

Blogging Site Development Specifications

As of Wednesday, January 20, 2010

This file is one example of my technical business analysis work. In most cases, I attempt to put together specifications so, that both the application users can understand them and the developers can use them. These kinds of specifications help to form bridges between the users needs and the development processes, and to build well functioning, highly usable applications that perform lots of tasks for the users. As needed, additional documentation for back-end functionality development and mockups for front-end user interface development can be developed as well, in accordance with the specifications master file.

If you want to use any part of this specifications file for your own application development purposes, please create a clearly noticeable and visible, human readable link from one or more high traffic pages on your website to either

<http://www.ProjectDeveloper.com>

or to

<http://www.CreativityManagementNetwork.com>

or to both sites.

Thank you in advance,

Thomas Eklund

<http://www.ProjectDeveloper.com>

<http://www.CreativityManagementNetwork.com>

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About the Specifications

Informative-Educational Blogging Software Specifications

I put together detailed **informative-educational blogging software** specifications for my new websites, because I have not seen any sites that use the kind of software that I need. I am pretty sure, though, that many for profit companies and non-profit organizations would want to use something like it as well.

Typical blogging software can be used for informing site visitors about something in a two-dimensional manner. That is, typical blogs focus on the latest posts.

The blogging software that is being addressed here can be used for informing and educating site visitors interactively about products, services, issues and topics, and for new product development and marketing related research and development, addressing related topics from different aspects.

For example, creativity management and creativity development related posts, or business development and management related posts and posts from many other areas can provide better informative-educational value to the visitors, when the relevant topics are set up in sections that are all developed further in blogging environment in an inter-related manner by modifying content, but not archiving it.

Accordingly, site content production process should take place interactively between the content administrators and site visitors, so that site administrators channel, monitor and control the relevant processes, while also benefiting and learning from the feedback that they receive. The resulting website content can have increasing informative-educational value both to the website visitors and to the site content owners.

What We Need

In my opinion the informative-educational blogging software specifications call for a hybrid of a regular, traditional, static website, blogging site and a forum – with a twist.

- When we look at the side page mockups that were put together for this site development purposes, then we can say that from navigation prospective, this site is a very old fashioned, traditional static website. This navigation structure is not necessarily a perfect solution, but it does meet the site usage needs quite well. Further, it is browser neutral, and I believe that it can be used so, that we can create a template-based site and content management system.
- We certainly do need blogging functionality. The posts, as updates to the site, will be created primarily by people who will administer the site. In that sense, this is indeed a blogging site.
- However, we will have a rather large number of posts active simultaneously, so that the site visitors can submit comments and questions, and, hopefully, later on, also answer each others questions. In that sense, this site is somewhat similar to a forum.

This site will have to function so, that a large number of individual topics and pages are updated frequently (maybe daily). So, we could say, that this site has a large number of individual blogs combined together.

- Through the content management system site administrators can filter out any visitor entries that are not appropriate and are not in accordance with the site objectives. Obviously, this process has to be done ethically. Constructive criticism can be very valuable to the site content and relevant product and service development.
- Further, unlike any other site that I know of, the blogging process will be set up so, that over time posts may be updated after the initial entry date. In addition, over time the site administrators may delete some comments and questions, leaving only these entries that are deemed to have the highest informative-educational value. The purpose of this process is to create site content that can benefit the visitors the most from the informative-educational prospective.

As a result, both new and returning visitors will find content whose qualitative value keeps increasing over time, and site owners can continue to learn about their target markets needs, wants and preferences.

Making Educated Compromises

This informative-educational blogging site specifications have been put together based on the actual needs of the business venture that the site is being built for. I'm not trying to fit how any existing blogging or other type of software works into the needs of this venture, or vice versa. I'm simply stating, what those needs are, so that we can, hopefully, as cost effectively as possible, build software that meets these needs.

However, this being said, I am certainly open to suggestions that help to reduce the development cost (in a form of the development time, for example), while still enabling us to put in place the outcome that is needed.

With a few exceptions, purposely, in most parts of this specifications file and also in the content management system specifications file, from technical development prospective, I am not suggesting any specific solutions. I am simply describing how the end results should function. As much as we can, we will want to use existing solutions. For example, if we will decide to use WordPress, then as much as we can, we will want to use the existing solutions that have been built for WordPress.

However, the resulting informative-educational website and its content management system must function, look and feel the way they are described in the specifications files, and are shown on the mockups.

In some areas we may need to make some compromises and maybe even give up some less important described features, especially, when the existing solutions come close to what we need, and the modification time that would be required to achieve full compliance is likely to be excessive. We will want to evaluate pros and cons and decide each such instance individually.

Software Options and Solutions

Most likely we will want to use blogging software for this site development, and if we do, I am leaning toward using WordPress.

However, until we will actually start the development process, we should consider other alternatives as well.

For example, it seems that in the longer run Joomla may be a better alternative. Joomla is a content management system, and WordPress is blogging software that has a content management system.

Further, there is one area that I am concerned about, regarding WordPress usage. As I state above:

This site will have to function so, that a large number of individual topics and pages are updated frequently (maybe daily). So, we could say, that this site has a large number of individual blogs combined together.

WordPress regular content management system does not seem to be particularly well equipped for handling such a structure, where multiple sections and pages within these sections have to be updated frequently.

Given, that we will build the informative-educational blogging software content management system according to the existing specifications, we will have a blogging software content management system that supports updating multiple sections and pages within these sections as frequently as necessary.

However, I'm not sure, how well WordPress architecture supports such content management system development.

As far as I know, Joomla, however, should be able to support this feature just fine.

Then again, site Version 1 development in Joomla may be more difficult and expensive.

Further, as far as I know, for SEO purposes WordPress is a better alternative.

Briefly, given, that we will develop site Version 1 using WordPress, we must make sure, that all the needed features can be built on top of WordPress based structure.

CreativityModel.com Site General Description

Brief Overview

CreativityModel Enterprises, Inc. is an startup that will offer through its website, <http://www.CreativityModel.com> creativity management and development solutions that can increase personal and professional productivity and success rate.

Site and company will be developed further in stages. Website first version will provide informative-educational content in custom developed blogging environment. Next versions will contain online creativity management and development training exercises and programs.

On the company development side, the focus will be on ads sales, blog development, founding team assembly, and then on online community building, training of online specialists, and on offering to different target markets online training exercises and training programs that can increase personal and professional productivity, effectiveness and success rate and produce measured results.

Another site, <http://www.TechnologyConnectedCompany.com> will document this technology connected company's (a.k.a. virtual company) step-by-step development process in blogging environment.

Important Point of Focus

It is important to build the website so, that it can be reasonably easily developed further in the future. Among other things, this means having sufficiently thorough documentation, and code available in compiled and uncompiled versions.

Website Development Highlights

- Findability, including SEO-related development aspects and browser neutrality, are important to this website development.
- The site needs a content management system (CMS) that is customized for the site administration needs.
- The website needs to carry ads as well.

I need quite a bit of control over placement of ads. Briefly, I want to divide ads into groups, and be able to designate, where I use which groups of ads.

I plan to use custom designed ad management functionality, that is part of the CMS. However, if you have suggestions for a different solution, please let me know about it. For example, we can consider using a Web-based, hosted solution instead – for example, Google Ad Manager or something similar.

For the ads source, I plan to start with Google AdSense, but then diversify from there as soon as possible, so that I get ads from different sources.

I plan to start selling ads soon after launching the site.

In addition, the site will use our own ads as well, that is, ads that this company orders from contractors.

- Live Chat type of functionality should be included on the site.
- We should keep the visitor-facing aspects – usability, user interface and the relevant functionality development – as consistent throughout the site as possible. For the most part, this should make the site development easier, too.

For example, blogging functionality, whenever present, should work for the visitors the same way throughout the site.

The same applies to placement of ads – the ads should be placed the same way on blogging, non-blogging, and CreativityModel Method Formal Version 1 section pages.

The same applies to login – whenever login is needed, for the visitors the relevant functionality should work the same way. However, depending on the visitor's activities, the application may have to respond differently to a visitor's actions.

- Visitor, who registers, should be able to log in to designated areas and functionality parts. Further, visitor, who registers, creates a profile for him or herself, that he or she should be able to change.
- In order to read most of the site content, visitors do not need to register (and to create an account) or log in. Access to some of the pages, like, for example, CreativityModel Method Formal Version 1 section pages, should include login requirement. That is, only the site visitors who have logged in should be able to access pages in this section.

Further, in order to submit something, including comments, questions, replies and any type of inquiries, visitors do need to log in, which also means, that they have to register first.

Similarly, every part of the site functionality, that is database backed, should require visitor login.

- We should use objects for as many parts of the site as possible. While to most developers this is common sense, it is worth of mentioning here. The idea is to have functionality set up so, that if the same feature is used in different parts of the site, and we need to make changes to it or replace it, then we need to make changes in only one place, instead of making changes to different pages individually.
- I put together a description of a functionality piece that I call Site Map / My Reading List. It is Site Map, that has database backed functionality, which allows visitors to check off the subsections that they want to read and have already read, and provides data about where they can find new information that may interest them.
- Another functionality piece allows visitors to assemble Custom Pages, which are communication devices that allow to recycle website information in order to support a point of discussion.

Looking from technical prospective, Custom Pages function in a way that has some similarity to the way search functionality functions. Custom Pages use a template, and display results, that the site visitor or admin has selected by pointing and clicking. So, instead of doing a word or phrase based search, the functionality has to assemble the results using the IDs, that were collected when the visitor or admin activated the Custom Page functionality and made the relevant selection.

This could be accomplished by displaying the results that are assembled based on posts, questions and comments IDs that are embedded in the link. This approach has some similarity to how, for example, this link opens a page that uses a template and forms results for word "test"
<http://www.projectdeveloper.com/Search.aspx?val=test>

Behind the above link is Microsoft's technology. That doesn't really matter here. This example simply illustrates the point, that Custom Pages functionality can be set up in a way, that is similar to search results assembly. In my opinion, from the development prospective this is even simpler, because we need to assemble a page that contains matches to the specific, identified IDs, that is, Primary Keys.

- We need search functionality as well. Most likely we will use Google's Custom Search Engine (CSE).
- I need to be able to set up certain questionnaires, which are accessible only to the registered visitors who receive URL for the questionnaire. For website Version 1, we can keep this functionality relatively simple, without using advanced "If-Then" type of functionality parts.
- I would like to include some Abuse Control functionality that prevents malicious acts, like, for example, intentional repeated usage of features. I am describing the relevant functionality in this file.
- As I mention above, I plan to start selling ads soon after launching the site. CrystalTech, the web host that I am using, offers also payment taking functionality. However, for selling ads, I may use a different route altogether – just simple banking and checking accounts. In one way or another, Version 1 payment taking functionality, if needed, will probably be relatively easy to set up.

While using website Version 1, I do not intend to sell anything to individual site visitors, or to take any payments from the individual site visitors.

The above is further described in the specifications file. That's why the file is so long.

Website Parts

CreativityModel.com Stage 1 website version will have the following primary parts:

- Registration Page.

- Profile Changing Page, that contains the Registration Page fields that are filled with the data that the visitor has entered, and also contains visitor activity related information.

Visitor can use his or her Profile Changing Page for making changes to his or her profile. In addition, from his or her Profile Changing Page, the visitor should get his or her site activity related information about the comments, questions, replies and inquiries that he or she has submitted, and should be able to download Live Chat transcripts within the designated period of time.

- Profile of [Username] page, that contains Registration Page / Profile Changing Page data that a visitor wants other site visitors to see.
- Login Page.
- Homepage. (Preferably, instead of using page name "default," the default page(s) should be named *index*.)
- Main website side pages. Each such page includes a post and blogging functionality (comments, questions and replies).
CreativityModel Method Formal Version 1 section pages, that include login requirement, should use the same page templates, including blogging functionality, that the regular website side pages use. So, in that respect the two types of templates should not differ.
- Main website side pages that include a post, but do not include blogging functionality. These pages are intended to be used primarily for product or service promotions.
- My Reading List / Site Map.
- Custom Pages.
- Live Chat functionality.
- Questionnaires.
- Inquiry submitting page.
- Pop-ups: Privacy Policy and other such pages.
- Content management system, that includes different types of functionality parts, and will, most likely, include Ads Management functionality as well.
- Because of special importance that ads have, I am including ads, including the ads that we will create, here as separate functionality parts as well.

Coding Standards and Documentation

We should use either the following, or a similar website as the primary source for coding standards:

<http://www.dagbladet.no/development/phpcodingstandard/>

It is very important, that the developers will document all the code very thoroughly. The more complex code a functionality part contains, the more thoroughly it must be documented.

Further, all the functionality parts must be available and accessible as uncompiled components, in addition to being compiled as needed.

Findability and SEO Requirements

Findability and SEO requirements are very important topics regarding CreativityModel.com website development and will need continuous attention after the website launch as well.

Different Aspects of Findability

Under “findability” I address here the following areas:

- SEO – Developing the site so that it ranks well in search engines in response to organic searches when specified keywords are being used. So, properly set up Meta Names, headings, CSS, tags, et al are all important.
- Browser neutrality – All page should look completely identical in IE 6 and higher, Mozilla Firefox 2.0 and higher, Opera 9 and higher, Google Chrome 2 and higher, and Safari 3 and higher.
- Design – We want a pleasant looking design that supports site usage related objectives and has a reasonably easy to use and intuitive navigation structure.
- Usability – The degree, to which site visitors are able to use user interfaces for achieving their objectives.
- Information architecture – Information display and management structure and functionality parts.
- Development – All functionality should work as specified in a browser neutral manner. Further, fast content loading speed is important.
- Accessibility – In this website case, we will focus on making sure that different site parts are accessible to the visitors in accordance with the specifications.
- Marketing-related aspects – Website features that support traffic generating, including social buttons, Google and other search engines, linking, mailing lists, et al.
- Content writing – For the most part, content writing is not directly related to site development, but because content writing helps to boost ranking in the organic search results, it certainly is related to findability.

Essentially, these areas focus on the following:

- Generating traffic to the site.
- Helping visitors to find the information they are interested in.
- Keeping visitors on the site longer.
- Bringing visitors back again.

Below are listed *some* of the relevant topics.

I may address other topics that are related to the above areas throughout the site development process.

I hope, that you will bring up relevant topics as well

JavaScript Usage

We should try to develop this site so, that at least the site navigation structure is usable even when JavaScript has been turned off.

Further, we want to make sure that JavaScript usage does not prevent the site indexing by the search engine spiders. Most importantly, the content of the site must be accessible without the use of JavaScript. For example, we should not use AJAX for loading content into the page.

Usage of AJAX helps to speed up content loading. However, preferably, we will find other ways for speeding up content loading. When we will have problems with content loading speed during the development, please let me know about that.

Further, we want to keep the structure (HTML), presentation (CSS) and behavior (JavaScript) separate, so that the style (CSS) and JavaScript (js) files are separate files. This is the traditional approach. However, we also want to take into consideration the page loading speed and the aspect, that the fewer requests to the server are needed, the faster the page loads.

If you have any recommendations regarding the above topics, please let me know about them.

Black Hat SEO Tricks

We should not use any black hat SEO tricks.

Must Have Features

We want the content to load quickly.

For the most part, with a few exceptions, we don't want to use JavaScript for loading content – just HTML.

We want to use keywords in addition to the content also in parts of the page that affect page ranking (tags, for example).

We want the content management system to be set up so, that the relevant keywords can be added and changed as needed.

We want to use a clear information hierarchy.

We want to set up robots.txt and sitemap.xml files.

We want to set up a custom 404 page.

We want to have a decent site search engine.

We want to set up ping services.

We want to set up RSS feeds.

We want to set up site for efficient indexing.

We should set up the code so, that all tags are closed, including those, for which the closing tag is optional (<p> and </p>). Tags, that do not have closing tag should be closed with a closing tag that contains space (
 and
).

HTML and XHTML files should be separate from the CSS and JavaScript files. Common external CSS and JavaScript files should be linked, so that they can be shared.

All pages should start with a document type definition.

All image tags should include the alt attribute.

All special characters should be encoded.

All tag attributes should be written within quotes.

Keyword Density

Content

Content is obviously the primary place for the keywords. However, in all the areas where visitors interact with the content, I consider the usability of the content to be the most important priority. Search engine likings are the close second, but it should not debase usability. Nevertheless, I will definitely take recommendations into consideration in these areas. Further, I will make conscious efforts to find a balance between the usability of the content, and search engine preferences.

In one way or another, we need to focus heavily on keyword usage in other, more technical areas of page buildup as well.

Additional Keyword Locations

Here's a list of places to consider for keyword placement (in addition to content and section and subsection names):

- Heading tags were listed above, but I will repeat them here
- <title> attributes
- <alt> attributes
- Meta tags (meta description tag, meta keywords tag, meta robots tag)
- Within the URL
- Link labels
- Depending on what we will use, and or and <i>.

It seems that for SEO purposes using and is preferable to using and <i>. However, we may want to use both, so that we use and for SEO purposes, without them actually affecting how the text looks, and and <i> for the actual markup that the visitors see.

- Possibly also certain external file names, like CSS file name, for example
- Table elements, if we will use them, like <th> and <caption>
- <acronym> and <abbr>, if we will use them
- Image tags

If you have additional recommendations for keyword placement, please let me know about that.

CSS File

We should avoid usage of CSS display:none

Microformats

We may have some usage for microformats on this site.

We may be able to use hCalendar for events (like trainings, chat sessions, pod casts etc), hReview for user reviews, hCard for contact information of trainers / consultants, hResume for resumes/CVs of trainers / consultants etc.

We may need to add the rel="license" attribute to certain links.

I'm not so sure about rel="tag"

VoteLinks may also be something we want to use.

Custom 404 Pages

We should set up custom 404 pages.

Page Loading Speed

We should use eAccelerator or similar software for optimizing page loading speed.

If you have additional recommendations for optimizing the server-side setup that focuses on page loading speed, please let me know.

We would also want to optimize the number of HTTP requests sent to the server.

However, we probably still want to keep the structure (HTML), presentation (CSS) and behavior (JavaScript) separate, so that the style (CSS) and JavaScript (js) files are separate files.

We want to set up the HTTP expire headers 3 months into the future.

We want to avoid excessive white space within the files.

We want to use file compression utilities. For example, we can minimize HTTP response size by enabling Gzip compression for HTML.

CSS and JavaScript

We want to put all CSS and JavaScript into external, linked files. However, we also want to minimize the number of external CSS and JavaScript files that we will use per page, so that we can optimize the number of server requests per page.

Further, we should make sure that all CSS and JavaScript files contain only code that is necessary for this website and that there is no code that is not necessary.

Tags

Title Tag

We probably want to use the page heading as part of the <title> tag the following way:

```
<title>Page Heading | CreativityModel.com | Short keyword-rich phrase</title>
```

Further, if we will use WordPress, we may want to use the All in One plugin.

Anchor Tag

Preferably, we would want to set up the anchor tags so, that we can place keywords in the title attribute as well.

Meta Tags

There are number of meta tags we want to use; I'm only addressing couple of them here.

We should use the description meta tag.

We should not use the refresh or redirect meta tags.

In the meta tags we want to list the keywords in the order of importance. We want to use singular and plural forms of important keywords, but without repeating a keyword more than 3 to 4 times within a tag. We definitely do not want to be considered keyword spammers.

alt Tag

This is one of the tags we want to use.

Heading Tag

For SEO purposes, we want to set up the <h1>, <h2>, <h3> and <h4> tags in a structure – one <h1> per post, approximately one to three <h2> under it, and one or two <h3> tags under the <h2> tags. <h4> may also be needed on some pages, but for the most part I will try to avoid it.

For readability purposes we want to set up most of the content similarly.

** Tag**

We do not want to use the tag.

Tag Cloud

Tag cloud is a somewhat different concept, but I am including it here. Tag cloud is not shown on the mockup, but I am considering tag cloud usage and would like to include it in the development work.

rel="nofollow" Attribute

All links to external sites that site users have submitted in their comments, questions or replies should have the rel="nofollow" attribute.

Content Management System should give the users the ability to include the rel="nofollow" attribute with any links on the page that the user is working on.

Update Services

There are number of update services that we could use, so that the sites are pinged when new content is created:

<http://rpc.technorati.com/rpc/ping>
<http://blogsearch.google.com/ping/RPC2>
<http://ping.feedburner.com>
<http://api.my.yahoo.com/rss/ping>
<http://rpc.pingomatic.com/>
<http://api.feedster.com/ping>
<http://api.moreover.com/ping>
<http://ping.amagle.com/>
<http://ping.bitacoras.com>
<http://ping.blo.gs/>
<http://ping.rootblog.com/rpc.php>
<http://ping.syndic8.com/xmlrpc.php>
<http://ping.weblogalot.com/rpc.php>
<http://rcs.datashed.net/RPC2/>
<http://rpc.blogbuzzmachine.com/RPC2>
<http://rpc.blogrolling.com/pinger/>
<http://rpc.icerocket.com:10080/>
<http://rpc.newsgator.com/>
<http://rpc.weblogs.com/RPC2>
<http://topicexchange.com/RPC2>
<http://www.blogdigger.com/RPC2>
<http://www.blogooole.com/ping/>
<http://www.blogoon.net/ping/>
<http://www.blogsnow.com/ping>
<http://www.blogstreet.com/xrbin/xmlrpc.cgi>
<http://www.lasermemory.com/lsrc/>
<http://www.newsisfree.com/RPCCloud>
<http://www.popdex.com/addsite.php>
<http://www.snipsnap.org/RPC2>
<http://www.wasalive.com/ping/>
<http://www.weblogues.com/RPC/>
<http://www.blogsdominicanos.com/ping/>
<http://www.xianguo.com/xmlrpc/ping.php>

<http://www.feedsky.com/api/RPC2>

URLs

As much as applicable and feasible, we would want to set up the URL that we will use and the search engines will (attempt) to index, so that these URLs do not contain GET variables or session IDs.

Permalink URL Structure

We do not want to use WordPress default permalink structure, that simply has a numeric entry for the post URL name. Similarly, I don't think that we want to use a date and name based URL structure.

Instead, we want to use a search engine friendly structure that also reflects CreativityModel.com site structure.

CreativityModel.com is informative/educational site that contains blogging functionality. It is not a regular blogging site.

Accordingly, I would like us to customize the permalink structure as category-name/post-name/

That is, I would like to use website section and subsection based URLs. These could look like, for example, this:

<http://www.creativitymodel.com/concepts-in-a-nutshell/why-does-this-matter-to-you.php>

For WordPress, we may want to use the Customizing Permalink Structure option "Custom, specify below." In the Custom structure field we may want to add:

```
/%category%/postname%/
```

given, that this is also in accordance with the rest of the naming and site development structure that we will use.

However, ideally we will set the content management system up so, that we can specify URLs that are different than the post's heading is. This should give even better SEO results.

Categories and Archiving Functionality

WordPress lets to display posts by a chronological archive or by categories.

Displaying by chronological archive would not work for CreativityModel.com. WordPress categories correspond to CreativityModel.com sections. Displaying the site by sections does work.

So, we do want to use categories, which in our case are the website sections.

In each website section we also want to display the subsections, that is, the posts within the section.

WordPress categories are not archived, but typically posts are.

We, however, do not want to use any type of automatic archiving functionality because such functionality is not compatible with the nature of CreativityModel.com informative/educational site structure.

"WP Simple Sitemap" WordPress plugin, that automatically lists all the posts and has page archiving option available, may be helpful here.

Section Opening Page Excerpts

CreativityModel.com website content is divided into sections and subsections. Website sections are similar to WordPress categories.

Section opening page is the first page of a section, where a visitor lands, when he or she clicks on the section's name in either Website Sections area, or on the Site Map.

Mockup page 4 illustrates a section opening page.

As is shown on mockup page 4, a section opening page should contain excerpts of the subsections within that section, that is, abbreviated versions of the section's content, with links to the individual subsections of the section.

Individual subsection pages open from the summary page when the visitors click on a "Read more" link, or on a subsection name in the left hand Selected section's content area.

Mockup page_2.htm is an example of an individual subsection page.

Content management system specification file Subsection and Section Content Management subsection addresses the section opening page content management further.

Homepage Content

Homepage should function so, that through the content management system the individual parts below the image, including the captions, can be updated as needed.

Displaying the Most Recent Posts

We do not need to be able to display automatically a summary of the most recent post and a link to it on the homepage. Instead, we want to set up the content management system based functionality so, that we can manually change each homepage text area's content as needed.

Social Exchanges of Content

We may want to use either Sociable plugin or something similar.

Tracking the Website Usage Activity

For Version 1, we do want to have the website usage activity and page popularity statistics available to us for our own purposes only. We will not display page popularity figures on the website.

The web host that I am using, CrystalTech, has website usage tracking and reporting functionality in the Web Control Center. However, based on my experience, it provides only partially accurate data. I would say, that its level of accuracy is less than acceptable.

So, I would like to install Google Analytics, because it is a much better tool.

Accordingly, we don't want to use WordPress caching functionality (WP Cache plugin), because it may create problems with the Google Analytics functionality work.

eAccelerator should be helpful in this area.

XML Sitemap

We certainly need sitemap.xml file.

We want to avoid, or at the least minimize, any manual work regarding sitemap.xml file generating.

Google Sitemap Generator seems to be a good tool for this purpose.

Cross-Browser Testing

Browser neutrality is, of course, a very important topic to this website's development.

We can use tools, like, for example, Blueprint (<http://www.blueprintcss.org/>) Browsershots (<http://browsershots.org>) for cross-browser testing.

Google Canonical Problem

We want to address the Google Canonical Problem, so that inbound links both with and without www will automatically map to a single, consistent format. I prefer the regular format with www included.

So, when someone requests <http://CreativityModel.com/> the functionality should do a 301 (permanent) redirect to <http://www.CreativityModel.com/>

Page Caching

We are not going to use WP-Cache plugin. Maybe we want to consider some alternative to it that does not interfere with the Google Analytics functionality work.

Before installing the WP-Cache plugin, we should disable WordPress Gzip Compression option. If we will use an alternative plugin, we will want to find out, if we will need to do the same.

Content Management System

Most of the details pertaining to content management system (CMS) are listed separately. Here are just a few relevant details.

We want to set up the CMS so, that we can place keywords in places where they can help page rankings in search engines (for example, <title> tag).

I like the idea of setting up <title> tags so, that we use | separators in the following way:

<title>Page Heading | CreativityModel.com | short keyword-rich phrase</title>

So, hopefully we set up the content management system so, that we can use the | separators this way.

Other Technology Specific Issues

There are other issues that pertain to the technologies that we will use, that are relevant here. Some examples are .htaccess file and mod_rewrite module usage in Windows environment.

Depending on the technologies that, first of all, we could use, and, second, we will have to use, please address such issues with me yourself.

We should also assess other SEO related plugins for WordPress.

Search Functionality

I consider the following search functionality features to be important: (1) **minimizing the maintenance related time and labor needs**, (2) **accuracy, relevance** and (3) **speed**.

Depending on what search functionality we will use, compared to the mockup, we may have to modify the search window portion. For example, if we will use Google's Custom Search Engine, we will have to include the relevant Google branding pieces.

In the latter case, we would want to put Google™ Custom Search below the search window and button.

Google's Custom Search Engine (CSE)

We most likely will want to use Google's Custom Search Engine (CSE). As far as I know, it's not perfect, but it is a pretty good option.

We would want to use Ajax for CSE.

If we will use Google Ajax Search API, the number of results that can be displayed on the site is limited to 10 at the time and up to 1000 per day. Especially the first number, the number of results being 10, is not very convenient to the visitors in my opinion.

So, we may want to use our own template for this purpose. Most likely we will want to make the search results page look like a combination of ProjectDeveloper.com search results and the current CreativityModel.com mockups. I will provide more specific details during the development process.

Most of the pages we will want to include in the search results, when they are relevant. There probably will be pages in CreativityModel.com site that we do not want to include in the search results. We want to set up the CSE functionality so, that we only have to identify the pages that we don't want to include in the search results. So, first we want to include the whole site by specifying `www.siteName.com/*` and then we want to use annotations to exclude individual pages.

Preferably we will also want to use the expansion controls, so that the visitors can choose to display few or many search results – either 10 or 100 per page, for example.

If we use CSE, we need to integrate it with AdWords account that will be used for the rest of the site.

Between CreativityModel.com and TechnologyConnectedCompany.com, we want to set up the search so, that the results are displayed from both websites. CSE offers this option. However, we want to set this up so that it is clearly distinguishable, from which site the search results originate.

Site Architecture, Navigation Structure and Design

Working With Designers

So far I have not found a designer, whose work I both like and can afford. So, out of necessity, I have done design myself. However, I will continue to try to work with different designers whom I can afford. Eventually, I may find designers who are within my budget and whose work style, taste and other characteristics of the outcome match my preferences sufficiently well.

Overall Approach

CreativityModel.com site has to combine substantial amounts of informative-educational content with blogging functionality. Unlike regular blogging sites, on CreativityModel.com not just the latest post or posts, but practically all the posts that contain blogging functionality are equally important, whether they were created one day or one year ago. The site architecture and user interface layout reflect these development related needs.

During the next development stages we will add to the existing functionality creativity management and development online training exercises and other types of relevant functionality pieces and parts.

The site should be browser neutral, that is, all page should look completely identical in IE 6 and higher, Mozilla Firefox 2.0 and higher, Opera 9 and higher, Google Chrome 2 and higher, and Safari 3 and higher.

Further, CreativityModel.com website design should be a relatively simple, but also a somewhat original combination of two different characteristics, playfulness and business focus, with good information architecture and navigation structure that are suitable for displaying large amounts of text.

In addition, all the text and images have to be easy to replace as needed, and adding, changing and deleting individual pages and website sections has to be relatively easy.

Throughout the website, most of the individual pages will contain content in 3 columns.

CreativityModel.com should have a flexible layout, so that the **height** of the content of the individual columns, and the individual areas within the columns, is not inter-dependent. That is, the content of the individual areas within the columns should be expandable so, that the individual areas within the columns do not have fixed height. Website Sections, Selected Section's Content and all other areas, including the banner ad, must have flexible height.

On Using Objects and Having Flexibility

We want to use objects so, that when we make adjustment to an object or object part, all the pages that are using the object reflect the adjustments that were made.

We should set up the homepage and side pages so, that we can adjust the width of the columns as needed. When the width is adjusted on a template, it should be also adjusted accordingly on all the pages that are displayed to the visitors and are using that template.

The same applies to (1) ads placements and to (2) the placement of different colored areas on the pages (that is, page elements), and (3) placements of the elements within the individual areas. When adjustments are made to a template, the same adjustments should be reflected on all the pages that are displayed to the visitors and are using that template.

So, the side page should be an object, or, to put it differently, a template, that is filled with the relevant information on as needed bases.

Similarly, for example, most likely the Profile of [Username] page and other similar pages should be, like other pages on this website, objects, or, to put it differently, templates, that are filled with the relevant information on as needed bases.

However, for website marketing purposes, we want the spiders to be able to access and crawl individually all these pages that are accessible to the website visitors **without having to log in** (including the Profile of [Username] pages), so that all these pages appear on the search engines as individual pages.

To put it differently, all that information that any website visitor can find without having to log in, should be accessible to the spiders as well. The information that requires login, should not be accessible to the spiders.

Color Scheme

CreativityModel.com site has the same color scheme that ProjectDeveloper.com has:

Red RGB 153, 0, 51, Hex #990033

Green RGB 0, 102, 102, Hex #006666

Blue RGB 0, 51, 102 Hex #003366

Orange RGB 255, 153, 0, Hex #FF9900

Gray background RGB 225, 225, 225, Hex #E1E1E1

Symbol, Slogan and Logo

Below are CreativityModel.com symbol, slogan and logo.



CMEI_Logo_2406.JPG, width=220, height=60



For the word “Creativity” I chose a font that reminds me of handwriting. Creativity is “hand made” and at least to some degree personal, just like handwriting is.

For the word “model” I chose Arial, because it is from the Helvetica family, and its equal size letters represent the industrial design, models and mechanics – that in many ways is the direct opposite of what usually is meant by creativity. However, these opposites are both used as parts of CreativityModel Method.

Further, Arial is probably one of the most commonly used fonts. I want CreativityModel Method to become a very commonly used and well known concept.

For the symbol, I chose the

+ – ? ! com

components that do represent CreativityModel Method to a large degree.

Pooling, and adding together different components and discarding, what’s not needed, is an important part of this Method. Similarly, questioning, whether or not any individual components are in accordance with the theme and/or goals, and finally getting to the exclamation point – the successful completion of the project – characterize CreativityModel Method.

The arrow head on the circle looks little bit like atom’s symbol. CreativityModel Method helps to energize and speed up different type of projects’ development processes. Further, CreativityModel Method is the nucleus of CreativityModel.com, which is the nucleus of the company it represents.

After giving it some thought, I also added the com in the slogan, because CreativityModel Enterprises will be very much an Internet-based company.

Support Symbols and Their Downloading Functionality

Purpose

Here's a description of a small additional design-related project that needs to be handled.

I need two images that can – but do not necessarily have to be – based on the logo. Further, I need a functionality that allows the site visitors to download and install an image on their site.

The idea is, that website visitor, who becomes interested in CreativityModel Method and its development, can show his or her support by placing an image on his or her website. This image should be linked to CreativityModel.com website.

This concept is similar to web-based support ribbons usage, where people can place support ribbon symbols on their MySpace and other sites. If you search Google for

support ribbons for myspace

you can find relevant websites that illustrate this concept.

So, I need something similar, but, as is stated above, for people who will be motivated enough to show their support for CreativityModel Method and its development.

I need the whole package, that is, both images **and** some sort of download functionality that is independent of the visitor's browser and operating system.

A simple solution would be make the relevant images and HTML code available to the visitors, so that the visitors can copy and paste it in their sites.

Images Needed

I would like to set up two images as CreativityModel Method support symbols. These could be based on the logo used on the website. I will describe here the suggested, logo-based solution. However, these support images do not necessarily have to be based on the logo.

One of the images could be bigger and one smaller. So, if we use the logo-based solution, then one image can be the logo itself, with the following text:

I support the development of

The second can be smaller, a modified version of the logo. It could be just the symbol, with the following text above it:

I support

and with the word CreativityModel below it. That is,

I support

then the symbol

CreativityModel

We could try it so, that the text "I support" and "CreativityModel" are straight (horizontal) and so, that these text parts are curved around the slogan, above and below it.

Advertising Company Selection, Ads Placements and Sizes

Because of their importance, ad placement related development aspects warrant special attention.

Content management system's specification file contains additional, much more thorough information on ads management related topics.

What Advertising Company to Use?

For ads, initially I plan to use Google AdSense.

However, I would like to set up the website so, that I can diversify and work with other companies as well, when I choose to do so.

Above all, this means that (1) the page templates and (2) the content management system should be set up so, that we can make relevant changes to the page templates later on as needed bases.

I would like to avoid a situation, where we must do a huge amount of work and redesign everything, when I will want to sell ads by working with other companies as well.

As of this point, beforehand, we don't know all the possible requirements that different companies may have. However, if we have the templates with flexible height and width, and suitably set up content management system, we should be able to handle most of the relevant requirements.

Locations of Ads

On the side pages I plan to have ads in 4 locations:

- 1) In the left-hand column, in the Other Material sections.
- 2) In the top part of the page, so that an ad spans over the middle and left-hand column.
- 3) In the bottom of the page, after either text area, in case the page does not contain blogging functionality, or after the blogging area, in case the page does contain blogging functionality.
- 4) In the right-hand column, in the Other Material sections.

Please see the mockups for additional information.

Here's a principle that is very important to this website development:

In each spot on the website that is designated for an ad, we always want to display an ad.

Accordingly, whenever we do not have an outside ad to display for a spot (from Google or any other source), we will display an ad that we have created.

Currently Considered Widths of the Columns and Google AdSense Ad Sizes

I took the "Potentially suitable ad sizes" information listed below from:

https://www.google.com/adsense/static/en_US/AdFormats.html?sourceid=aso&subid=ww-ww-et-asui&medium=link

Homepage

width=990 – current homepage version does not contain any ads.

Side Pages

Column widths from left to right, respectively:

width="242"

width="502"

width="242"

The borders are 9 px wide because of the corner units. So, the total width of the border is everywhere $2 \times 9 = 18$ px.

Further, please note that I would like to use additional, HTML-based borders around the ads as well.

Left-hand column

Potentially suitable ad sizes:

Small Square 200 x 200 Link Unit Up to 5

Small Square 200 x 200 Link Unit Up to 4

Small Square 200 x 200 Text Ad

Small Square 200 x 200 Image

Small Square 200 x 200 Video

Middle column

Potentially suitable ad sizes, top of the page

Leaderboard 728 x 90 Image

Leaderboard 728 x 90 Video

Please note, that because of the corner units and the relevant borders, the total width of the top ad is $728 + 9 + 9 = 746$ px

Potentially suitable ad sizes, bottom of the page

Banner 468 x 60 Text Ad

Banner 468 x 60 Image

Link Unit 468 x 15 Up to 4 links

Link Unit 468 x 15 Up to 5 links

Large Rectangle 336 x 280 Image

Large Rectangle 336 x 280 Text Ad

Large Rectangle 336 x 280 Video

Right-hand column

Potentially suitable ad sizes:

Small Square 200 x 200 Link Unit Up to 5

Small Square 200 x 200 Link Unit Up to 4

Small Square 200 x 200 Text Ad

Small Square 200 x 200 Image

Small Square 200 x 200 Video

We may carry video ads that are hosted by others, that is, are on outside servers. At least initially, we will not host multimedia, including video ads, ourselves.

Sponsorships, Product Evaluations and Promotions

For Stage 1, we probably will not add any special functionality in these areas, other than having page templates that do not contain blogging functionality, but otherwise look the same as do the pages, that do contain blogging functionality.

So, these pages have the post-like text, but no blogging functionality. Please see the relevant mockup for additional information.

Blogging Functionality

CreativityModel.com Blogging Functionality Highlights

Most of the topics that are briefly addressed here, are explained in more detail the content management system specifications subsections.

- CreativityModel.com will contain posts, that are divided into categories. Using a standard website structure, we display different categories and posts so, that they can receive equal attention from the visitors.
- For each post, website visitors can submit questions, comments and replies. Please see the relevant mockup for additional information.
- All visitor comments, questions and replies are reviewed and may be approved, put on hold, discarded or modified by CreativityModel.com staff members.
- If we do not post a visitor submitted entry, a website administrator will post a relevant message in that visitor's Registration, Profile Changing and Interaction History page special section, named My Interaction History. In the message the admin explains the reason(s) for the action.
- Our primary objective is to create a website, that over time will contain **from the informative-educational prospective** increasingly useful, CreativityModel Method usage and creativity management and development related content. Keeping this in mind, the website will contain notices, that will read something like this:

This website combines educational content with blogging functionality. To benefit the visitors to the fullest degree, posts may be updated after the initial entry date. Further, over time our staff may delete some comments and questions, leaving only these entries that are deemed to have the highest educational value. The purpose of this process is to create site content that can benefit the visitors the most.

So, we will take the liberty to modify already existing posts as needed, and to delete existing comments and questions.

I would like to set up these, and possibly also some other notices as objects, so that when the text is changed, it is changed everywhere, where the object is used.

In addition, we need functionality that allows to re-order the displayed comments and questions. This can be, behind the scenes, in a table, an additional field with integer numbers, so that we can use this field for the sorting purposes under individual posts. On the administrative user interface level, this part of the site functionality should allow people, who are allowed to administer the site, to re-order the comments and questions that the site visitors have submitted.

Please note, that every comment and question should be re-ordered so, that any replies related to it move with the comment or question as a unit. To put it differently, the relevant functionality should be set up so that replies cannot be accidentally separated from their original questions or comments.

From the technical prospective, this probably means that all questions, comments and their replies need additional sorting (column).

Further, we must be able to edit existing posts, comments, questions and replies.

The above is further addressed in the content management system specifications Page Edit subsection.

- CreativityModel.com website will contain both blogging and non-blogging pages. The non-blogging pages are otherwise similar to the blogging posts, except that they do not contain any blogging functionality. Such pages are planned to be used primarily for product or service promotion purposes.

In the website content Word file, everywhere where you see

□ **Blogging** □

is intended to be a blogging page. Pages, that do not contain this symbol after the body text, are not intended to be blogging pages.

Automatic Archiving System

If the blogging software that we will use for CreativityModel.com contains any kind of automatic archiving functionality, then we probably should disable it.

Table Structure Development Notes

For the reasons outlined below, I believe that we want to keep all the questions, comments and replies in the same table.

Why We Do Not Want To Have Questions, Comments and Replies in Separate Tables

- Because replies have replies, too, we have normal one-to-many relationships between some of the questions and replies, but not others, and some of the comments and replies, but not others. To put it differently, we do not have normal one-to-many relationship between questions and replies, and comments and replies.
- When the blogging subsections (post) have one-to-many relationship to questions and comments table, which has one-to-many relationship to the replies table, and in the latter table in reality the replies have inner relationships, too, then the posts have a distorted relationship to the replies. The posts should have one-to-many relationship to all of the replies, precisely the same way they have to the questions and comments. The replies are under the post and not less important than question and comments are.
- When the questions, comments and replies are brought together (through a query), then keeping track of which items are questions, which are comments and which are replies is more much cumbersome than it is when the questions, comments and replies are all in the same table.
- When replies have multiple levels of replies (replies that have replies, that have replies, that have replies and so on), keeping track of under which replies the individual replies belong to becomes a more cumbersome process.
- Custom Page generating becomes a more cumbersome process.
- On query level, extracting data from two separate, question/comments and replies joined tables makes the application slower than is using one table, where the relevant fields are indexed.

Why We Want To Have Questions, Comments and Replies in the Same Table

- We can easily identify, whether an item is a question, comment or a reply.
- We can easily identify, under which post any question, comment or reply belongs to.
- We can easily identify, under which question or comment any reply belongs to, and under which reply any reply belongs to, no matter how many levels of replies we have.

I can keep going, but the items listed here are in essence a reversed mirror image of the previous part.

How We Can Set Up The Questions, Comments and Replies Table

Blogging and non-blogging subsections table has one-to-many relationship to questions, comments and replies table.

Let's call the questions, comments and replies table tblItems in this example.

Identifier Field

In tblItems we have an Identifier field, Ident for short, that accepts whole numbers, 1, 2 or 3.

A question is submitted, Ident = 1

A comment is submitted, Ident = 2

A reply is submitted, Ident = 3

In this system, a reply is a reply. It does not matter, how many levels of replies are involved.

Extra ID Fields That Are Needed

We need 3 extra ID fields, but to make this system both easier to develop and more reliable, we can use copies of the Primary Key for all of them.

- We need an ID field to tie together a group of items – a question or a comment with its replies. Let's call it GroupID.
- Every reply needs an ID field that helps to link it to the item (question, comment or reply) under which it belongs. Let's call it LinkDownID. (Previously I was using ParentItemID field name. It doesn't matter much, what names we use in the examples.)
- Similarly, every item (question, comment and reply) needs an ID field that helps to link it to the reply that may be entered under it. Let's call it LinkUpID.

Example

A question or a comment is entered. (Questions and comments are treated the same way.)

Let's say, it's Primary Key (EntryID) = 123

Then,

GroupID = 123

LinkDownID = 123

LinkUpID = 123

A reply is entered under this question (or comment).

Let's say, it's Primary Key (EntryID) = 124

Then,

GroupID = 123

LinkDownID = 124

LinkUpID = 123

A reply is entered under this reply.

Let's say, it's Primary Key (EntryID) = 125

Then,

GroupID = 123

LinkDownID = 125

LinkUpID = 124

A reply is entered under this reply.

Let's say, it's Primary Key (EntryID) = 126

Then,

GroupID = 123

LinkDownID = 126

LinkUpID = 125

A reply is entered directly under the original question (or comment).

Let's say, it's Primary Key (EntryID) = 127

Then,

GroupID = 123

LinkDownID = 127

LinkUpID = 123

- All of the necessary values can be easily identified and entered when the new records are created.
- The necessary data manipulations can be accomplished through usage of the Ident, EntryID, GroupID, LinkDownID and LinkUpID field values.
- For a question or comment, EntryID = GroupID = LinkDownID = LinkUpID. However, all these fields are necessary for data linking, displaying, sorting and filtering and other operations.
- Every EntryID, GroupID, LinkDownID and LinkUpID combination is unique to one record in the table.
- GroupID is unique to a group of items. Only one group of items, that belong together, has a specific GroupID.
- Only one or two items at the time can have the same LinkDownID.
- As many items as have been entered under an item, plus one, have the same LinkUpID.
- For any given record, EntryID = LinkDownID, however, for sorting purposes both fields are needed.
- Of course, we want to index the GroupID, LinkDownID and LinkUpID fields. I don't know for sure, but I guess that indexing, which makes fields faster for searching purposes, applies to MySQL as well.

Visitor Entries

Overview

We can divide the visitor entries into two broad categories:

- 1) Stored entries
- 2) Stored and processed entries

These categories can be further broken down in the following way:

Stored entries:

- Functionality-related entries: Profile of [Username], Site Map / My Reading List, and Custom Pages
- Live Chat transcripts

Stored and processed entries:

- Comments, questions and replies
- Different type of inquiries
- Questionnaires

From the **website content administration** prospective the difference between the two categories is, that the first category, Stored entries, requires functionality that the visitors can use. The second category, Stored and processed entries, requires in addition also administrative functionality and administrative interaction.

So, the first category can be portrayed as: Visitor → interaction with functionality → results.

The second category can be portrayed as: Visitor → interaction with functionality → administrator's interaction with the visitor's submission and the relevant administrative functionality → results.

These different visitor entry types require their own different (administrative) content management functionalities. The content management system specifications subsections address the administration of these areas further.

From the **website functionality usage** prospective the difference between the two categories is, that the first category, Stored entries, generates (almost) immediate results for the visitor who is using the relevant functionality. The second category, Stored and processed entries, does not generate immediate results.

From the website functionality usage prospective the

- Comments, questions and replies are directly related to blogging and are addressed elsewhere in this document.
- Similarly, Profile of [Username], Site Map / My Reading List, and Custom Pages are addressed elsewhere in this document.
- Live Chat transcripts are also addressed elsewhere in this document.
- Questionnaires are also addressed elsewhere in this document.

A brief explanation regarding the questionnaires: I and later also other people working for this company will use the questionnaires for evaluating company founding and management team applicants, evaluating CreativityModel Method Specialist, Consultant and Trainer License Program candidates, and evaluating prospective contractors and employees.

- Inquiries are addressed below.

Inquiries

Below are listed **some of the** different Inquiry Types that the site visitors should be able to submit, using the Inquiry form.

- Information on CreativityModel Method Specialist, Consultant and Trainer License Programs.
- Suggestion for CreativityModel Method usage discussion topics.

- CreativityModel Method usage discussion topic article submissions.
- Website development related suggestion.
- Request for additional information on CreativityModel Global Alliance membership.
- Request for additional information on CreativityModel Method licensing principles.
- Request for additional information on becoming part of CreativityModel Enterprises, Inc. company development team.
- General inquiry.

This is an initial and incomplete list. The content management system should be set up so, that additional entries can be added to this list as needed, and that the relevant submitted inquiries can be managed as needed.

Inquiry Submitting Usability

We need a functionality that keeps the visitor entry submitting processes simple for the website visitors. Best solution seems to be to have one inquiry page, where the visitors who have logged in, need to do only the following:

- Choose from a drop-down box the submitted entry type.
- Type, or copy and paste, the entry text.
- Optionally, use the “Include custom page link” link. (This functionality is explained elsewhere in the specification file.)
- Click the Submit button.

So, the relevant user interface should contain simply a drop-down box, text area, “Include custom page link” link and the Submit button.

This simple functionality should be on the same type of a page, where the posts are, or it could be on a popup.

For this to work properly, I would like to set this up so, that

- Only a visitor, who has registered, can log in (this is logical; all websites are set up this way, so, this is nothing new).
- Only a visitor, who has logged in (and, thus, has already registered) can send inquiries of any type.
- For every visitor who sends an inquiry through the Inquiry page, the visitor ID is submitted automatically with the inquiry.
- Content management system contains functionality that, based on the visitor ID, pulls the visitor’s information from the relevant linked tables (visitor’s name, and so on).

Further, prior to submitting the inquiry, code should check that a valid visitor ID is available, that is, that it has not been wiped out by an error or for some other reason is not available.

Thus, code should be set up so, that if the visitor ID has been wiped out accidentally, the system requires another login. However, whatever text the visitor has written prior to clicking the Submit button, must be preserved. We most definitely do not want to make people to write their messages twice in a case of an error; that would be very irritating.

Custom Page Functionality And Inquiries

(Custom page functionality is explained elsewhere in the specification file. I am adding here notes that are relevant to inquiries, so that I can keep the inquiry functionality related content together.)

Custom page links are by their nature URLs.

Everything that is submitted in an inquiry should appear as unformatted text only, including any URLs.

Accordingly, we want to set this functionality up so, that custom page link can be inserted into an inquiry as well, but in the inquiry it appears as unformatted URL.

Avoiding Submission Spam

Submission spam is addressed in the Abuse Control System section.

Visitor Entry Filtering System

All visitor entries should be filtered and handled as is described in the Visitor Entry Filtering System subsection.

Using Captchas

I plan to use captchas only when the visitors register.

Accordingly, we probably do not want to use captchas when the (logged in) visitors submit inquiries.

As far as I know, some robots can find their way around the login requirement, too. Nevertheless, unless we find a cost effective solution for combating such abuse, for website Version 1 we will not address this problem area.

Visitor Entry Handling System

Thank You Notes

After a successfully submitted entry, a thank you note should appear, stating simply:

Thank you, the submitted information has been received and will be processed by our staff.

After a successful registration, a thank you note should appear, stating simply:

Thank you, the registration process is complete.

Handling Stored and Processed Entries

Above I divided the visitor entries into “Stored entries” and “Stored and processed entries.”

Stored entries:

- Functionality-related entries: Profile of [Username], Site Map / My Reading List, and Custom Pages
- Live Chat transcripts

Stored and processed entries:

- Comments, questions and replies
- Different type of inquiries
- Questionnaires

“Stored entries” are more like events. Visitor does something, application stores the data.

“Stored and processed entries” are not like events, they are more like processes. Visitor does something, application processes data so, that one or more CreativityModel.com staff members are involved, and the results of the entire process are stored along the way.

I would like to set up the “Stored and processed entries” so, that individual visitors get feedback about their data processing. That feedback is stored in the visitor’s Registration, Profile Changing and Interaction History page special section, named My Interaction History.

In addition, visitors who use the Live Chat sessions, should be able to download their Live Chat session transcript within 24 hours from the live chat instance from the My Interaction History section as well.

Submission Guidelines

Below are the planned submission guidelines for the site visitors. This text should probably be on a popup that opens from a link that is on all the blogging pages.

Our primary objective is to create a website that over time will contain from the informative-educational prospective increasingly useful, CreativityModel Method usage and creativity management and development related content. Keeping this in mind:

- Any references to outside sources and Web addresses that are part of comments, questions and replies, should be related to the page content. If you want to market products or services, please use your profile page for that purpose.
- Please do not add multimedia or HTML formatting. As needed, you can use dashes or double dashes (--) instead of bullets in the beginning of a line. Empty lines will be used as paragraph breaks.
- All visitor comments, questions and replies are reviewed and may be edited by CreativityModel.com staff members before they are posted.
- We do not post entries that in our opinion are off the topic, or offensive, or contain ad hominem attacks (for example, are attacking persons instead of addressing ideas).

If we do not post your submitted entry, we will post an explanatory message in the My Interaction History part of your Registration, Profile Changing and Interaction History page.

- Posts may be updated after the initial entry date. Further, over time our staff may re-order, update, or delete some comments and questions, leaving only these entries that are deemed to have the highest educational value.

The purpose of this process is to create site content that from the informative-educational prospective can benefit the visitors the most.

- CreativityModel.com staff members may block a site visitor from submitting information, if the visitor's activities are deemed to be disruptive.

We will send the visitor who has been blocked from submitting information an email using the email address that the visitor entered in his or her profile page, explaining why the information submitting block was implemented and what the visitor can do to have the blocking removed.

Flag as Offensive

In the blogging area, visitors can flag individual questions, comments and replies as offensive.

Please see the mockups for additional information.

This functionality requires login. So, when a visitor clicks on the Flag link in the blogging area, the first step should be determining, whether or not the visitor has logged in. From there on, the functionality should proceed accordingly. Site Visitor Login subsection contains additional information on this topic.

We don't know, whether or not individual entries actually are offensive. That is, this website administrator's opinion may differ from the site visitor's opinions. So, we consider such entries potentially offensive, and handle them through the content management system.

When visitor, who has logged in, clicks on the Flag link, a popup should come up, with the content that is described below. The visitor's entries to the text box and/or text area should be stored as well, so that they can be reviewed through the content management system.

Below is a mockup of this popup's content.

As this website visitor, you can flag entries that you consider offensive.

Some entries may indeed be explicitly offensive, others may be a matter of individual opinion. So, the site administrator will review all the flagged entries and will decide, what to do about them.

Explanatory comment: We need to show the specific potentially offensive entry's text here, in order to avoid mistakes. So, the potentially offensive entry text should be shown here.

Does the above text contain a specific word or a phrase that you consider offensive? If so, please help us to identify it by entering it here: [text box, 100 character limit]

If there is no specific word or phrase that you consider offensive, please explain briefly, why do you consider this entry to be offensive. (300 character limit.) Your explanation is needed, so that we can understand the issue the way you do, and can decide, what to do about it.

[text area, 300 character limit]

Thank you for your help!

Submit (button)

Before the entry is submitted, it should be filtered as well, just like other types of visitor entries need to be filtered.

We also need functionality, that prevents visitors from abusing the Flag as Offensive functionality.

Registration, Profile Changing and Interaction History Pages

Basic Principles

- Visitor, who registers, creates a profile for him or herself, that he or she should be able to change.

Selected portion of the profile is displayed to other visitors as well.

Further, for the visitor's records, part of the profile page, named My Interaction History, contains also information about the visitor's entries (questions, comments, and so on).

- We should have two pages, that are linked to the same underlying data set, but display different fields to individual visitors:

- Registration, Profile Changing and Interaction History Page
- Profile of [Username] page

- **Registration, Profile Changing and Interaction History** page is described below in the Registration, Profile Changing and Interaction History Page subsection.

This page is needed both (1) as an empty template, and (2) as a template that is filled with visitor specific data.

In both cases, this page should contain the same fixed number of fields per visitor, so that the fixed number of fields is the same for all the visitors.

- During the registration, a visitor uses the Registration, Profile Changing and Interaction History page, which is described below in the Registration, Profile Changing and Interaction History Page subsection.

Similarly, when an already registered visitor wants to make changes to his or her profile, the visitor does so through the same Registration, Profile Changing and Interaction History page.

That is, any time after the registration, a visitor can access the Registration, Profile Changing and Interaction History page again. He or she should see the same fields, and should be able to make the same changes to it, that he or she is able to make during the registration.

Similarly, a visitor should see the same data, that the visitor saved when he or she used the Registration, Profile Changing and Interaction History page the last time.

Briefly, we want to keep this functionality's usage as consistent as possible.

- **Profile of [Username]** page, which is the profile page for a registered visitor, contains information from certain fields that are selected by default, and these fields, that the visitor has selected for displaying his or her information to other website visitors.

Through using the Registration, Profile Changing and Interaction History page, a visitor creates his or her Profile of [Username] page content by (1) filling in registration fields with information, and (2) by selecting, which fields should be displayed as his or her profile to other visitors.

So, the Profile of [Username] page's content should be assembled dynamically, and different visitors Profile of [Username] page's content may differ.

- When a registered and logged in visitor submits comments, questions or replies, his or her Username is posted as well. That Username is a link to that visitor's profile, that is, Profile of [Username] page's content.

If needed, please see the relevant mockup for additional information on how the Username is posted with comments and questions.

Please note, that on the mockup every Username is the same – simply a word Username. In reality, they would differ, because different site visitors would leave comments, questions and replies, and these different visitors have different Usernames, because the Usernames must be unique.

Looking from database development prospective, this is obvious, but just in case, for the sake of clarity, I am mentioning it here.

- When any of the visitors clicks on a Username link, that Username link should open the Profile of [Username] page for the relevant Username.

As is mentioned above, the Profile of [Username] page's content should be assembled dynamically, and different visitors Profile of [Username] page's content may differ.

- We should have a functionality that reserves certain usernames so that these usernames cannot be used – for example, the word NA.

Registration, Profile Changing and Interaction History Page Mockup

Registration, Profile Changing and Interaction History

Your registering and providing accurate information and feedback helps this site developers to understand, who may be interested in the services that we intend to develop. [Read more](#)

[Information about this form's usage](#) | [Privacy Policy](#) | [My Public Profile](#)

Public?	Please fill in all these fields	
	VisitorID:	
Yes	Username:	Text box, 15 character limit. <i>If the username is unavailable the way it is typed during the registration, it will be appended with a number, so that it will be unique.</i> <i>Only username will appear with the comments, questions and replies.</i>
<input checked="" type="checkbox"/>	First name:	Text box, 100 character limit
<input checked="" type="checkbox"/>	Last name:	Text box, 100 character limit
<input checked="" type="checkbox"/>	Gender:	<input type="radio"/> Male <input type="radio"/> Female Option buttons, visitor should be able to select one of the two options.
<input checked="" type="checkbox"/>	Birthday:	[Select Month] [Select Day] [Select Year] Each of the above is a drop-down; we will specify this functionality further later.
Yes	Industry / Activity Area:	Drop-down; we will specify this functionality further later.
No	Annual household income:	Drop-down; we will specify this functionality further later.
Yes	Your country or current location:	Drop-down; we will specify this functionality further later.
<input checked="" type="checkbox"/>	State (if US):	Drop-down; we will specify this functionality further later.
<input checked="" type="checkbox"/>	Zip code (if US):	Drop-down; we will specify this functionality further later.
<input checked="" type="checkbox"/>	Province and postal code or index, if applicable (non US):	Text box, 20 character limit
No	How did you find or hear about this site?	<ul style="list-style-type: none"> • Search engine [drop-down, will specify content later] • Through a person I know • Other – Please specify [text box, 100 character limit] <p>Development note: Site visitor should be able to select only one option among the three that are listed above.</p>

No	Email:	Text box, 100 character limit; we will specify this functionality further later.
No	Password:	Text box, 15 character limit; we will specify this functionality further later.
No	Retype password:	Text box, 15 character limit; we will specify this functionality further later.
No	<input checked="" type="checkbox"/> I am interested in product and service information and relevant opportunities, including possibly participating in free evaluations of new online creativity management and development exercises. <i>Leaving this box checked does not obligate you in any way. If we do contact you, you can decide whether or not you want to participate in free evaluations or use any other offers. Further, you can change the information in your public profile during the later logins, too, including unchecking this box.</i>	
No	<input type="checkbox"/> I agree to the Site Usage Terms	
	Type in the displayed characters: Here we should have captchas.	
	Optional information	
<input checked="" type="checkbox"/>	Your picture	Ideally, we will set this up so that the visitors who register can also upload images of themselves. We will need to address the relevant details prior to or during the development process.
<input checked="" type="checkbox"/>	Self description	Text area, we will specify the limit further later.
<input checked="" type="checkbox"/>	Your website	Text box, 100 character limit; we will specify this functionality further later.
<input checked="" type="checkbox"/>	I allow other registered site visitors to contact me. <i>Our automated delivery system will forward an email to you without giving out your email address. In each instance when we forward an email to you, you can decide, whether or not you want to respond and give out your email address to the sender.</i>	
	Block the following site visitors from contacting me (one Username entry per line)	Do Not Contact Me List Text area; we will specify this functionality further later.
<input type="checkbox"/>	Make my Do Not Contact Me List public	We will specify this functionality further later.
	Submit [A button]	

Your registering and providing accurate information and feedback helps this site developers to understand, who may be interested in the services that we intend to develop. [Read more](#)

[Information about this form's usage](#) | [Privacy Policy](#) | [My Public Profile](#)

Registration, Profile Changing and Interaction History Page Development Notes

Development-Related Notes

Here are some notes I made. Here, and in most other places, the development-related notes indicate how we probably want to set up the relevant functionality. However, when better alternatives emerge, we can make changes as needed. So, if you have recommendations or suggestions, please let me know and we can consider making changes, add or in some instances, if needed, omit some initially planned features.

- The three underlines areas here should launch relevant popups:

Your registering and providing accurate information and feedback helps this site developers to understand, who may be interested in the services that we intend to develop. [Read more](#)

[Information about this form's usage](#) | [Privacy Policy](#)

Similarly, [Site Usage Terms](#) should be a popup.

Website administrators should be able to modify the content of these popups through the content management system.

[Read more](#)

Your registering and providing accurate information and feedback helps this site developers to understand, who may be interested in the services that we intend to develop.

Some of the planned services will require substantial investments. In order to get the investors interested in working with us, we need to demonstrate that there are substantial numbers of real people, not just usernames and email addresses, who may be interested in online creativity management and development exercises and other services that we plan to offer.

So, thank you already in advance for your help!

[Information about this form's usage](#)

Your username will appear with the comments, questions and replies, and is a link to your public profile.

(1) Username, (2) country and (3) Industry / Activity Area selection will be displayed by default in your public profile. Most of the rest of the fields are set up so, that you can decide, whether or not you want to include them in your public profile.

Either way, your email address and Annual household income will not appear in your public profile.

Please fill in all the fields that apply to you, then uncheck these fields that you do not want to appear in your public profile.

- *Only the fields that are checked will appear in your public profile. So, by checking or unchecking fields you can decide, which fields will appear in your public profile.*
- *You can change the information in your public profile during the later logins, too.*
- *Every time when this website visitors read the comments, questions or replies that you submit, they can also check out your profile.*

*If you wish to do so, **you can use your profile for marketing your products and/or services.** Preferably, these products and/or services should related either directly or indirectly to creativity management and development.*

In the Optional information portion below, you can write a short summary about yourself and, optionally, also the company, products and/or services that you represent or sell. If you also fill in and check off the Your website field, the website that you enter will be listed in your public profile below the summary that you write.

- You can decide, **whether or not other site visitors can contact you.**

Based on your profile, comments, questions and replies, other site visitors may be interested in contacting you directly. So, this feature could help site visitors to find new friends who may share their areas of interests. Similarly, if two visitors want to exchange ideas beyond the scope of this website, they can contact each other using this feature.

You have the following options:

- *You can decide, whether or not other registered site visitors can contact you.*
- *You can block specific site visitors from contacting you by entering their Username to your Do Not Contact Me List.*
- *You can decide, whether or not other registered site visitors can see your Do Not Contact Me List. If you do not want certain site visitors to contact you, you can, if you like, display that information publicly.*

You can try out these features, and if you don't like the outcome, you can change the settings during any of the future logins through your Profile of [Username] page.

Caution: If you are a minor – that is, under the legal age, whatever that is in your area of the world – be very careful about giving out your contact information to other site visitors if and when they contact you directly. Consult with your parents and, as applicable, other legal guardians that you have, especially if someone wants to meet with you in person.

Username must be one word and can be up to 15 characters long. You can combine several words into one username. If the username that you select is unavailable the way you type it during the registration, the selected username will be appended with a number, so that the end result is unique.

- The **My Public Profile** link should be grayed out, that is, inactive for those visitors, who have not logged in. It should be active for those visitors who have logged in. If active, this link should launch the Profile of [Username] page for the logged in visitor who clicked it.
- The checkboxes should be checked/unchecked by default as is indicated above.
- (1) Username, (2) country and (3) Industry / Activity Area fields should not have checkboxes, because the selection of these fields will be displayed by default in any registered visitor's public profile (that is, the Profile of [Username] page).

(4) Email and (5) Annual household income fields should not have checkboxes, because these fields should never be displayed in any registered visitor's public profile.

Among the rest of the fields, these fields should be displayed in the registered visitor's public profile, for which the visitor has BOTH filled in the field and left the field checked off.

To make this simpler for us, my recommendation is to set this up so, that initially all the relevant checkboxes are unchecked. When the visitor leave a field, and the field is populated, the field-related checkbox is checked off programmatically. The visitor can thereafter uncheck the relevant checkbox.

- Site Usage Terms check box should appear as unchecked by default. The visitor has to check it, to indicate agreement with the Site Usage Terms.
- All visitors must fill in all the fields listed in the **Please fill in all these fields** area.
- Filling in the fields listed in the **Optional information** area is optional, that is, these fields can be left empty.
- If the site visitor fills in and checks off the Your website field, the entered website should be listed in the public profile below the summary that the visitor writes.
- Optional information area fields should be displayed independently from each other. For example, if the summary field is empty, or is not checked off, but the website field is filled in and is checked off, the website field should be listed in the public profile.

- The website field content should be listed as a hyperlink to a website. So, we need functionality there, that always results in a website address that has a correct syntax (that is, structure). For example, if the site is entered as www.sitename.com, or sitename.com, or http://www.sitename.com, it should result in http://www.sitename.com. The same applies, of course, to other extension in addition to .com as well (.net, .org, and so on).

However, if the site is entered as http://sitename.com, it should result in http://sitename.com. The same applies to http://sitename.com/extension and http://sitename.com/extension.filetype, where extension may be a folder or file name.

Further, all external websites should open as new windows, so that the underlying CreativityModel.com website stays open.

This has to work with different browsers and browser versions – for example, IE 7 (and, preferably, IE6, too), Firefox, Safari, Opera, Chrome.

This principles applies to all the links in any part of our website, that open external websites and we have any control over. We always want to open such external websites in new window.

In cases where we do get the HTML for external ads, we should modify the HTML so, that the advertised URL opens in a new window, too.

To put it differently, as much as possible, I want to keep CreativityModel.com open, so that any external URLs open as new windows.

- When the Industry / Activity Area drop-down's content is selected, the application should behave as is described in the Industry / Activity Area subsection.

When the visitor clicks the Submit registration button, the functionality should proceed in the following order:

- If the username is unavailable the way it is typed during the registration, it should be appended with a number, so that the end result is unique.

If the username was appended, a message should appear:

Your username will be:

[the appended username]

Is this OK?

Yes/No

If the visitor clicks Yes, proceed. If the visitor clicks No, ask the visitor to select a new username and repeat the cycle until the answer is Yes.

Unless we have reasons to decide differently, we can use a popup for this message.

- Next, check, that each of the required fields has been filled in or, if applicable, a selection has been made.

We will specify separately the requirements for the necessary fields, like, for example, Birthday, State (if US), Zip code (if US), and Province and postal code or index, if applicable (non US).

We do **not** want to use client-side JavaScript for this functionality. **Instead, we want to use server side programming.**

- Next, check, that the Site Usage Terms check box has been checked off. If not, ask the visitor the following question:

Do you agree to the Site Usage Terms?

Yes/No

If the visitor clicks Yes, proceed. If the visitor clicks No, display the following notice:

We cannot register you unless you agree to the Site Usage Terms.

Briefly, we do not let the visitor through with the registration, unless the visitor agrees to the Site Usage Terms.

- Next, check, that the visitor has typed in the displayed captcha characters in the Type in the displayed characters field. These characters may look something like this:



We should use **complex background textures for captchas** so that we make it as difficult as we can for programmed bots to read them.

As much as possible, we should set up the site so, that advanced bots cannot read the captchas we use, cannot log in and cannot submit any information that we store.

- Visitor entry (Self description field content) filtering as is described in the Visitor Entry Filtering System subsection.
- Successful registration should create VisitorID field entry (AutoNumber) that is displayed both to the visitor, and also publicly, as is shown in the Profile of [Username] subsection.

The reason for displaying it is, that we want to encourage the visitors to use VisitorIDs when they need to do so, instead of using Usernames. Using all numeric VisitorIDs tends to be less error prone than is using Usernames, that can be spelled in very unusual ways.

For VisitorID we probably want to use regular Primary Key values, that are incremented by 1 for every new record.

- After successful registration, we probably should refresh the page. Further, a thank you note should appear, stating

Thank you for registering!

Password was emailed to you for the first login. That password is good for the first login only. During subsequent logins you will need the password that you created during the registration.

After logging in, you can check out your public profile. Your public profile contains information that other site visitors can see about you. You can check out your public profile by clicking on the My Public Profile link. You can make changes to your public profile. If needed, click the Information about this form's usage link for more information.

In addition, a message should be posted on the visitor's My Interaction History portion of the profile. I will specify that message's content later. (This message, just like other similar messages should be changeable through the content management system as well).

- I would like us to set up the first login so, that the initial password is emailed to the visitor. As is explained above, that password is good for the first login only. During subsequent logins the visitor should use the password that he or she created during the registration.

This is somewhat inconvenient, but it helps to make the defense mechanism against the bots stronger.

Profile of [Username] Development Notes

When a registered website visitor submits comments, questions or replies, his or her Username is posted as well. That Username is a link to that visitor's profile, that is, to that visitor's Profile of [Username] page's content. If needed, please see the mockups for additional information on this.

As is mentioned in the Site Visitor Registration, Basic Principles subsection, the Profile of [Username] page's content should be assembled dynamically, and different visitors Profile of [Username] page's content may differ.

There are couple of additional features in the Profile of [Username] page that are described here.

I Want To Contact This Website Visitor

Additionally, the Profile of [Username] page should contain a link:

I want to contact this website visitor

Clicking on this link should allow sending an email (message) to the visitor, whose profile is being displayed.

The sender should not see the recipient's email address.

This functionality requires login. So, a click on the I want to contact this website visitor link should activate the relevant login verification functionality.

We should set the Profile for [Username] page up so, that the I want to contact this website visitor link is displayed only in these site visitors Profile for [Username] page, who have left checked off the following feature in their profile:

I allow other registered site visitors to contact me. Our automated delivery system will forward an email to you without giving out your email address. In each instance when we forward an email to you, you can decide, whether or not you want to respond and give out your email address to the sender.

Briefly, if a registered visitor has indicated, that he or she does not want other site visitors to contact him or her, then it would be better, if we do not display the I want to contact this website visitor link in that registered visitor's profile at all, or have the I want to contact this website visitor link disabled for that registered visitor.

For those registered visitor, who allow other visitors to contact them, the I want to contact this website visitor link should open the user interface that allows one site visitor to contact other site visitors. This user interface can be very simple – just text area for sending a message, Send button, and some explanatory text.

For example, the sender's actual name and email address should always be automatically included with the message, and I want to include that explanation in the message sending user interface as well.

This functionality should require login, that is, only a visitor who has logged in can contact other site visitors this way.

As with every other instance that requires login, if the visitor has not been logged in, he or she should be prompted to log in.

I plan to clarify this message sending user interface further during the development.

Deactivating/Reactivating Profiles

Site visitors can deactivate and reactivate their own profiles. We offer this in lieu of allowing the visitors to delete profiles.

Of course, this functionality requires a login.

Deactivated profile should display the following records: Username, country and Industry / Activity Area selection. These are the fields that are being displayed by default also in the actively used Profile of [Username] pages.

So, any comments, questions and replies that the visitor has submitted remain linked to the same username, but no additional information about the profile is displayed to other site visitors.

If the visitor wishes to do so, he or she can reactivate a profile that he or she has deactivated. So, visitors should be able to log in to the profiles that they have deactivated, using the relevant username, email and password (or, if we so choose, username and password).

Please note, that through the content management system site administrators (that is, CreativityModel.com staff members) should also be able to deactivate and reactivate profiles. However, this should be set up so, that if a profile is deactivated by site administrator, the visitor is no longer able to log in using the relevant username, email and password.

Further, site administrators should also be able to delete profiles.

We don't want somebody start somehow abusing this by clicking on the reactivate-deactivate repeatedly. So, we could set this up so, that we use a 1 hour waiting period, or something similar. In addition, I would like to put this through the Abuse Control System as well (as is described in the relevant subsection).

Industry / Activity Area

Below is the Industry / Activity Area drop-down box's content. This drop-down box is part of the user interface and the underlying functionality, that is described in the Site Visitor Registration, Registration, Profile Changing and Interaction History page and Profile of [Username] subsections.

Please note, that CreativityModel.com staff should be able to modify the content of this drop-down through the content management system.

I intend to build on this functionality during the later company and website development stages. So, initially, during this first stage, we simply set up user interfaces and functionality for collecting information.

Please make a selection

High School Student

University / College / Graduate School Student

Homemaker

Retired

Between Jobs / Not Currently Working

Business Services / Consultancy

Marketing / Advertising / Public Relations / Media

Entertainment / Publishing / Broadcasting

Tourism / Travel / Hotel / Restaurant Services

Retail / Wholesale / Distribution

Finance / Banking / Accounting / Venture Capitalist

Insurance / Real Estate / Legal

Healthcare / HMO / Hospital / Medical

Pharmaceuticals / Biotech

Manufacturing

Mining / Energy / Utilities / Refineries / Agriculture

Engineering / Architecture / Construction

Transportation (highway, air, railroad, maritime)

Government (Federal/State/Local)

Aerospace / Defense / Military

Research / Development Lab

Education (University/College)

Education (Other than University/College)

Non-Profit / Trade Association

CreativityModel Method Specialist Trainee

CreativityModel Method Consultant Trainee

CreativityModel Method Trainer and Consultant Trainee

CreativityModel Method Specialist

Licensed CreativityModel Method Consultant

Licensed CreativityModel Method Trainer and Consultant

CreativityModel Enterprises, Inc. Employee

Profile Updating By Site Users Who Are Not Site Visitors

I want to set the registration functionality up so, that the CreativityModel Method Specialist, Trainer and Consultant Trainees and course graduates and, also, CreativityModel Enterprises, Inc. employees, can fill in and update their profiles. Briefly, for the most part I intend to keep this somewhat complex functionality as simple and standardized as possible for different types of site users.

Accordingly, in the above Industry / Activity Area list, the last group of records lists different types of site users who are not simply site visitors:

CreativityModel Method Specialist Trainee

CreativityModel Method Consultant Trainee

CreativityModel Method Trainer and Consultant Trainee

CreativityModel Method Specialist

Licensed CreativityModel Method Consultant

Licensed CreativityModel Method Trainer and Consultant

CreativityModel Enterprises, Inc. Employee

In order to make this work, we need functionality that prevents regular site visitors from selecting any of the above records, when they create or modify their profiles. I describe below one way we can do this.

About the Information Flow

I will add here some clarifying comments about how I envision some information flow aspects working together.

Every trainee must submit the Trainee Application before becoming a trainee. Similarly, every employee, including the partners and other management team members, must submit the Employee Application. Both types of Applications will be electronic, are part of the same application that this specifications file describes, will be linked to the same database structure that the rest of the blogging website is linked to.

I will set this up so that everybody must follow the application submitting protocol. No exceptions, because exceptions can create havoc and we do not need that. We need to keep things as standardized as possible, while also making sure that all the standardized processes are as user friendly as possible.

In order to submit any type of inquiry or application, the site visitor must register and create his or her profile first. That process results in assigning the VisitorID.

A registered visitor can then submit an application.

The VisitorID of every trainee and employee candidate who has been accepted, together with identifying what the person has been accepted for (and the date of acceptance), will be entered in a different table. (I will describe that in the content management system file.)

Next, an email will be sent to the candidate, letting him or her know, that he or she has been accepted. Among other things, the email will ask him or her to change the Industry / Activity Area drop-down box's selection. In order to make the change, the visitor must log in, go to the Registration, Profile Changing and Interaction History page and select the applicable Industry / Activity Area drop-down box's record.

The application must then search the second table, and if it finds a match in the second table to the visitor's VisitorID and the selected Industry / Activity Area drop-down box's record, the change is accepted. If not, the application should display the following error message:

Please do not select this option, unless you

-- Have submitted the relevant application and

-- Have been notified, that the application has been approved.

This means, that every regular visitor, who selects one of the options that is related to CreativityModel Enterprises, Inc. activities, should get the same error message in response.

From relational database development prospective, the above is pretty simple.

Handling Abuse

If somebody attempts to abuse this functionality by purposefully selecting wrong drop-down box's records repeatedly, either manually or programmatically, that should trigger the Abuse Control System response.

Selecting Group Dividers

When the site visitor selects the following Industry / Activity Area drop-down box's content record:

the drop-down box's content should move to, that is, select and display the first record instead:

Please make a selection

The behind the scenes functionality can be rather simple. Behind the scene, in the relational database structure, in the underlying table, each record has an ID. If the ID is triggered, that corresponds to the divider, it triggers the functionality described above.

Again, from relational database development prospective, the above is very simple.

Handling Abuse

Just like above, if somebody attempts to abuse this functionality by purposefully selecting wrong drop-down box's records repeatedly, either manually or programmatically, that should trigger the Abuse Control System response.

What Triggers the Verification?

It seems to me, that we can set this up in one of the two ways.

- We can verify, that the visitor has selected the correct drop-down box' entry every time a visitor changes the Industry / Activity Area drop-down box's record.
- We can verify, that the visitor has selected the correct drop-down box' entry every time a visitor clicks on the Submit button.

The latter is less convenient for the visitors, especially when the --- is selected accidentally. However, I recommend the latter option, that is, running the verification only when the Submit button is clicked, because that option probably is easier to develop, is less prone to abuse by the visitors and will put less burden on the server resources.

Visitor Entry Filtering System

All website visitor entries of any type should be filtered against two lists of terms: Offensive Terms List and Potentially Offensive Terms List.

The purpose of this is to separate these visitor entries, that may contain offensive language, from the rest of the visitor entries. Through the content management system, the separated entries will be dealt with as lower priority tasks. That is, we want to address and get posted these entries faster, that seem to be fully legitimate and are more likely to contain content that is in accordance with the website's purpose.

We will specify the filtering functionality further. However, in a nutshell, the functionality should work in the following way:

- One or more direct matches to Offensive Terms List – submitted entry will be placed on the Deleted Offensive List.
- One or more partial matches to Offensive Terms List – submitted entry will be placed on the Quarantined Offensive List.
- One or more direct matches to Potentially Offensive Terms List – submitted entry will be placed on the Quarantined Offensive List.
- One or more partial matches to Potentially Offensive Terms List – submitted entry will be placed on the Quarantined Offensive List.

Relevant message is displayed on the website. For this purpose we can probably use a popup.

We want to set this up so, that the message that is displayed contains the identified term as well.

For example, the message could look something like this:

We have a potential problem here. Your entry contains the following word(s) or term(s) that is/are on our watch list:

bitch

One or more website administrators will review your entry. If this entry is deemed to be such, that it helps to build the educational and informative value of this website's content without being potentially offensive, it will be posted as usual, otherwise it will be deleted.

Thank you in advance for being understanding about our website administration policies. We try to build content that can be helpful to people, without being explicitly offensive. What is or is not offensive is often a matter of judgment. So, our site administrators will have to make the relevant decisions and proceed accordingly.

If there more than one word or term is involved, the message could look something like this (problematic words are all listed, so that they are separated with commas):

We have a potential problem here. Your entry contains the following word(s) or term(s) that is/are on our watch list:

bitch, boobs

One or more website administrators will review your entry. If this entry is deemed to be such, that it helps to build the educational and informative value of this website's content without being potentially offensive, it will be posted as usual, otherwise it will be deleted.

Thank you in advance for being understanding about our website administration policies. We try to build content that can be helpful to people, without being explicitly offensive. What is or is not offensive is often a matter of judgment. So, our site administrators will have to make the relevant decisions and proceed accordingly.

Handling Abuse

Site visitor, who has submitted an entry that contains a match to either the Offensive Terms List or the Potentially Offensive Terms List, and thereafter wants to post another entry, that does not contain a match to either of the two Lists, can do so.

To put it differently, we don't prevent a visitor from submitting additional entries, just because he or she submitted an entry that had a match to one of the two Lists.

However, we want to set this up so, that any site visitor can post, either manually or programmatically, only a limited number of offensive and potentially offensive entries.

If somebody attempts to abuse this functionality by purposefully submitting offensive entries repeatedly, either manually or programmatically, we need to be able to intervene. For example, we could close the browser instance (by invoking a simple script that closes the page) and to disable the visitor's login credentials temporarily. I will specify the relevant functionality further during the development.

Relevant Content Management System Functionality

In the content management system, we need to be able to update, delete and modify terms on both lists (Offensive Terms and Potentially Offensive Terms) and to change the content of the relevant messages that are displayed to the site visitors (on the label referenced above).

Further, in the content management system, we need to be able to see in the Action Needed Summary Page, how many of the different type of entries there are in each of the relevant categories, on the Deleted Offensive list and on the Quarantined Offensive list.

In addition, we need to be able to review easily, and either Clear or Delete each of the items on the Deleted Offensive list and the Quarantined Offensive list. All Cleared entries will be processed as regular entries. All Deleted entries will be deleted permanently.

We will need a continuous form type of setting, with the data in the columns, and two checkbox columns: (1)Clear and (2) Delete. In addition, we need an action button.

Content management system specifications file describes the relevant functionality parts further.

Security Related Development Topic

Motley Fool visitor registration website contains among other things the following information. I would like us to use something similar during the registration and login.

About Secure Submission

How does secure submission work?

When we say your data is being "submitted securely" we mean we're using SSL-encryption, an industry standard protocol for safely exchanging information. The important part here is that your information is encrypted so that only your computer and the Motley Fool can see or understand it.

That's great, but what exactly is SSL-encryption?

That's a very good question. Our security Fools like to describe how SSL-encryption secures your data using the following analogy:

Imagine you are passing a note from the back row of a full auditorium to your friend in the front row. You send it on its way and hope no one between you and your friend decides to open your note and read the message. This is very similar to the way most information travels on the Internet. Now imagine placing your note in a locked case, that only you and your friend have keys for, and passing this case to your friend. No one can open the case and read your note except you and your friend. SSL-encryption is the electronic equivalent of a locked case and only your computer and the Motley Fool have the keys.

For those of you interested, a somewhat more technical explanation can be found at Netscape (the creators of the SSL protocol).

OK, but my browser says the page may not be secure. What's the deal?

SSL-encryption comes with some costs. A common "cost" is that secure pages load more slowly. To minimize the effect on performance, we do not use SSL-encryption on the pages we send to you that do not contain sensitive information (like your password). We only secure the sensitive data that you send to us. Our web servers start using SSL-encryption when you click on the Secure Submission button.

Although this is a perfectly safe and secure method used by many sites (for example Yahoo and MSN), it does have a few confusing side effects you may encounter.

Your browser will not identify the page as secure because the pages we send you are not encrypted

When you submit your data to us, your browser will detect you are about to send data using SSL-encryption from a page it does not consider secure. Depending on your browser configuration, you may see a warning message.

When you are finished sending us your data and we start sending you web pages, your browser will detect that you are no longer using SSL-encryption. Depending on your browser configuration, you may see a warning message.

I still have questions and concerns about Security, who can help?

Security is a top priority at the Motley Fool. We have a team of Fools dedicated to securing all of our systems and information. If you'd like to ask them a question, they'd be happy to hear from you. Just drop a line to SecuritySam@Fool.com or swing by the [Internet Security Issues](#) message board. They'll do their best to address your concerns and answer your questions.

Site Visitor Login

What Requires Visitor Login?

Certain areas, functionality parts and activities should require visitor login. So, we need visitor login functionality with its authentication, data storage and other relevant functionality parts.

For the most part there are two types of functionality areas that require login:

- Whenever a site visitor submits information that we will store, the visitor must log in.

For example, submitting comments, questions, replies, or inquiries requires login.

- Reviewing selected stored information requires login.

For example, reviewing Registered Visitors Profiles, or CreativityModel Method Formal Version requires login, while just visiting and reading regular website side pages does not require login.

Further, accessing existing Profile Changing and Interaction History page requires login.

However, for website marketing purposes, we want the spiders to be able to access and crawl individually all these pages that are accessible to the website visitors **without having to log in** (including the Profile of [Username] pages), so that all these pages appear on the search engines as individual pages.

To put it differently, all that information that any website visitor can find without having to log in, should be accessible to the spiders as well. The information that requires login, should not be accessible to the spiders.

Registration and Login

Logging in, of course, requires registration. So, on the Login page, we should display the functionality for registering as well, for those visitors who have not registered yet, and, therefore, do not have their registration information. (Some sites use the phrase “sign up” or “signing up” instead of the word “registering” which I prefer).

Similarly, we should use the traditional “I forgot my username” and “I forgot my password” functionalities.

Password Requirements

We have to decide what password requirements we will use.

Here’s an interesting article that I found when I did some Google search on password requirements:

<http://blog.kamens.brookline.ma.us/~jik/wordpress/2009/09/29/password-security-hall-of-shame/>

Here, as an example, is a set of password requirements:

- Password must contain between 7 and 32 characters, all of which belong into the following set:

! # \$ % & () * + , - . / 0 1 2 3 4 5 6 7 8 9 ; : < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] _ `
 a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~

- Password must contain 1 or more lowercase letters: abcdefghijklmnopqrstuvwxyz
- Password must contain 1 or more uppercase letters: ABCDEFGHIJKLMNOPQRSTUVWXYZ
- Password must contain 1 or more numeric characters: 0123456789
- Password cannot contain more than 3 identical consecutive characters, like AAAA, iiiii, \$\$\$\$ or others.
- Password cannot contain your username, or email address, or first name, or last name.

Invalid Login Information

When a visitor submits invalid login information, the application should bring up a popup with a captcha and explanation, that invalid login information was submitted.

Either password or username (or both) did not match our records.

- If you would like to try to log in again, please enter the word displayed below in the text box and click Continue.

Captcha

Please enter the text displayed above (text box)

Submit (button)

- If you forgot your username or password, click on either the “I forgot my username” or “I forgot my password” link and follow the instructions.

[I forgot my username](#) | [I forgot my password](#)

If a visitor has submitted invalid login information for more than 3 times in row, we should close the browser instance.

We can discuss any additional measures that we can take in such cases.

“I forgot my username”

Username is unique, but the password may not be unique.

This means, that we can identify a visitor based on username, but not based on password.

When a visitor clicks on the “I forgot my username” link, we should display a page that has a secure connection to our server. On that page, I would display first the following message, and below it the following text and fields:

If you have submitted any questions, comments or replies, locate them. Your username is included with every question, comment and reply that is being displayed on the site.

If you would like us to email your username to you, please fill in the following fields, so that every field matches our records, and click the Submit button:

First name (text box)

Last name (text box)

Country (drop-down)

Email (text box)

Password (password box)

Captcha

Please enter the text displayed above (text box)

Submit (button)

We have to use captcha as well, that’s what the “Please enter the text displayed above” is for.

If we are going to use the above 5 fields, then here we have to find a match to all of these fields.

If we do not have any match to the username that was submitted, we should display a message:

We do not have the submitted username in our records

If we do not have a match to all 5 fields in our records, we should display a message:

Please check the first and last name and email entry for spelling errors, and make sure that the country selection and password entry match our records.

If a visitor has submitted invalid login information for more than 3 times in row, we should close the browser instance.

We can discuss any additional measures that we can take in such cases.

“I forgot my password”

As is stated above, username is unique, which means that we can identify a visitor based on username.

When a visitor clicks on the “I forgot my password” link, we should display a page that has a secure connection to our servers. On that page, I would display first the following message, and below it the following text and fields:

If you would like us to email your password to you, please fill in the following fields, so that every field matches our records, and click the Submit button:

First name (text box)

Last name (text box)

Country (drop-down)

Email (text box)

Username (text box)

Captcha

Please enter the text displayed above (text box)

Submit (button)

We have to use captcha as well, that’s what the “Please enter the text displayed above” is for.

Here, we can find a match to the Username field entry, and then see, if the rest of the fields match that username records.

If we do not have any match to the username that was submitted, we should display a message:

We do not have the submitted username in our records

If we do have a match to the username that was submitted, but one or more of the other fields do not match, we should display a message:

Please check the first and last name and email entry for spelling errors, and make sure that the country selection matches our records.

If a visitor has submitted invalid login information for more than 3 times in row, we should close the browser instance.

We can discuss any additional measures that we can take in such cases.

Login Setup and Usability

Login screen should be a popup. From the usability prospective a popup is the best solution.

Username is publicly visible and accessible. Therefore, if we use only username and password for authentication, we are actually using only password to authenticate login. This probably is not a sufficient requirements. So, I am thinking that website login should require filling in the following three fields:

Username

Email on file

Password

Determining if a Visitor Has Logged In

Visitor Is Either Logged In or Logged Out, Regardless of the Number Of Open Browser Instances

Every time, when a visitor tries to access functionality that requires login, the application should first determine, whether or not the visitor has logged in for the current session with the website.

When a visitor is logged in, and opens other browser instances to CreativityModel.com site, the visitor should be able to access functionality that requires login through any of these other browser instances as well.

As is stated above, every time, when a visitor tries to access functionality that requires login, the application should determine, whether or not the visitor has logged in for the current session with the website. So, it should not matter, through which browser instance the visitor accesses specific functionality.

Similarly, when a visitor logs out, it does not matter how many browser instances that visitor has open to CreativityModel.com site. If that visitor wants to access functionality that requires login, the visitor must log in again.

How exactly the application determines whether or not a visitor is logged in, is another matter. We can discuss different alternatives in this area.

Further, when I above say “browser instance,” then I do not mean popups that we use. So, we have to make sure, that closing a popup does not log out a visitor that closed it.

Closing Browser Instances Without Logging Out

People may close the browser instance without logging out. For security reasons, we have to log out such visitors automatically.

So, when a visitor, who is logged in, closes a browser instance that he or she has open to CreativityModel.com site, that visitor should be logged out automatically.

Just like above, when I say “browser instance,” then I do not mean popups that we use. We have to make sure, that closing a popup does not log out a visitor that closed it.

Visitors may have several browser instances open to CreativityModel.com site.

If a visitor has several browser instances open to CreativityModel.com site, ideally, the application’s behavior should differ, depending on whether the visitor signs out, or simply closes a browser instance. (Signing out is addressed above, in the previous subsection.)

- When a visitor, who has several browser instances open to CreativityModel.com site, closes one browser instance, ideally the application will still have the visitor signed in through the other browser instances that the visitor has open.

Of course, this must work in a browser neutral manner.

- Another development alternative is to set the functionality up so, that when a visitor who has several browser instances open to CreativityModel.com site, closes one of the browser instances that is open to CreativityModel.com site, that visitor is logged out automatically the same way, as if the visitor actually logged out him or herself.

Login Related Messages

Login Prompt

If the visitor is not logged in and wants to access functionality that requires login, a message should appear:

Hello Guest, Please [Log in](#) or [Register](#).

In this message, the [Log in](#) and [Register](#) should be links to the relevant functionality.

Already Logged In Visitor

If a visitor, who has logged in, clicks on Log In link, a message should appear:

You are already logged in.

Privacy Policy and Other Popups

Privacy Policy should be a link to a popup. We will specify the dimensions of this popup later. Our (CreativityModel.com) staff will need to be able to modify the Privacy Policy content through the content management system.

We may need other Policy type of popups as well. For example, we need site Terms of Usage popup, with the similar ability to modify the content through the content management system.

Below are examples of couple of popups.

Conditional Permission to Use Functionality

I would like to use this text as one of the popups, so that popup opens from one or more locations that we specify.

My Reading List and Custom Page functionalities were developed for CreativityModel.com. You can use one or both of these functionalities, given that you

- 1) Register your request and your website with CreativityModel.com through selecting and submitting an applicable inquiry on the [Contact / Submit an Inquiry](#) page.
- 2) Create one or more links from your site to <http://www.creativitymodel.com> so that the links are placed on highly prominent locations, clearly noticeable and accessible to all website visitors.

Briefly, time and efforts went into creating these functionality parts. We are not going to copyright them. Instead, we make the relevant information available and allow other sites to develop their own versions of these functionalities. All we ask in return, is that the sites, that use either these functionalities or any other features from CreativityModel.com, register their request and link back to us, giving us credit this way.

Hopefully, you find this request fair enough.

Report Ad Abuse

Here is the content of another popup that I would like to use. The link to this popup should open from the bottom of every website page. Please see the mockups for additional information.

As with all the popups, I should be able to modify the content of this popup from the content management system – or, there should be some other way for managing the content of the popups.

Ads should help us to pay for this site's further development, thus, enabling further progress. Hopefully, the ads match to a degree the site content and this way help to provide additional value to some visitors.

This site is designed so, that we can display lots of ads without – hopefully – them being obtrusive. However, if you do find that the ads make reading the site content more difficult, please let us know about it by sending an appropriate inquiry (Website development related suggestion). Please describe the problem briefly and indicate, what you would like us to do about it, so, that we can display the ads in a manner that improves the site usage experience.

Thank you for understanding and for your support.

Site Map / My Reading List

This website contains a lot of reading material. The Reading List functionality helps the visitors to work with the site content systematically, if they wish to do so. Visitors can add to their Reading List subsections that they intend to read, keep track of the subsections that they have and have not read, and add subsections to their RSS feed list.

The proposed solution has some text with options above the Site Map. This text and these options are shown below. Included is one link that opens a relatively small popup.

I will show the mockup version of the Site Map / My Reading List in three ways

- The default view, without subsection descriptions and My Reading List
- Site Map with the subsection descriptions
- Site Map with the subsection descriptions after one subsection has been added to the Reading List

The **NEW** signs are explained below. The one sign shown on the mockup is just an example.

All mockups display only a small portion of the Site Map. That is, in reality the Site Map contains many sections and subsections.

Just like in other parts of this file, the dark blue color, and here also the red color, indicate (mockup) parts that are supposed to be on the website.

There's more here for you than Site Map!

[Show](#) / [Hide](#) subsection descriptions

[Show](#) / [Hide](#) **NEW** indicates recently added subsections/posts, comments, questions and replies (last 7 day additions)

If you are [logged in](#), you can put together a Reading List of subsections that you intend to read, keep track of the subsections that you have and have not read, add subsections to your RSS feed list, and use the Reading List filtering options. [Click for more information](#) on Reading List usage.

[Show full Site Map](#)

[Show only My Reading List Entries \(full Reading List\)](#)

[Show My Reading List unread entries](#)

Site Map / My Reading List

Section's Name

Subsection's Name **NEW**

Subsection's Name

Next subsection's name, and so on

[^ Top](#)

In reality, the Site Map should continue after the "Next subsection's name, and so on" part.

Below is a version that opens when a visitor clicks on the [Show](#) part of the [Show / Hide](#) subsection descriptions button.

There's more here for you than Site Map!

[Show](#) / [Hide](#) subsection descriptions

[Show](#) / [Hide](#) **NEW** indicates recently added subsections/posts, comments, questions and replies (last 7 day additions)

If you are [logged in](#), you can put together a Reading List of subsections that you intend to read, keep track of the subsections that you have and have not read, add subsections to your RSS feed list, and use the Reading List filtering options. [Click for more information](#) on Reading List usage.

[\[•\] Show full Site Map](#)

[\[o\] Show only My Reading List Entries \(full Reading List\)](#)

[\[o\] Show My Reading List unread entries](#)

Site Map / My Reading List

Section's Name

Subsection's Name **NEW**

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Add to Reading List](#)

Subsection's Name

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Add to Reading List](#)

Next subsection's name with its features

[^ Top](#)

This visitor clicked on the [Show](#) part of the [Show / Hide](#) subsection descriptions button, but has not yet added any subsections to the Reading List.

The mockup on the next page shows a version where a logged in visitor has added one subsection to his or her Reading List.

CONTINUES ON THE NEXT PAGE

There's more here for you than Site Map!

[Show](#) / [Hide](#) subsection descriptions

[Show](#) / [Hide](#) **NEW** indicates recently added subsections/posts, comments, questions and replies (last 7 day additions)

If you are [logged in](#), you can put together a Reading List of subsections that you intend to read, keep track of the subsections that you have and have not read, add subsections to your RSS feed list, and use the Reading List filtering options. [Click for more information](#) on Reading List usage.

[•] [Show full Site Map](#)

[o] [Show only My Reading List Entries \(full Reading List\)](#)

[o] [Show My Reading List unread entries](#)

Site Map / My Reading List

Section's Name

Subsection's Name **NEW**

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Delete from Reading List](#) | Read | RSS

Subsection's Name

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Add to Reading List](#)

Next subsection's name with its features

[^ Top](#)

Next subsection, Functionality Setup, explains the development related aspects further.

Functionality Setup

Default View

I suggest that by default, every time when a visitor opens the Site Map, we show it so that:

- The subsection descriptions are hidden, like it is shown above.
- The **NEW** signs are displayed (but the visitors can hide them). The one sign shown on the mockup is just an example.
- **[•] Show full Site Map** filtering option is selected, which means that we display the full Site Map (and there is no filter applied to it).

The default option does not require login. Every visitor can use it. Only Reading List functionality requires login, because we store the relevant selection for the visitor.

Two Sets of Preferences

All visitors, whether they are logged in or not, should be able to use the two sets of preferences:

[Show](#) / [Hide](#) subsection descriptions

[Show](#) / [Hide](#) **NEW** indicates recently added subsections/posts, comments, questions and replies (last 7 day additions)

These two sets operate independently from each other. That is, the **NEW** signs are shown and hidden independently from the subsection description display option that is chosen.

NEW should shown or hidden for each subsection independently, depending on whether or not the subsection itself was added within the last 7 days, or it had at least one comment, question or reply added to it within the last 7 days.

NEW should probably be an image. However, it can be text-based as well, if needed.

We probably need AJAX for this, especially for showing and hiding the subsection descriptions.

If a visitor has turned JavaScript off, we should display a message letting the visitor know, that this functionality's usage requires JavaScript.

Popup

[Click for more information](#) link should open a popup that will contain a short explanatory information, something like this:

Reading List helps you to work with the site content systematically and to keep track of the subsections that you have and have not yet read. We store your Reading List selection for you, so, this functionality requires login.

To add a subsection to your Reading List, click on the Add to Reading List button.

To keep track of the subsections that you have read, check off the relevant subsections Read checkboxes.

To add a subsection to your RSS feed list, check off the RSS checkbox. To remove a subsection from the RSS feed list, uncheck the RSS checkbox.

To remove a subsections from your Reading List, click on the Delete from Reading List button. Removing a subsection from the Reading List also deletes the RSS feed from the list.

We should be able to modify this popup's content through the CMS.

Links vs. Buttons

For [Show](#) / [Hide](#) we could use links, which will load slightly faster than buttons do. Buttons allow us to control the user interface better, but I'm not sure, if we need them here.

However, if we do use buttons for [Show](#) / [Hide](#) then we probably need to use them for the filtering options as well:

[•] [Show full Site Map](#)

[o] [Show only My Reading List Entries \(full Reading List\)](#)

[o] [Show My Reading List unread entries](#)

Again, we may want to consider using links here.

For [Add to Reading List](#) and [Delete from Reading List](#) we probably want are displayed in the same location, the same number of pixels from the top and from the left. So, here we need more control over the user interface, and we probably want to use buttons, not links.

Using CSS, we want to format the checkboxes so, that they look good.

Only either Show or Hide is relevant to a visitor at any given point in time.

We can set this up so, that we either disable the buttons that are not relevant, or then so, that we display only the buttons that are relevant, and the buttons that are not relevant are hidden.

Reading List Buttons and Checkboxes Display

This Site Map / My Reading List version requires, that the [Add to Reading List](#) and [Delete from Reading List](#) buttons are displayed in the same location.

Subsection's Name NEW

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Delete from Reading List](#) | Read | RSS

Subsection's Name

Subsection's description (up to 2 lines long; we will specify the maximum number of characters accordingly)

[Add to Reading List](#)

When a logged in visitor clicks on the [Add to Reading List](#) button, we

- add the subsection on the visitor's Reading list,
- hide for the subsection the [Add to Reading List](#) button, and
- display [Delete from Reading List](#) | Read | RSS instead of the [Add to Reading List](#) button

When a visitor clicks on the [Delete from Reading List](#) button, we

- delete the subsection from the visitor's Reading List and
- hide for the subsection [Delete from Reading List](#) | Read | RSS and
- display for the subsection the [Add to Reading List](#) button

So, we either display [Delete from Reading List](#) | Read | RSS instead of the [Add to Reading List](#) button, or we display [Add to Reading List](#) instead of the [Delete from Reading List](#) | Read | RSS.

Both [Add to Reading List](#) and [Delete from Reading List](#) are displayed in the same location, the same number of pixels from the top and from the left.

We may need to have

[Add to Reading List](#) and

[Delete from Reading List](#) | Read | RSS

on top of each other for every subsection, so that one set is hidden and one is displayed (visible) at the time.

I cannot show them on top of each other here, in the Word file, but I believe that you know what I mean, when I say that they should be displayed in the same location, the same number of pixels from the top and from the left.

In that case we may prefer using buttons for [Add to Reading List](#) and [Delete from Reading List](#) instead of links.

So, we may want to put the buttons on top of each other, and then make the alternative sets visible/not visible.

Tables That Are Needed

I think, that we want to keep track of **only** these records, that a (registered, logged in) visitor has added to his or her Reading List.

It seems to me, that if we proceed this way, we need a two table structure for this

- In the first table we hold the Site Map records for all the sections, subsections and subsection descriptions. Let's call it tblSiteMap.

The same tblSiteMap should be manageable through the CMS and should be used for sidepage navigation system as well.

We can keep it relatively simple, with a Yes/No column for sections and so, that subsections must be entered under the relevant sections.

In addition, this table should also have fields for the subsection description.

This table has one record per section/subsection.

- In the second table we hold the records that the visitors have added to their Reading List. Let's call it tblReadingList.

In tblReadingList every record is identified by the combination of two fields: VisitorID and PostID.

This table may grow very large over time.

tblSiteMap Fields

tblSiteMap probably needs the following fields:

Primary Key

PostID

Included (Yes/No field, Yes means that the field is included on the Site Map)

Section (Yes/No field, Yes is section, No is subsection)

Description (fields for the subsection description)

tblReadingList Fields

tblReadingList probably needs the following fields:

Primary Key

VisitorID

PostID

Read (Yes/No field)

RSS (Yes/No field)

We need a very skilled database developer for putting together the table structure for this application.

Displaying the Site Map

- When a visitor opens the Site Map URL, we display the Site Map based on tblSiteMap. We do not have to touch the tblSiteMap again.
- We need to display the subsection descriptions and the Reading List-related parts when a visitor clicks on

[Show](#) part of the [Show / Hide](#) subsection descriptions

or, if the visitor is logged in and clicks on either of these two filtering options:

[\[o\] Show only My Reading List Entries \(full Reading List\)](#)

[\[o\] Show My Reading List unread entries](#)

In order to display the subsection descriptions and the Reading List-related parts, we go through tblReadingList, and generate a query based on the relevant VisitorID entries, that is, we filter tblReadingList for the matching VisitorID entries.

For every subsection, that has an entry in the resulting query, we display the Reading List related entries: [Delete from Reading List](#) | Read | RSS

Here, depending on the visitor's previous selections, the Read and/or RSS fields may be checked off.

Of course, on the Site Map every record from tblReadingList has to end up under the right subsection. We make the connection based on PostID, which is stored in both tblSiteMap and tblReadingList.

Adding and Removing Reading List Records

Adding and removing Reading List records is addressed above in the Reading List Buttons and Checkboxes Display section.

I will add here, that behind the Site Map / My Reading List user interface we need to store (invisibly) tblReadingList Primary Key field value as well for those records that have been added to the Reading List (and, thus, to tblReadingList).

When we delete records from tblReadingList, we should do so based on tblReadingList Primary Key field value.

Every deletion should be preceded by a message, something like this:

You are about to delete a subsection from your Reading List.

OK / Cancel options.

We should be able to modify this message through the CMS.

Abuse Control System

If we do set the Site Map / My Reading List up the way it is recommended here, then every instance of adding and removing My Reading List entries requires processing power.

In that case, we probably should put the above through the Abuse Control System as well.

Filtering Options

In the new version, we have only three filtering options, and the first of them, the default option, Show full Site Map, means actually that no filter is applied at all.

[Show full Site Map](#)

[Show only My Reading List Entries \(full Reading List\)](#)

[Show My Reading List unread entries](#)

The selection that a visitor makes regarding the filtering options is based on option buttons. That is, one option at the time can be chosen and for storage these filtering options need one field per visitor.

The first, default option, does not require login. However, the Reading List usage requires login. This means, that the usage of other two filtering options does require a login:

[Show only My Reading List Entries \(full Reading List\)](#)

[Show My Reading List unread entries](#)

Decreasing Amounts of Information

The three filtering options show decreasing full of information:

- full Site Map
- then only the Reading List (but full Reading List)
- then only the unread sections of the Reading List

The first option doesn't require any filtering, that is, we display all the Site Map data.

The second option requires that we filter tblReadingList for VisitorID, and use PostID for displaying the Reading List related data.

The third option requires that we filter tblReadingList for VisitorID and Read field value, and use PostID for displaying the Reading List related data.

These filtering options should work with the two sets of preferences as well:

[Show](#) / [Hide](#) subsection descriptions

[Show](#) / [Hide](#) **NEW** indicates recently added subsections/posts, comments, questions and replies (last 7 day additions)

Remembering The Chosen Filtering Option

While the visitor is logged in, we would want to keep his or her latest filtering selection in memory. However, when the visitor logs off, and logs in the next time, we want to show the default option again, so that we display the full Site Map and the **NEW** signs. The reason for this is, that we want the visitors to see the full Site Map, and the information about what's new. Otherwise, a visitor who only sees filtered information, may overlook something that may interest him or her.

During the individual logins, when the visitor navigates away from Site Map, and then back to it, we should show the Site Map filtering selection that was last applied.

The filtering option is always one selection per visitor, that is, it requires one field per visitor. So, if we need to store the visitor's filtering preference in order to display the Site Map as is described above, we may want to consider adding a field to the visitor's profile for that purpose.

However, we probably can use cookies for this as well – and that may be a preferable way for handling this. If the cookies are turned off, the visitor simply has to make the selection again, every time when he or she opens the Site Map URL.

On JavaScript Usage

Site Map features, and also other features on this site require JavaScript (and, more specifically, AJAX) usage. I was thinking about how to handle visitors, who have JavaScript turned off.

We can detect visitors who have JavaScript turned off.

So, we can have the Site Map page functioning so, that the visitors who have JavaScript turned off, can use it as a simple Site Map only, with default features.

As far as I can tell, Site Map default features don't require JavaScript to be turned on.

Whenever visitors, who have JavaScript turned off, click on any of the buttons that are related to JavaScript usage, the button does not work and the visitor gets a message that he or she should turn JavaScript on.

We would want to channel all this through a "central script."

Generally speaking, *I am looking for the simplest, least costly ways for taking these visitors into consideration, who have JavaScript turned off.*

Whenever we are dealing with **non-essential features**, my preferred solution would be simply not to serve these visitors who have JavaScript turned off, the features that are dependent on JavaScript.

I think that in many instances we will want to use this kind of solution. We detect visitors, who have JavaScript turned off. When they access non-essential features that require JavaScript usage, we will display a message stating, that JavaScript is needed for accessing the website functionality and should be turned on. The feature, that the visitor tried to access, simply does not work.

When we have **essential features** in question, like is navigating from one page to another, then things get complicated. For the essential features we need solutions that serve all the visitors.

That's why for the side page section/subsection navigation purposes I prefer a simple, HTML based solution, like the one that is shown on the mockups.

For essential features we probably want to use a solution, that serves all the visitors – that is, is independent of JavaScript usage and browser versions and browser features. Such solutions probably have to use the basic web technologies.

So, once again, I'm looking for simple, cost effective ways to handle the visitors who have JavaScript turned off.

Automatically Included Named Anchors

It would be very useful, if we can set up the blogging pages so, that the admins are able to reference individual comments, questions and/or replies, so that the visitors browser is automatically scrolled to the individual comment, question or reply, instead of the visitor being taken to the top of the page.

This can be accomplished by adding to every comment, question and reply an anchor that contains its primary key:

```
<a name="label">ID</a>
```

where ID is the numeric primary key.

An administrator, who wants to reference a specific question, comment or reply, has to include the primary key in the link:

```
<a href="http://www.creativitymodel.com/referenced-page.php#ID">
```

```
Jump to the referenced question/comment/reply</a>
```

Custom Pages

Custom Pages are another functionality piece that, as a mockup, I put together for this site.

Think of the Custom Pages this way.

Let's say, that you do some Internet search on a specific topic and find several interesting articles. You want to send parts of different articles to your friend, in order to illustrate a point that you are making. Given, that you don't violate any copyright laws, you can copy the relevant parts from these articles, and put them together in an email, for example.

If you like, you can also add your own comments to these copied and pasted parts.

Custom Pages allow doing something similar within a site.

Below, in dark blue, is mockup (draft) for Custom Page related explanatory text that is intended for the website.

After that are additional, development related explanatory subsections.

About Custom Pages

Custom page contains one or more individually selected and ordered posts, comments, questions and replies. Items on a custom page may be gathered from different sources. That is, every item on a custom page may have been originally part of the same post that other items are part of, or a different post than other items on that custom page are part of.

Custom page can be used as **support material** for

- explaining a topic,
- asking or answering a question,
- submitting a comment or making a statement.

For example, a link to a custom page can be added as support material to a reply, comment or question.

So, custom page is intended to support a topic or a point that is being made.

The best way to experience the advantages that custom pages can offer, is to put together and use some of them in posts, comments, questions and/or replies.

So, give it a try!

Using Custom Pages

To read a custom page, all you need to do is to click on a **click to read** custom page link that has been inserted into a post, comment, question or reply.

Clicking on a custom page link opens a page that contains the items that the person, who put together the link, assembled for the page.

You don't need to be logged in to read custom pages, but before you can put together custom pages yourself, you do need to be logged in.

Putting Together Custom Pages

- Log in, if you haven't already done so, and click on the "Start list" link. This link is in the bottom of the right-hand column, in the area with the dark green background, below Email this post link.
- For every post, comment, question and/or reply, that you want to include in the custom page, click on the "Add" link for that specific item.

Comments, questions and replies have "Add" links, and posts have "Add to CP" links, that you can use for putting together custom pages.

Add the items in the order that helps to support whatever you want to communicate.

You can add up to 10 items (posts, comments, questions and/or replies) to a custom page. If you need to use more items, assemble more custom pages.

- When you have added the needed items to the list, click on the “Complete” link.
- In order to see, how the custom page looks like, click on the “Check” link.

When you write the comment, question, reply and/or inquiry, where you want to use the link to the custom page that you assembled, put the cursor in that specific spot, where you want to insert the link that you assembled. Then click on the “Include custom page link.” This “Include custom page link” appears on the comment, question, reply and inquiry writing user interface.

One assembled custom page link is available to you at the time. If you need to use more custom page links, create and add them one at the time.

My Reading List vs. Custom Pages

It may seem, that Custom Pages are very similar to the Reading List functionality. That is not the case.

- My Reading List is essentially a **navigation** device, that the **site visitors** can use for customizing the Site Map, so that they can more conveniently **keep track of and navigate to** selected parts of the site. Visitors customize their Reading Lists **for themselves**.

My Reading List, just like Site Map, works with **posts**. It does not list individual questions, comments or replies.

(A related issue is, that if possible, we should provide RSS feeds for updated questions, comments or replies as well. In one way or another, My Reading List, which is part of Site Map, doesn't list questions, comments or replies.)

- Custom Pages are **communication** devices, whose purpose is to **recycle information**. Primarily **admins** are expected to use Custom Pages, and also visitors should be able to use them, for communicating information to visitors, that is, not to themselves, but **to others**.

Custom Pages should also work for assembling a list of posts, or any type of mix of one or more posts, question(s), comment(s), and/or reply or replies.

However, Custom Pages are expected to be used primarily for assembly of custom lists of questions, comments and replies in different ways, from different posts.

The Purpose In a Nutshell

In a nutshell, Custom Pages allow to assemble new and different responses from previously submitted information.

To put it differently, Custom Pages allow to provide new content with educational and informative value, by recycling and combining in new and different ways the previously submitted information.

For the admins, Custom Pages are intended to be a more efficient, time and labor saving and convenient way to provide information than would be repeated copying, pasting and modifying text.

For the site visitors, Custom Pages will hopefully be a more convenient and interesting way to receive information, than would be reading responses with somewhat repetitive content.

Why Custom Pages Are Needed

Increasing Amount of Actively Used Information

CreativityModel.com will have a lot of active pages. We will start with approximately 120 pages and, of course, will add posts on regular bases. Initially, we will add posts only couple of times a month, then once a week, later probably at a faster pace.

(A remotely related, but from our prospective important comment: Think of the advertising opportunities, that this type of setup will generate! Typical blogging site operates so, that visitors are compelled to visit only one, or at

the most, a few pages. CreativityModel.com will be set up so, that visitors have to visit many pages, because doing so will be directly beneficial to them. Of course, the content must be written so, that it clearly conveys this, and that's not easy to do, but that is another matter.

This is not some kind of trickery, or in any way something dishonest. This approach is completely honest and ethical. This is simply the nature of this type of venture. We will try to keep things simple, but some things you have to learn so, that you read more than one page on your chosen topic. That's just the nature of things.)

Compared to other regular blogging sites that archive posts, all of the pages on CreativityModel.com will have more-or-less equal value and will stay active, whether they were posted 1 day ago, or 1 year or more ago. That is, individual pages in **combination** contribute to learning about CreativityModel™ Method based creativity management and development processes, about using the learned material for personal and professional purposes, and about CreativityModel™ Method usage related business and employment opportunities.

Over time some of the pages on CreativityModel.com may receive quite a few comments, questions and replies.

The more people submit comments, questions and replies, the more information the site will contain.

Couple of years after opening the site and promoting it, there may be over 200 actively used pages, each of them with, let's say, 20 or more comments, questions and/or replies.

This is over 200 posts and over 4 000 comments, questions and/or replies.

Handling Qualitatively Similar Information Flow

It is likely, that in many instances people will ask very similar questions.

We do not want to repeat the same answers over and over again. We especially do not want to post on the site the same information over and over again. That would decrease the value of the content for the visitors, if there was too much very repetitive content.

Instead, we want the content be such, that we keep analyzing the relevant topics from related, but somewhat different angles.

That is very difficult to do with a specific product, or a service, because you run out of things to say. You can do this with a product or service *category*, if it contains an endless supply of new items. Technology is an example of such a category – and, correspondingly, there are many very successful technology focused blogs.

Similarly, you can do this with a method that focuses on human creativity management and development, because just like creativity is essentially endless, a method that focuses on its management and development is an endless source of things to say, and topics and situations it relates to.

Just like we don't want to post the same information over and over again, similarly, as much as possible, we do not want to make the admins to answer the same questions slightly differently again and again, by writing the same answers, in slightly modified ways, again and again.

So, for both replies that are posted on the website and for inquiry responses, we want, when applicable, to recycle the previously provided information.

Questions may be asked in a way, that the best answer combines pieces of information from several areas and different posts.

In such a case, we don't want to refer the visitor to entire bunch of posts, and ask him or her to find the answers among all the questions, comments and replies that already have been submitted there. Instead, we want to assemble a response for the visitor, using, when applicable, only these specific previously submitted questions, comments and replies from different posts, that are most relevant to the question that the visitor asked.

This is like mosaic, where the end result is put together from previously cut pieces.

How The Process Works

When a person does a search, he or she gets a search results. The more accurate are the results, the better the search functionality is.

However, in one way or another, the search results probably contain several pieces of information.

Custom pages are something similar, except that when applicable, admins assemble the results manually themselves. In addition to recycling information, when applicable, the admins may add some text themselves, too.

Similarly, we want to provide the site visitors with functionality to assemble Custom Pages, because if we give this functionality to the admins, we can equally well give it to these visitors as well, who want to learn to use it.

An Example

Let's say, a visitor asks the following question:

"OK, I understand why I need to use pooling and how to do that. But what's the best way to assemble the pooled components into a coherent outcome?"

Question Does Not Have Additional Informative-Educational Value

Maybe the same, or a very similar question was already asked and answered before.

Site admins, who respond to the questions, are supposed to be very familiar with the site content. That is part of their training, because it benefits them in multiple way and is directly related to their earning opportunities.

If a very similar question was already asked and answered before, the admin would respond, most likely via posting a message to the visitor's profile, with something like this:

Please see [click to read](#)

This end result should look like other pages on CreativityModel.com do, but if one item was used for answering the question, the page should contain only that one item, not multiple items.

Question Does Have Additional Informative-Educational Value

Maybe the above question was not answered before, or maybe there is an item already, that answers only a part of the question.

The above question pertains to several CreativityModel™ Method areas – pooling, usage of structural storyline, usage of theme, and component assembly. Each of these topics contains subtopics and may have many different informative-educational posts designated to them. When the site contains more detailed information, a visitor can learn first about the general topics, and benefit that way, and then dig into specific topics that he or she wants to know more about.

In addition, later we will add to the website individual exercises and exercise programs that are designed for different target markets. Visitors can do the exercises with or without trainer's (online) assistance.

First exercises will be rather general in nature, but later ones will be increasingly detailed and will help the visitors to pinpoint and analyze, which areas they should train (and why), and to compare their scores to their own previous results. Further, the exercise programs will focus on increasingly detailed areas of CreativityModel™ Method based creativity management and development aspects, and on doing the relevant steps faster and more efficiently (within individual sets of abilities, experience and expertise).

All of these posts, including the ones that are related to exercises, may have many questions, comments and replies related to them, but some of these items are likely to be more relevant to the question that was asked, than are others.

So, in order to answer the question, instead of rewriting the previously written material, or asking the visitor to read several posts and all these posts questions, comments and replies, we will give the visitor a list that contains the most relevant items that form an answer to the visitor's question.

If the question was not answered before, then such an assembled reply may be something that we would want to post on the website as well, so that other visitors can read it, too. Admin may add a short explanatory comment to such a reply. Such a reply does recycle the previously written material, but it does so by combining items in a new way, that adds informative-educational value to the website.

Technical Aspects

Order of the Components

Custom page contains components – questions, comments, replies, and/or posts. These components can be listed in any order, but that should be the order, that the person who puts together the Custom Page finds to be most appropriate. To put it differently, it should be the order in which the components (the items) were selected by clicking on them.

This is similar to writing text. A sentence is in essence a Custom Page, and so is a paragraph, and so is a subsection of this Word file, or a chapter in a book, and so on. All of them contain components which have been used in countless ways before. A sentence contains words, all of which have been used in countless ways before, and so on. When you write to me, or I write to you, we are both recycling words, sometimes in new ways, sometimes by just repeating ourselves. The same applies to speaking as well.

Often a sentence can be written in different ways, and the writer determines, how he or she wants to write it.

Potential Similarity to Assembling Search Results

A search page, like this one, for example, contains different items:

<http://www.projectdeveloper.com/Search.aspx?val=test>

I believe, that for putting together Custom Pages, we would want to assemble results in a somewhat similar manner.

The search page on ProjectDeveloper.com uses a template, Search.aspx. We would want to use something similar, but is designed precisely the same way the rest of CreativityModel.com pages are designed.

Let's say, that we will call it CustomPage.aspx or something like that. Because we will use different technology, it will not be an aspx page, but the same can probably be accomplished using MySQL and PHP as well.

The way I see it, we want to assemble a list of search results, so that we use the relevant IDs for putting together the end results.

In essence, we will say something like this:

"Give me ALL WHERE

ItemID=241

OR PostID=39

OR ItemID=17

OR ItemID=4

OR PostID=P122

OR ItemID=562

OR ItemID=90

OR ItemID=328

OR ItemID=907

OR ItemID=1025"

For reading convenience, I wrote this vertically, clearly listing out all the IDs.

The IDs are made up, of course. Similarly, the order of the items and IDs is made up.

That means, that the above parts of the string could be in any order, but that should be the order that was determined by the person who put the Custom Page together. For example, if I put it together, and I selected first a question, whose ItemID is 241, and then a post, whose PostID is 39, and then the rest of the page content, then that's the order in which the items should appear.

Results Assembly The Hard Way

I do not think, that the Custom Page results assembly will be very difficult to do, but just in case, I will describe here some experiences that I myself have had in the past.

What I myself have found difficult to do, is to assemble results from unrelated sources, that is, from tables that are not joined, so that the end results form one coherent set of information.

I have assembled results from completely unrelated sources and put them together in one outcome, as if they were assembled from related sources.

For example, try putting together completely unrelated (and, unrelatable) tables in one query, and then pick results out of it. You get an incredible mess. However, I have assembled results from sources like that. Not by using queries, or other ways that you are “supposed” to use, but by using ways that I invented on the spot myself.

If we needed to, we could assemble results from unrelated sources as well. For example, we could create dynamically, on the fly, a temporary table per visitor who starts using the Custom Page functionality. Then, by using the item’s ID, we could find the result from the first unrelated source, and copy and paste the result over into that visitor specific temporary table. Then, we could find the result from the second source, copy and paste it over into the same visitor specific temporary table, and so on. This would have to be set up so that all copying and pasting is done like using “packets” is – that is, everything has to end up in the user-specific ways in the right places.

As the page is closed, the temporary table is deleted.

In the past, I have done things like that, when needed.

Once again, I do not think that we need to use anything that complex or complicated here.

Query Based Results

After giving this subject matter more thought, I think that we want to set things up so, that the Custom Pages, as an end result, will be query based.

In our underlying table structure, every question, comment and reply has its own unique ItemID, that is, its own unique Primary Key.

In the table, that holds posts, we can call the Primary Key field also ItemID, or PostID, or something else. That doesn’t matter very much, I think, but I do recommend using Primary Keys that are easy to understand. In one way or another, Primary Key is what we use for distinguishing the items from each other.

In the Wednesday, September 16, Custom Pages Discussion you asked, what are the relevant IDs, and how to distinguish them from each other.

I am sure, that you know very well things like what I said above. So, I probably did not understand your question correctly. If I did not provide a sufficiently good answer in today’s correspondence, please clarify your question further. Of course, the same applies to everything else in this file.

Related Data Sources

We probably want to keep the posts in one table, and questions, comments and replies all in another table, so that the posts table has one-to-many relationship to the questions, comments and replies table.

That is, the Custom Page data sources should be related. Posts, and their relevant questions, comments and replies, should be related.

Through using a query, we should be able to find the results relatively easily.

When the visitor starts putting together a Custom Page, he or she clicks on the IDs, thus, identifying the IDs. We need to store them.

When that visitor finishes the Custom Page assembly, we already know, what the relevant posts, question, comments and/or replies IDs are. So, instead of using a search word to relate the search results together, we can use these IDs directly for relating the results together, by using [this ID] OR [this ID] and so on.

That is, based on a query, we can say

“Give me all where the ID=this OR ID=that OR ... and so on.” We know the precise IDs of all of the components that we need in the end result. So, this should be fully doable.

I don't think that we want to use any other IDs than the Primary Keys, which should be all numeric entries.

Question: Please let me know, if you find this doable and if not, then what precise problems do the developers have.

One Custom Page Per Visitor At the Time

When a visitor uses search functionality, he or she can get the search results one at the time. That is, he or she will get the search results, and if he or she wants to do a new search, then he or she will get the next search results.

That is essentially how I see the Custom Pages functioning as well – one Custom Page, as either end result, or work in progress, per visitor, at any given point in time.

If this is unclear, please ask me about it.

Link Design

As is stated above, when a Custom Page link is inserted into text, we would want that link to look the same, something like this:

[click to read](#)

Of course, the actual content of that link should differ, so that when clicked, it opens the template that is filled with the applicable information.

Custom Page Functionality And Inquiries

We want to set this functionality up so, that custom page link can be inserted into an inquiry as well, but in the inquiry it appears as unformatted URL.

Briefly, everything in an inquiry should appear as unformatted text only, including any URLs.

Custom Page Functionality Display

On the mockups, the custom page assembly functionality is in the bottom of the right-hand column, in the area with the dark green background, below Email this post link.

Below it, is a text box.

I was thinking, that we could set this up so, that every time, the visitor adds another ID, the added ID (and any previously added IDs, if there are any) are displayed in this text box window.

At this point, this text box is active, that is, you can put the cursor in it. In the actual production environment, we probably want to disable it, so that data is being displayed, but cannot be changed in the text box.

Registered Visitors Profiles

Functionality Overview

This page is going to be one of the links in the Website Sections area and allows to review the visitors public profiles.

Relevant functionality should be set up so, that accessing this page does not require login, but reviewing visitor profiles requires login.

That is, any site visitor can click on the link in the Website Sections area that will take him or her to this page. The page opens and displays the functionality that is outlined below. When the visitor clicks the Display Results button, the application should determine, whether or not the visitor has logged in, and proceed accordingly.

Below is a mockup layout of the Registered Visitors Profiles page features.

Here you can review this website visitors public profiles

Username, Country and Industry / Activity Area are displayed for all the registered visitors. Name, Birthday and Gender are displayed for visitors who chose to reveal this information.

Please make sure that you have logged in before using this functionality.

Filter for

Username [drop-down]

Country [drop-down]

Industry / Activity Area [drop-down]

Display Results (button)

Remove Filter (button, that is disabled by default)

-- cutoff --

Total: [total number of matches]

< Back Page X of Y Next >

Username	Birthday	Country
Name	Gender	Industry / Activity Area
<u>Username</u>	Birthday	Country
Name	Gender	Industry / Activity Area
<u>Username</u>	Birthday	Country
Name	Gender	Industry / Activity Area
<u>Username</u>	Birthday	Country

So, unregistered visitors should only get an idea, that there is more potentially interesting information available to them, if they register and log in.

The

-- cutoff --

should not be on the actual page. I added it here only for clarity.

Remove Filter Button

When the visitor clicks on the Remove Filter button, the Registered Visitors Profiles page should be displayed again the same way that it is displayed when the page opens (which is explained above).

The Remove Filter button should be disabled by default. When the visitor makes a selection and the selection is displayed, the Remove Filter button should be enabled. After the visitor clicks on the Remove Filter button, the filter should be removed as is described above, and the Remove Filter button should be disabled again.

Looking at the Results

In order to see the results, the visitor must make a selection from one or more of the three Filter for drop-downs:

Username [drop-down]

Country [drop-down]

Industry / Activity Area [drop-down]

The visitor can make a selection only from Username, or only from Country, or only from Industry / Activity Area drop-down.

Similarly, the visitor should be able to make a selection from **both** Country and Industry / Activity Area drop-downs.

However, if the visitor has made a selection from the Username drop-down, the visitor should not be able to make another selection from the Country or Industry / Activity Area drop-down. We should set it up this way, because usernames are unique, and there is no sense to let the visitors filter the data any further, after making the Username selection.

When a visitor clicks on the Display Results button, the application must first determine, whether or not the visitor has logged in, and proceed accordingly.

Next, the application should determine, whether or not the visitor has made a selection from the relevant drop-down boxes.

Displaying the Results

The results should be displayed, 10 at the time, so that each resulting match is displayed in 2 rows, as is indicated above.

I suggest using 2 rows per Username, because we simply will not have space for more than 3 columns per row. We probably will not have enough space for all the Country and Industry / Activity Area entries in their respective columns either. Any such Country and Industry / Activity Area entries that are too long for the column can be cut off. We are not looking for perfection here. However, we should make every attempt **not** to cut off the visitor's names, because cutting off names may offend people.

In the Name column we should display the first and last name, like, for example, Thomas Eklund.

The data should be displayed in accordance with every visitors Profile of [Username] settings. For example, if a visitor does not want to display his or her name, instead of the name should be NA The same applies to all the fields where the visitors can determine, whether or not the information will appear in their Public Profile. In this case, this applies to the Name, Birthday and Gender fields. Username, Country and Industry / Activity Area fields are displayed for all the visitors.

Limiting Visitor Activities

I would like to make sure, that the visitors do not abuse the Registered Visitors Profiles functionality either manually or programmatically.

Preferably, we will have functionality that limits the Registered Visitors Profile searches to, let's say, 10 per day (that is, per date). In such a case, if the searches exceed the limit, the application should not proceed beyond the default state (that is explained above) for that date and visitor combination, and a message should be displayed:

Please limit the Registered Visitors Profile searches to 10 per day.

Username as a Link

Username should be a link to the relevant visitor's Public Profile. That is, clicking on that link should open the Public Profile for the relevant Username. This should be identical to what happens, when the Username link is clicked in the blogging-related Comments, Questions and Replies area.

That is, how I would like to set this up.

<u>Username</u>	Birthday	Country
Name	Gender	Industry / Activity Area

However, if for some reason we cannot do this, we can set it up the way shown below, so that we have separate Full Public Profile links. Nevertheless, I believe that we can set this up so, that Username is a link as described above.

Username	Birthday	Country
<u>Profile</u>	Gender	Industry / Activity Area

Sorting the Results

The default sorting order should be by Username.

Ideally, I would like to set this up so, that each of the 6 column headings is also a link to the relevant sorting order. (In the above mockup, the column headings are displayed in bold and in size 12 font.)

For example, when the visitor clicks on the Country column heading, the results are sorted by the country

When the data is sorted by clicking on a column heading, the relevant filtered data can be displayed again from the beginning. For example, when there are 3 pages of data, the visitor is on page 2, or 3, and clicks on the Country column heading, the data should be displayed from page 1, so that it is sorted by Country field entries within the already filtered data set.

Abuse Control System

We need a functionality, a system, that prevents site visitors from abusing either manually or programmatically functionality parts where the visitors interact with the application and either **submit** information to the application or **receive** information from the application

The objective is to prevent instances where the visitors intentionally and maliciously behave in a manner that creates additional work for the admins and/or abuses server resources.

The primary focus is on trying to prevent malicious submissions of data that we store (questions, comments, replies, inquiries and profiles) either manually or programmatically.

Examples of Abuses

Here are some examples of abuses. These examples pertain to instances, where a specific visitor repeats the same action for several times within a designated period of time:

- Submitting any type of entry repeatedly for a relatively large number of times, either manually or programmatically, within a short period of time. For example, I consider more than 3 inquiries submitted within 4 minutes an abusive activity. Similarly, I consider submitting more than 5 inquiries within a login an abusive activity. However, we can probably consolidate the two types of possible abuses, and say that submitting more than 5 inquiries within a login is an abusive activity.
- Repeatedly selecting and submitting incorrect data, using the Industry / Activity Area drop-down box, either manually or programmatically, so that the verification-related server response is triggered.
- Submitting repeatedly within short period of time, either manually or programmatically, entries that contain offensive language.
- Performing, either manually or programmatically, a relatively large number of Registered Visitors Profiles searches repeatedly. I consider more than 10 searches within a login an abusive activity.
- Clicking on the deactivate-reactivate link-button repeatedly (this link-button allows site visitors to deactivate and reactivate their own profiles). I would say that more than 3 activations within a login is an abusive activity.

How Should the Abuse Control System Function?

The planned Abuse Control System should function so, that

- Within the Abuse Control System, we develop one or more different responses to the abuses.
- We set up test conditions for individual functionality parts where the visitors submit or receive information from the application. (Examples of these test conditions are listed below in this subsection's part Abuse Control System Version 1 Tested Functionality Parts.)
- For each **tested functionality part**, we select one specific Abuse Control System response, that the application will apply as a response whenever the test conditions are being met.

Abuse Control System Version 1 Tested Functionality Parts

Below is a list of the Abuse Control related tested functionality parts and test conditions.

For CreativityModel.com Version 1, I would like to set up the Abuse Control System so, that we run site visitor login specific Abuse Control tests and register Abuse Types.

Abuse Type is the tested functionality part and the tested condition *combination*. To put it differently, Abuse Type is registered for a specific visitor, when the tested condition is True for the specified functionality part.

We probably want to make the Abuse Control tests described below **visitor login specific**.

1) Industry / Activity Area

If a visitor submits repeatedly inapplicable Industry / Activity Area drop-down box's records, either manually or programmatically, that should trigger the Abuse Control System response.

For the regular site visitors, the inapplicable entries are in the last category of the Industry / Activity Area drop-down box:

- CreativityModel™ Method Specialist Trainee
- CreativityModel™ Method Consultant Trainee
- CreativityModel™ Method Trainer and Consultant Trainee
- CreativityModel™ Method Specialist
- Licensed CreativityModel™ Method Consultant
- Licensed CreativityModel™ Method Trainer and Consultant
- CreativityModel Enterprises, Inc. Employee

Further, the --- selection is also a wrong selection for any site visitor.

Recommended Abuse Control Test Condition

No more than 3 incorrect Industry / Activity Area drop-down box' submissions per visitor and login instance.

2) Visitor Entry Filtering System

If somebody attempts to abuse this functionality by purposefully submitting offensive entries repeatedly, either manually or programmatically, that should trigger the Abuse Control System response.

Recommended Abuse Control Test Condition

No more than 2 entries that contain offensive language per visitor and login instance.

3) Registered Visitors Profiles

If somebody attempts to abuse this functionality by performing a very large number of searches, either manually or programmatically, that should trigger the Abuse Control System response.

Recommended Abuse Control Test Condition

No more than 10 searches per visitor and login instance.

4) Reactivating-deactivating Profiles

Clicking on the reactivate-deactivate link-button repeatedly (this link-button allows site visitors to deactivate and reactivate their own profiles).

Recommended Abuse Control Test Condition

No more than 3 reactivations per login session.

5) All Inquiry Types

Inquiry Types are listed in the Visitor Entries subsection.

If a website visitor attempts to submit too many inquiries, then that should trigger the Abuse Control System response.

Recommended Abuse Control Test Condition

No more than 5 inquiries submitted within an individual login.

6) Questions, comments and replies

If a visitor submits many questions, comments or replies within a short period of time, he or she is probably abusing the functionality either manually or programmatically, and that should trigger the Abuse Control System response.

Recommended Abuse Control Test Condition

No more than 4 questions, comments or replies submitted within 4 minutes by a visitor.

However, I am concerned here, that in order to detect this, we have to put every question, comment and reply through this test. Relatively speaking, that creates quite a bit of additional server processing. Further, it

seems to me, that because different item types (questions, comments and replies) are involved, developing this test may be difficult and time consuming to do.

So, we have to discuss this.

Abuse Control System Version 1 Response Development

As is stated above, I would like to set up this functionality so, that for each Abuse Type we select one specific Abuse Control System response that the application applies as a response whenever the test conditions are being met.

For Abuse Control System Version 1, I would like to set up **only one** Response Type. I call it ResponseN1 here, which stands for Response Number 1.

This means, that for every tested functionality area and Abuse Type, we use the same Response Type.

However, I would like you to develop this so, that the developers can add additional response types later when needed, during this application's future development time. That is, even though there is only one response type initially, please develop the functionality as if there were more, that is, so that for each tested functionality part the application will have to check, which response it has to apply. This will make the later application development easier.

So, among other things, this means that through the user interface where we list the Abuse Types we need to be able to designate the Response Type for each Abuse Type. Even though for CreativityModel.com Version 1 Response Type will be ResponseN1 for all the Abuse Types, I would like to have this user interface included as well. That will make the future updates more convenient to develop.

ResponseN1 Description

ResponseN1 contains the following parts that correspond to three different **Abuse Levels**. Each of the Abuse Levels should generate a VisitorID and Abuse Type specific record in the table that holds the visitor login related Abuse Control Management records.

- 1) When a given test condition is true for the first time for a specific visitor and Abuse Type (that is, tested functionality part and the tested condition), the application displays a message to the visitor.
- 2) When a given test condition is true for the second time for a specific visitor, the application requests an explanation from the visitor.

To make things easier to develop, we probably will want to set this up so, that the explanation requesting user interface is similar to inquiry user interface (only slightly different), and the explanations are processed as inquiries.

We do need a separate user interface for this. That user interface should be similar to the Inquiries user interface, but simpler. However, we probably want to process the explanations through the same table structure and functionality, that is used for processing the rest of the inquiries.

The Abuse Control System related Inquiry Types should be set up so, that the visitor cannot change them. Further, preferably the Inquiry Type is not visible to the visitor in abuse related instances. Similarly, the abuse-related Inquiry Types should not be part of that user interface drop-down, that the visitors user for sending other inquiries and where they select the inquiry type.

- 3) When a given test condition is true for the third time for a specific visitor, the application
 - Requests another explanation from the visitor.
 - Informs the visitor that the account is suspended and that CreativityModel.com staff member will contact the visitor via email, using the email address in file.
 - Logs out the specific visitor programmatically, that is, programmatically triggers logout functionality for the specific visitor.
 - Closes the browser instance – the objective here is not to grant the visitor the login privileges until the item-related issue has been resolved.

- Marks the account for the Manual Data Processing Mode, as is described in the Issue Handling Modes section.

As a result, through the content management system the staff members are alerted that the item needs to be addressed.

The alerts, that CreativityModel.com staff members see in the content management system, are essentially very similar to these that they see for comments, questions, etc. that need to be handled by the staff members. Briefly, we want to keep all of this as standardized as possible, in order to keep it as simple as possible from both usability and development prospective.

Through the CMS we will need to be able to set up and modify the Abuse Type-specific text that the application displays to the visitors. So, will need CMS functionality for that. Setting this up should be pretty easy to do, but it is one more thing that needs to be done.

Issue Handling Modes

Closely related to the Abuse Control System functionality is the Issue Handling Modes concept.

This company will interact with its customers primarily through its website, and also the employees will interact largely in technology connected environment.

In the longer run, most likely we will want to automate an increasing number of business processes. Of course, we will have to proceed with this in stages and in development versions and so, that we match the development scope with the available resources.

Another objective, that is related to this subject matter, is to divide the application administration-related interactions into the following steps:

- 1) **Computerized Testing Mode:** Application-conducted tests, aimed at determining whether or not the application user can continue to use the account without additional involvement from CreativityModel.com staff members.

We will need to run spell checks as part of the Computerized Testing Mode.

- 2) **Computerized Data Processing Mode:** Application-based issue handling, aimed at detecting and solving application users problems that are related to application usage processes.
- 3) **Manual Data Processing Mode:** Issue is addressed, as needed, by one or more applicable staff members.

As a result, the account is either reset or closed. If the account is reset, it's back in action and ready for what above is referred to as 1) Computerized Data Processing Mode, just like the rest of the accounts.

However, a record should remain of the Manual Data Processing Mode interaction, that the staff members can review. We need this, so that we can spot possible repeated problem sources.

Abuse Control System will use the Computerized Testing Mode.

In the case of CreativityModel.com Version 1, in most instances the default solution is: The account can be reset. However, if specific conditions, that the application tests for, prove to be correct, the account is suspended.

To put it differently, the application handles selected issues until, based on the test conditions, it determines, that it cannot resolve the issue on its own.

In the case of CreativityModel.com Version 1, the suspended accounts are marked for 3) Manual Data Processing Mode.

However, in the longer run, we want to put more emphasis developing functionality for the 2) Computerized Data Processing Mode, so that the application can handle an increasing variety of work, and the application administrators will have to do less work.

We do not want to start developing some kind of artificial intelligence for this purpose. (Generally speaking, artificial intelligence based of programs are very costly and labor intensive to develop). We will use a different, simpler approach here, that is also related to CreativityModel Method usage.

Additional Features

Live Chat

I would like to include live chat functionality from the beginning.

For CreativityModel.com Version 1 we will most likely install PHP Live, most likely with the default features.

http://www.phplivesupport.com/features_source.php

Email, RSS Subscribers, Trackback, Social Bookmark and Feed Button Builder

- Email this post – functionality for emailing specific URLs of a post to designated email addresses.

Unless we find, that this functionality can be abused somehow, we probably don't want to require login for usage of this functionality.

RSS feed – Ideally, we will set up RSS feed (1) from Site Map / My Reading List and (2) directly from posts.

Ideally, a visitor can sign up for RSS feed for all the posts listed on his or her Site Map / My Reading List, or for a subset of posts listed on his or her Site Map / My Reading List.

To put it differently, for example, if a visitor has 8 posts listed in the My Reading List, then he or she can choose all 8 for RSS feed, by checking them off individually on My Reading List, using the "[] RSS" checkboxes. Similarly, the visitor can select any subset of these 8 posts for RSS feed, by checking off the individual posts, using the "[] RSS" checkboxes.

Further, ideally a visitor can sign up for RSS feed both

- through Site Map / My Reading List – as is indicated in Site Map / My Reading List section by using the "[] RSS" checkboxes.
- directly from a post – as is shown in the mockup. Anything that is added to RSS feed list directly from a post, is first added to My Reading List as well, in order to keep this functionality consistent.

Login is required for using the RSS feed functionality.

- Login should be required for usage of trackback functionality. Further, we probably want to use Akismet plugin for WordPress.
- We may want to use screen space saving Social Bookmark service like <http://www.addthis.com/>

In addition, we may want to consider using the following:

- <http://www.digg.com/>
- <http://www.technorati.com/>
- <http://www.delicious.com/>
- <http://www.propeller.com/>
- <http://www.stumbleupon.com/>
- <http://www.reddit.com/>
- <http://www.fark.com/>
- <http://www.newsvine.com/>
- <http://slashdot.org/>

Section Pages

As is shown on mockup page 4, we want to set up the website sections so, that the first page that opens contains abbreviated versions of the section's content, with links to the individual subsections (parts) of the section.

So, section page is the first page of a section, where a visitor lands, when he or she clicks on the section's name in either Website Sections area, or on the Site Map.

For the sake of clarity I will add, that on the Site Map the section pages are simply links and as such, are not related to the My Reading List functionality. To put it differently, site visitors can add individual posts to their reading list, but not entire sections.

Questionnaires

I need to be able to set up and use questionnaires that are accessible only to selected individuals. I plan to use these questionnaires for collecting information from and evaluating potential founding team members, employees, trainees and business partner candidacies.

Further, I would like to have a functionality, that helps to keep track of

- which questionnaires are available,
- to whom their filling invitations have been sent and
- who has or has not yet filled in the questionnaire that was sent to him or her.

In order to differentiate between the back end tables and the relevant front end, user interface level features, I am calling back end tables “table” and front end functionality parts “list.”

So, every front end “list” should be in the back end supported by one or more tables. I do not want to use any front end JavaScript based lists, for example.

Overall Information Flow

I intend this to work so, that

- I put together a questionnaire, which is an objects that, when ready, can be used by multiple visitors for entering information that is stored in the same database where the rest of CreativityModel.com website related data is stored.

Just in case, I will add the following comment. Every table in our relational database needs primary keys, of course. This applies to the entire application that we are developing, and to any other relational database backed applications that we may be working on in the future. **In all cases**, these primary keys should be an automatically generated (whole) number, so that the first number is 1 and every consecutive number is generated by adding 1 to the previous number.

Similarly, questionnaire’s ID should be an automatically generated number.

- I enter questionnaire’s name on a list of questionnaires through the content management system’s relevant user interface. Behind this list is a simple table with a list of questionnaires.
- In a separate list I enter, one by one, the visitors who should receive an invitation for filling in the questionnaire. Every time, when I add a visitor, this process creates a unique string that combines the URL, visitor’s ID and questionnaire’s ID.
- In a separate (manual) process, I will send out emails to the relevant visitors, inviting them to fill in the questionnaire. In each email I include also the visitor specific unique string that combines the URL, visitor’s ID and questionnaire’s ID.
- When a visitor clicks on the URL string that he or she receives, the application registers it as this specific visitor’s this specific questionnaire’s filling in attempt.

Accessing a questionnaire should require a login through the main website login functionality. If a visitor, who tries to access a questionnaire, has not logged in, then, as usual, when login is required, the visitor should be prompted for login.

The information that the visitors enter through the questionnaire should be stored in our database, where it is accessible through the content management system. As with everything else in the content management system, I should be able to designate what user groups can access this information. Similarly, I should be able to designate what user groups can access questionnaire creating functionality.

As far as I can tell, the most complex part of this is providing functionality for putting together the questionnaires. So, we have to find a way to make this part of the application development work as easy, that is, as little time consuming, for your developers, as possible.

Other than this, it should not be difficult to implement. So, if anything about it seems very complex to do, please let me know about that.

Questionnaire Generating Process

- 1) Ideally, I would use the content management system to set up questionnaires.

The questionnaires that I need can be relatively simple. However, providing a fully functional application for setting up questionnaires would most likely require a lot of development time. If that is the case, we need to use some other way that requires less development time.

- 2) The second option would be to use third party applications that are set up for generating and administering questionnaires. I like this option a lot, but I have not been able to find any questionnaire creating related software or service that would meet my needs, without being too expensive.

Because I need something relatively simple, I do not want to pay for complex functionality that I do not need.

- 3) We can also consider using a solution, where I need to set up questionnaires manually.

Questionnaire Administration Process

Below I describe an ideal solution for CreativityModel.com Version 1 Questionnaire Administration process. It may be, that we will actually settle for a much simpler solution, especially, if we will use a third party solution.

In the content management system's administrative side, I would like to be able to have a simple tracking functionality, where I can add questionnaire names and registered visitors, to whom I have sent out an invitation to fill in that questionnaire. From the same tracking functionality, I would like to see, who has and who has not yet filled in that questionnaire.

For example, let's say, I create a new questionnaire named ABC, and send out an invitation to fill it in to John Doe and Mary Doe.

	Questionnaire	VisitorID	Last, First Name	Invitation String	Sent on Date	Filled In Date	Time Used	Compl
[--]	ABC	VisitorID	Doe, John	These are all rather long strings that combine the URL, visitor's ID and questionnaire's ID.	01/23/10	01/25/10	22 min	[--]
[--]	ABC	VisitorID	Doe, John		01/23/10	01/26/10	110 min	[--]
[--]	ABC	VisitorID	Doe, Mary		01/23/10			[--]
[--]	(empty record)							[--]

Fill records (button)

Delete records (button)

Filter records by [drop-down]

Apply filtering (button)

Review (button)

Download as txt file (button)

Download into Excel (button)

The first column, where are [--] placeholders, contains checkboxes that are related to using the “Fill records” button and “Delete records” button below the list. Here, I should be able to select records and then use the “Fill records” button and/or “Delete records” button.

The second column should contain both QuestionnaireID and questionnaire name, but should display only Questionnaire name. As is explained below, this column should be a drop-down, so that I can select the questionnaire name from the list of questionnaires.

Here, John Doe received the questionnaire ABC on 01/23/10, and filled it in the first time on 01/25/10, and the second time on 01/25/10. By the way, these two dates could be the same, if John Doe filled in (or attempted to fill in) the questionnaire twice the same day.

The first time John Doe spent 22 minutes and the second time 110 minutes on filling in the questionnaire.

Mary Doe received the questionnaire ABC on 01/23/10 but has not yet filled it in.

Questionnaire Generating Related Functionality

So, we need functionality that

- Allows to list questionnaires, so that they are stored in a separate table. Let’s call it tblQuestionnaires.
- Allows to track questionnaire sending and filling activity. Let’s call it tblQuestTracking.
- Allows to add questionnaires to tblQuestTracking – perhaps a drop-down is suitable for this field. The above tblQuestionnaires, where the questionnaires are listed, populates the drop-down field entries. To put it differently, the entries that are listed in the tblQuestionnaires, show up in tblQuestTracking “Questionnaire” field.

Only the questionnaire should be displayed in this field, but for the underlying functionality the QuestionnaireID should be accessible as well.

In the table that stores the list of questionnaires, every questionnaire should be listed once, but in the above, tracking table, every questionnaire can be listed as many times as necessary.

- Allows to add registered visitors to the tracking list (table) fields.

This can work so, that

- (1) I fill in the “Questionnaire” field value
- (2) Filling in the “Questionnaire” field value triggers application functionality, where the application checks the checkbox for the relevant record (this checkbox is in the first column).

This checkbox can be filled in and cleared manually as well.

- (3) I enter VisitorID in the relevant field for the new record that I am filling in.

I repeat this process for as many records as needed, that is, for as many visitors that I need to send the relevant questionnaire at the time.

- I click on the “Fill records” button.
- Based on the VisitorID, the application fills in the “Last, First Name,” “Invitation String” and “Sent on Date” fields values for every record, that had the checkbox selected before I clicked the “Fill records” button.
 - The “Last, First Name” field value, that the application fills in, is based on the VisitorID that I entered. This VisitorID is generated when the visitor registers. It should be available through content management system.
 - “Invitation String” field should contain the string that needs to be emailed to this particular visitor. This string should combine the URL, visitor’s ID and questionnaire’s ID and “Sent on Date” fields values. When the visitor clicks on this string, the application should register specific questionnaire (type) filling attempt by the specific visitor and proceed as is explained below.

- “Sent on Date” should be today’s date.

The date field values should be formatted mm/dd/yy

- Next, the application clears the checkboxes in the first column for all the records.

EXCEPTIONS

For records, that do not have any value in the “Questionnaire” field, the application should not fill in any fields even if the checkbox is checked off. If any records, that have the checkbox checked off, have value missing from the “Questionnaire” field, the application displays a notice:

One or more records are missing the Questionnaire field value.

Similarly, for the records, that have the checkbox checked off, but do not have any value in the VisitorID field, the application should not fill in any fields. If any records, that have the checkbox checked off, have value missing from the “VisitorID” field, the application displays a notice:

One or more records are missing the VisitorID field value.

Similarly, for the records, that have the checkbox checked off, but have an invalid VisitorID, the application should not fill in any fields. If any records have an invalid VisitorID, the application displays a notice:

One or more records have an invalid VisitorID value.

To keep this simpler for the developers, the application does not have to identify, which records have missing the “Questionnaire” field values, or missing or invalid “VisitorID” values.

- For the records, that the application filled in, I should be able to change the “Sent on Date” fields values. I should not be able to change any other fields values.
- I should be able to select any records that have one or more fields filled in, using their checkboxes in the first column [--] and delete them by clicking on the Delete button.

Basic Structure of Questionnaire Usage

The following is the basic structure of questionnaire usage:

1. When an Invitation String is clicked, the application evaluates and updates data as is described below.
2. When the questionnaire is closed, the application evaluates and updates data as is described below and the person who is filling in the questionnaire should be disconnected from the questionnaire filling in functionality. Further, all the data entered by the visitor is stored in our database.

Invitation String Clicking Related Functionality

Through using the Invitation Strings we want to make sure that a specific individual visitor, who has logged in under his or her credentials, can fill a specific questionnaire up to specified number of times.

If you have better solution to offer than is the Invitation String usage described here, please let me know what it is.

As is stated elsewhere, the Invitation Strings should be rather long strings that combine the URL, visitor’s ID and questionnaire’s ID.

- The visitor’s login ID – which is the VisitorID related to the login – should match **both** the VisitorID in the string and in the tracking table, AND that for the same record in the tracking table the questionnaire ID in the string should match the questionnaire ID in the tracking table.
- Through the Invitation String usage we need to make sure that the visitor is not exceeding the number of times that he or she is allowed to access the questionnaire.

Questionnaire accessing functionality should be set up so, that a questionnaire can be only opened after the relevant validation. To put it differently, a questionnaire should not open without passing the relevant validation steps listed here.

1. Login is required.

As is stated above, accessing a questionnaire should require a login through the main website login functionality. If a visitor, who tries to access a questionnaire, has not logged in, then, as usual, when login is required, the visitor should be prompted for login.

As always, no login = no access to the functionality and area that requires login. No exceptions.

2. Validate the login to invitation.

If a visitor is logged in, **or** after the visitor has logged in, the application should validate that the visitor's login ID matches the VisitorID in the Invitation String.

- If there is no match, the validation process should end. The visitor should be redirected to CreativityModel.com homepage. The questionnaire should not open.

Further, a message should be displayed:

Sorry, I was not able to validate your access to this questionnaire. Please contact the CreativityModel.com staff member who sent you the invitation string to this questionnaire, list the name of the questionnaire that you tried to access and mention "Validation issue Q1" in your correspondence.

Do you recommend something else than popups for such messages and if so, why? I have written this text assuming, that you recommend popups.

This message should be a popup. As with all the messages, authorized CreativityModel.com staff members should be able to modify this message content through the content management system.

- If there is a match, the validation process should continue.

3. Next, the application should access the tracking table data.

We can set this up so that the application

SELECT ALL where VisitorID in the invitation string = VisitorID in the tracking table

AND

QuestionnaireID in the invitation string = QuestionnaireID in the tracking table

AND

Compl = No

- Just like above, if there is no match, the validation process should end. The visitor should be redirected to CreativityModel.com homepage. The questionnaire should not open.

Further, a message should be displayed:

Sorry, I was not able to validate your access to this questionnaire. Please contact the CreativityModel.com staff member who sent you the invitation string to this questionnaire, list the name of the questionnaire that you tried to access and mention "Validation issue Q2" in your correspondence.

This message should be a popup. As with all the messages, authorized CreativityModel.com staff members should be able to modify this message content through the content management system.

Please note the difference in these messages "Validation issue Q1" vs. "Validation issue Q2."

- If there is a match, the application should evaluate and modify data as follows:
 - If there is 1 (one) match and the "Filled In Date" field is empty (first attempt):
 - Insert today's date in the "Filled In Date" field.
 - If there is 1 (one) match and the "Filled In Date" field contains a date value (second attempt):
 - Make a copy of the entire record.
In the new record replace the "Filled In Date" field's content with today's date AND clear the "Time Used" field so that there is no value in the "Time Used" field for the new record.

No modifications whatsoever should be made to the previous record.

Further, a message should be displayed:

You can access this questionnaire twice. Please try to complete your work on this questionnaire during this current login. If you need to continue filling in this questionnaire after the current login, please contact the CreativityModel.com staff member who sent you the invitation string to this questionnaire.

This message should be a popup. As with all the messages, authorized CreativityModel.com staff members should be able to modify this message content through the content management system.

- If there are 2 (two) or more matches, the validation process should end. The visitor should be redirected to CreativityModel.com homepage. The questionnaire should not open.

Further, a message should be displayed:

Sorry, you can access this questionnaire only twice. If you need to continue filling in this questionnaire, please contact the CreativityModel.com staff member who sent you the invitation string to this questionnaire, list the name of the questionnaire that you tried to access and mention "Validation issue Q3" in your correspondence.

This message should be a popup. As with all the messages, authorized CreativityModel.com staff members should be able to modify this message content through the content management system.

Please note the difference in these messages "Validation issue Q1" vs. "Validation issue Q2" vs. "Validation issue Q3."

Questionnaire Closing Related Functionality

Uniform Handling

I would like to set this functionality up so, that if the visitor closes the browser instance without clicking the "Submit Questionnaire" button, the situation is handled precisely the same way as if the visitor had clicked the "Submit Questionnaire" button.

Please let me know if that can be done.

Data Saving

I would like to set up data saving so, that we don't lose any data, even if the visitor closes the browser without clicking the "Submit Questionnaire" button. For example, perhaps we can set this up so, that data is stored automatically as soon the cursor leaves the field, and also when the questionnaire is closed? What do you recommend?

Questionnaire Closing

When the questionnaire is closed:

- 1) All the data that the visitor had entered should be saved.
- 2) The application should calculate and enter the number of minutes the visitor spent on filling in the questionnaire.
- 3) The application should communicate with the visitor and modify data as is indicated below.
- 4) The visitor should be redirected to CreativityModel.com homepage.
- 5) Questionnaire should be closed.

2) Calculating and Entering the Number of Minutes

The application should calculate the number of minutes passed from the time the Invitation String was clicked and enter the result in the relevant record's "Time Used" column.

Question/Suggestion: Maybe the best way to do this is to add two Date/Time columns in the underlying back end table, "Time Started" and "Time Completed," calculate the difference in minutes, and then enter it in the "Time Used" column that is displayed?

3) Communicating With the Visitor

When the questionnaire is closed, we want to know whether or not the visitor considers his or her work on the questionnaire to be completed.

The relevant messages depend on whether this was the visitor's first or second questionnaire filling in attempt.

For this we need to be able to access this visitor's VisitorID and currently used questionnaire's QuestionnaireID.

Using these variables, we want to select from the tracking table the records that match the relevant VisitorID and QuestionnaireID and where Compl = No.

The last variable, Compl, is questionnaire completion related Yes/No field.

PLEASE NOTE, that this last variable, Compl, is important, because I may send the same questionnaire to individual visitors more than one (if they request it). So, the Compl variable helps to differentiate between past and current questionnaire filling records.

If we find 1 (one) match, it's the first attempt. If there are 2 (two) matches, it's the second attempt.

- If it is the first attempt,

the application should ask the visitor:

Thank you for working on this questionnaire. Have you completed this questionnaire?

If you answer Yes, you indicate that the questionnaire is ready for review and you do not intend to access it again.

If you answer No, you indicate that you intend to work on this questionnaire again, before submitting it for review.

- If the answer is Yes, the application should mark the Compl Yes/No column field as Yes for the record that pertains to this visitor and questionnaire.
 - If the answer is No, the application should proceed with the next step.
- If it is the second attempt,

the application should display the following message to the visitor:

Thank you again for working on this questionnaire! Your work on this questionnaire is now considered complete. However, if you would like to continue working on this questionnaire, please contact the CreativityModel.com staff member who sent you the invitation string to this questionnaire.

and the application mark the Compl Yes/No column field as Yes for all the previously selected records that pertain to this visitor and questionnaire.

Questionnaire Usage Related Functionality

- I would like to set this up so, that a visitor can fill in the questionnaire up to 2 times, that is, during 2 logins. Further, I would like to set this up so, that a visitor can fill in the questionnaire within 2 weeks.
- I would like to capture separately any end results from the first and the second questionnaire filling it attempt for every questionnaire type and every visitor, who fills in a questionnaire.

This we can keep relatively simple. When the visitor starts filling in the questionnaire the second time, he or she should be able to start where he or she left off the first time. Further, he or she can make any changes, or keep the responses the same as they are. We don't need to capture any changes made, just the end results from the point when the visitor clicks the Submit Questionnaire button **for the first questionnaire filling attempt, and the second questionnaire filling attempt.**

So, in a separate table – let's call it tblQuestionnaireData, for example – we store for every visitor the questionnaire results every time he or she submits them. In this table we want to store the VisitorID as well.

If the rest of the functionality functions as needed, a visitor can store data up to two times per Invitation String that was generated and sent out.

My recommendation is to use a separate table for every questionnaire's results. This helps to keep things simpler.

In this case we don't need to store the QuestionnaireID every time, but we do need to set up this functionality so, that the data is stored in the correct tables.

- Further, the questionnaires should be set up so that
 - Only the visitors, who are designated to fill in a specific type of questionnaire, can access it.
To put it differently, for example, an prospective employee should not be able to access questionnaires that are meant for prospective founding and management team members, even if that prospective employee somehow gets hold of that questionnaire's ID and hacks into the application.
 - No visitor should be able to see, who else is expected to fill in, or is filling in, or has filled, in any type of questionnaire. Similarly, no visitor should be able to see any other visitor's questionnaire information that has been filled in.
 - To put it differently, every visitor, who has received an invitation to fill in a questionnaire, should be able to access (and see) only that questionnaire, that he or she is designated to fill in.
Some visitors may be asked to fill in several questionnaires. This means, that they should have access to these, and only these, questionnaires, that they have been designated to fill in.

Buttons and Questionnaire Data Filtering Functionality

Below the tracking list user interface should be the following functionality aids:

Fill records (button)

Delete records (button)

Filter records by [drop-down]

Apply filtering (button)

Review (button)

Download as txt file (button)

Download into Excel (button)

As is explained in the above subsection Questionnaire Generating Related Functionality, the "Fill records" button and "Delete records" button are related to working with the selected records. These records are selected by checking off the tracking list first column's checkboxes.

The rest of the functionality aids are explained below.

Filtering Functionality

I would like to have filtering functionality (Filter records by drop-down, and Apply filtering button), that allows me to see the tracking data in the following ways:

-- All data, default sorting

-- Have not filled in the questionnaire

-- Recent visitor activity

- The "All data, default sorting" option should display all data sorted by the default sorting, which is: "Questionnaire," "Last, First Name."

- “Have not filled in the questionnaire” means that the visitor has received an invitation to fill in the questionnaire, but has not attempted to fill it in yet.

This option should show the records where the “Sent on Date” field is filled in but the (“Filled In Date” field is empty AND the Compl field = N).

COUPLE OF CLARIFYING NOTES

Just in case I will add that

field is filled in means that the field has a value

and

field is empty means that the field does not have a value.

Further, as usual, a field not having a value means **either** that the field may have not had a value at all, or it may have had a value, and the value was deleted.

For example, when the field is not initiated, that is, has not been used, it has no value. Similarly, in this context that I am using here, when the field is populated, that is, has a value, and then the value is deleted, it has no value.

- “Recent visitor activity” should filter data so, that all these entries are displayed, where the “Filled In Date” field is within 7 days from today’s date. To put it differently, this option should show the records of the questionnaires that have been submitted within the last 7 days.

All of these filtering options should be pretty easy to implement.

If you find any of this complicated to do, let me know. In such case we probably have a misunderstanding that we need to clarify, that is, I probably did not express myself clearly enough.

Review Button

When a visitor submits a questionnaire, we store the data in our database. I would like to be able to review this data so, that I select the record from the first (checkbox) column, and then click the Review button.

The results should be displayed vertically in two columns, so that the questions are in the first column and the responses in the second column. This layout should be very similar to ProjectDeveloper .com inquiry review page layout.

Every questionnaire has its own questions, and every questionnaire needs its own review user interface.

This means, that for every questionnaire we need some extra work to be done, for setting up the data storage (table and functionality parts) and data review user interface.

However, the Review button should function so, that it opens the correct questionnaire’s result, for the selected visitor. That is, the user interface should display results, one visitor and questionnaire at the time.

So, there could be, for example, questionnaire ABC in one record for John Doe, and questionnaire XYZ for Mary Doe in the next record.

When the first record is selected and the Review button is clicked, it should open that questionnaire ABC results for John Doe.

When the second record is selected and the Review button is clicked, it should open that questionnaire XYZ results for Mary Doe.

If instead of the Review button you find it easier to set this up so, that there is a Review column, with clickable links, let me know.

Let me know when you would like to take a look at the ProjectDeveloper .com inquiry review page layout, and I will send you the login information.

EXCEPTIONS

- When more than one records are selected from the first column when the Review button is being clicked, the application should open the results for the first selected record.

- Because the “Filled In Date” is stamped (that is, entered) when the visitor accesses the questionnaire, not when he or she completes it, it is possible to select a record and click the Review button while the visitor is still working on it.

Please let me know, how do you recommend to handle such instances.

I guess, we can handle accidental selections of the records where the “Filled In Date” is empty the same way. Please let me know about that, too.

Download Buttons

I would like to be able to download selected record's (or records) data into text files and Excel.

The results should be displayed vertically in two columns, so that the questions are in the first column and the responses in the second column. This layout should be very similar to ProjectDeveloper .com inquiry review page layout.

If downloading into Excel creates significant amounts of extra work, we can consider downloading into text files only.

EXCEPTIONS

- When more than one records are selected from the first column when the Download button is being clicked, the application should download the results for the first selected record.

However, if you can add little bit of looping code here, so that multiple records are downloaded one after another, then that's even better.

Please let me know about this.

- Because the “Filled In Date” is stamped (that is, entered) when the visitor accesses the questionnaire, not when he or she completes it, it is possible to select a record and click the Download button while the visitor is still working on it.

Please let me know, how do you recommend to handle such instances.

I guess, we can handle accidental selection of the records where the “Filled In Date” is empty the same way. Please let me know about that, too.

Navigation

Because over time the number of records may become large, navigation functionality is needed as well.

I would like to have navigation functionality that is similar to that of ProjectDeveloper.com search functionality navigation functionality (and also planned CreativityModel.com blogging pages navigation functionality).

We could set the limit of 100 records on a page.