JJY's Joomla 1.5 Template Design Tutorial:

Joomla 1.5 templates are relatively simple to construct, once you know a few details on how Joomla manages them. This tutorial assumes that you have a good understanding of <div>tags and how they relate to Cascading Style Sheet (CSS) statements. Even if you do not, there are generous comments throughout the code to help you learn and understand these concepts.

The example template that is used in this tutorial is fairly simple. This was done to clearly expose key template design concepts. If these basic concepts are mastered, it should be a simple matter to expand upon them and develop more sophisticated templates.

Let's begin...

1. First you must create a directory within your "path_to_joomla15\templates" directory. This directory must be named the same as your template. So, if you want to make a template called "example" you would create a directory named "example" within Joomla's templates directory.

If you are using Windows you might have a Joomla directory something along the lines of this...

C:\Program Files\Apache Software Foundation\Apache2.2\htdocs\joomla15

Within this directory you would have your "templates\example" directory

C:\Program Files\Apache Software Foundation\Apache2.2\htdocs\joomla15\templates\example

2. At a bare minimum, this directory will include the following files...

index.html – a simple HTML file to prevent security risks.

index.php -- a PHP file detailing the layout and content of your web page.

templateDetails.xml -- an XML file detailing all the necessary items needed by your template: files, images, directories, etc. It also includes information regarding the name of your template, its author, creation date, version, etc.

css\index.html – another simple HTML file to prevent security risks.

css\template.css -- a directory named css containing a file named template.css. This file details how your web page content will be displayed, i.e., styled.

We will now go over each of the files mentioned above in detail.

index.html and css\index.html:

These files are nothing more than place holders to prevent users from navigating the directories of your Joomla site. If you don't know what this is about, don't worry, just use the file contents as given below, it's just housekeeping.

```
<html><body bgcolor="#FFFFFF"></body></html>
```

For security reasons, you should place one of these index.html files in each directory of your template's directory hierarchy. For instance, if you have an images folder within your template directory you would need an images\index.html file.

index.php:

This file contains a number of sections that are used to provide the layout and content of the web page. The best way to see this is by example, so I have included what I believe is a fairly intuitive example of an index.php file. I have numbered the key sections that we will discuss.

```
1
     <?php echo '<?xml version="1.0" encoding="utf-8"?' .'>'; ?>
     <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</pre>
     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
     <?php require("suckerfish.php"); ?>
     <html>
2
     <head>
        <jdoc:include type="head" />
        <link rel="stylesheet"</pre>
     href="templates/system/css/general.css" type="text/css" />
        <link rel="stylesheet" href="templates/<?php echo $this--</pre>
     >template ?>/css/template.css" type="text/css" />
     </head>
3
     <body>
     <div id="Banner"><!--Banner Area --></div>
     <div id="Top"><!--Pull down menu and search box area just below</pre>
     the banner-->
     <div id="TopLeft"><!--Left section of top display area, i.e.,</pre>
     the pull down menu-->
          <div id="navFish">
             <?php mosShowListMenu("topmenu"); ?><!--Suckerfish pull</pre>
     down menu-->
          </div>
     </div>
     <div id="TopRight"><!--Right section of top display area, i.e.,</pre>
     the search box--><jdoc:include type="modules" name="TopRight"
     style="xhtml" /></div>
```

Section 1:

In section 1 we have a PHP statement that prints out the version of XML and the character encoding that we are using. This is followed by a DOCTYPE statement. Both of these statements are used to ensure that browsers will interpret our HTML and CSS documents properly. This is basically just house keeping.

The "<?php require("suckerfish.php"); ?>" statement, pulls in an additional PHP file, named suckerfish.php, that is included in the file listing section of our templateDetails.xml file.

The suckerfish.php file provides a slick pull down menu for our web page. In section 3, we use a function from this file to place just such a pull down menu on our web page. This is done in section 3 with the function statement, <code>mosShowListMenu("topmenu");</code>

Section 2:

In section 2 we have a number of statements that generate the header section of our web page. The first statement of interest is the "<jdoc:include type="head" />" statement. This instructs Joomla to output its header information. This is followed by a statement that pulls in Joomla's general.css style sheet.

The next statement brings in our template's style sheet, template.css. This is followed by a closing header tag.

Sections 1 and 2 are basically just the house keeping sections of our index.php file. Section 3 is where the real work is done, and this is typically the area that you will concentrate on while designing a template.

Section 3:

In section 3 we have the core statements that layout our page and bring in its content. Again, this content is styled by our template.css style sheet that we pulled in back in section 2.

Before we continue, we will refer to Figure 1 which will help us to see how our web page layout appears and how each area is named. In this figure each area, or position, is labeled in red. And, where appropriate, our content is labeled in green. Thus our banner area is found in Figure 1 and it is labeled in red as "Banner." Likewise we see our Top, TopLeft, and TopRight areas labeled in red with "Top Menu" and "Search Box" content labeled in green.

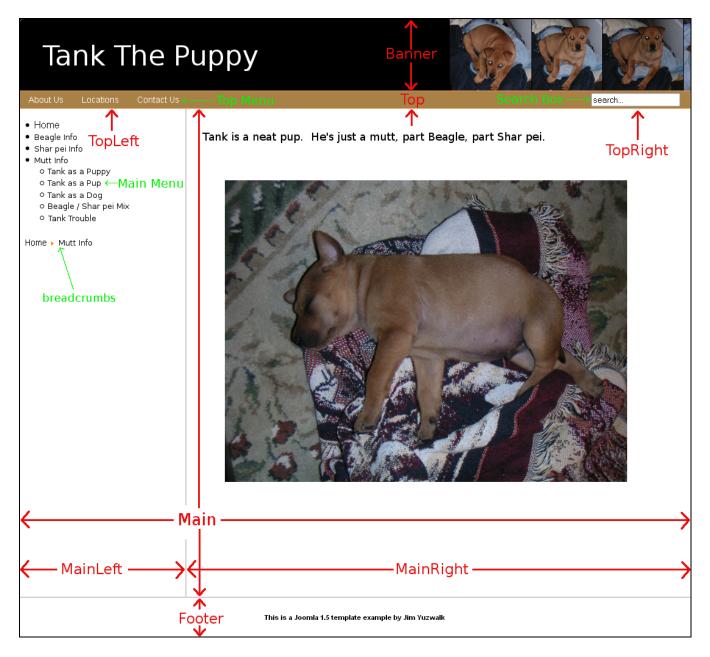


Figure 1

We do not use any tables within our example, so our entire layout is done using <div> tags and then referencing these tags in our supporting template.css style sheet. I did my best to use position names that are meaningful. They do not correspond with typical names as used in most Joomla templates: left, right, user3, user4, etc. But, instead, are Banner, Top, TopLeft, TopRight, Main, MainLeft, MainRight, and Footer. These names were chosen to aid learning.

The first item of note is the <div id="Banner"> statement. It provides an area for our banner image. Here's the section of our template.css file that deals with the "Banner" div tag...

```
#Banner{
height: 118px; /*banner height*/
background-color: black;
background-image: url("../images/banner.png");
background-repeat: no-repeat; }
```

As you can see, the template.css file formats the banner area and provides our banner image, banner.png, via a relative URL. The banner image is located within the "image" folder found within our "example" template's root directory. The area for the banner is 118 pixels in height with a black background.

The <div id="Top"> section provides an area for our "Top Menu" pull down menu and a search box named "Search Box." This section is located just below the banner. It is an area 28 pixels tall with a brownish background. The "Top" div tag encloses three additional div tags: TopLeft, TopRight, and navFish.

The <div id="TopLeft"> section is used to hold the suckerfish pull down menu, "Top Menu". It encloses a <div id="navFish"> tag that contains our pull down menu's content, which is brought in by a call to the suckerfish function, <?php mosShowListMenu("topmenu"); ?>.

The <div id="TopRight"> section is used to hold our search box.

Now, before we continue with more index.php details, let's take some time to discuss template.css to see how our content is being styled. We will get back to index.php a bit later.

template.css:

Our suckerfish pull down menu is styled, i.e., formatted, using our template.css file. The relevant sections are indicated by class references to ".nav" and div id references to "#navFish." Here's a complete listing of the template.css file with the suckerfish styling sections highlighted in yellow. There are generous comments throughout the file to make learning Joomla template design easy.

```
/*Joomla 1.5 template design, Jim Yuzwalk 2010-04-09*/
body {
margin: 0;
padding: 0;
font-size: 1em;
```

```
font-family: Helvetica, Arial, sans-serif;
#Banner {
height: 118px; /*banner height*/
background-color: black;
background-image: url("../images/banner.png");
background-repeat: no-repeat;
/*Top display area that will hold the pull*/
/*down menu and search modules*/
#Top {
height: 28px; /*top area height*/
background-color: #A88147;
border: 1px solid #F5A467;
#Main { /*Main display area*/
clear: both;
#Footer { /*Footer display area*/
clear: both:
font-size: 1em;
text-align: center;
border-top: 2px solid #ccc;
#TopLeft { /*top left -- Drop down menu*/
float: left;
background-color: #A88147;
list-style-type: none;
text-decoration: none;
font-family:arial;
font-size: 14px;
text-align:left;
#TopRight { /*top right -- search box*/
float: right;
padding-top: .2em;
padding-right: 1em;
background-color: #A88147;
#MainLeft { /*left side -- menu and breadcrumbs*/
```

```
float: left; width: 17em;
#MainRight { /*right side -- content*/
/*very important that this matches width in MainLeft gives*/
/*stable behavior during window resizing in IE6 and FireFox 3.6*/
margin-left: 17em;
padding: 0 1em;
border-left: 2px solid #ccc;
min-height: 800px;
/*Drop down list formatting*/
.nav ul {
/*Position our 24.1 em wide UL off screen*/
left: -999em;
position: absolute;
width: 24.1em;
/* place UL 5 units in front of everything else*/
z-index: 5;
/*border around entire drop down list area */
border: 1px solid #232323;
/*background color of drop down list */
background: white;
padding: 0;
}
#navFish {
/*Absolute position to ensure drop down menu is not*/
/*overwritten by search box when user narrows his browser view*/
position: absolute;
/*Give our navFish menu enough horizontal room so that*/
/*it displays properly even when a user narrows his browser view*/
width: 24em;
#navFish a {
float: left;
/*make height one pixel less tall to provide room*/
/*for 1 pixel wide border around drop down list*/
height: 27px;
line-height: 27px; /*Center the text vertically within the height*/
/*Provide some horizontal padding between listed items*/
padding: 0 15px;
font-weight: normal;
text-decoration: none;
color: white;
```

```
background-color: #A88147;
#navFish ul {
list-style: none;
margin: 0;
padding: 0;
#navFish li {
list-style: none;
/*float the pull down relative to the menu's root text*/
position: relative;
float: left;
margin: 0;
padding: 0;
}
#navFish li li {
/*drop down list width that shows background color */
width: 24.1em;
background-color: #A88147;
#navFish li li a {
font-size: 12px;
/*drop down text area font color */
color: black;
/*drop down list text area width */
width: 24em;
}
#navFish ul span {
float: left;
/*drop down text bottom border */
border-bottom: 1px solid #A88147;
}
#navFish li span.top {
/*drop down parent text area background color */
background-color: #a88147;
#navFish li li span.top a {
/*drop down child text area background color */
background-color: #F5A467;
/*Hover the list's background*/
#navFish li:hover,
#navFish li.sfHover {
```

```
background: none;
/*Hover the list -- show the UL list that was off screen (.nav)*/
#navFish li:hover ul,
#navFish li.sfHover ul {
left: 0px;
top: 28px;
}
/*Scale images smoothly as a user changes*/
/*the size of his browser window*/
imq {
/*Internet Explorer doesn't use bicubic interpolation by default*/
/*so enable it to eliminate image jaggies*/
-ms-interpolation-mode: bicubic;
/*Allows IE7 to shrink images when browser window*/
/*size is made smaller*/
max-width: 100%;
/*Main menu and breadcrumb formatting in MainLeft area*/
/*i.e., the left pane of the main display area*/
#MainLeft a {
color: black;
text-decoration: none;
#MainLeft ul {
margin: 0em;
padding-left: 1.5em;
padding-top: 1em;
#MainLeft ul ul{
padding-top: 0em;
#MainLeft span.breadcrumbs {
display: block;
margin-top: 1em;
padding-left: .5em;
font-size: 90%;
font-family:arial;
```

```
/*Simple formatting for all pages in MainRight area -- Main Content
area*/
#MainRight a {
color: black;
text-decoration: none;
#MainRight h1 {
color:black;
text-align: center;
font-size: 180%;
text-transform: uppercase;
font-family:arial;
#MainRight h2 {
color:black;
text-align: left;
font-size: 130%;
/*text-transform: uppercase; */
font-family:arial;
#MainRight h3 {
color:black;
text-align: left;
font-size: 130%;
/*text-transform: uppercase; */
font-family:arial;
#MainRight p {
color:black;
text-align: left;
font-size: 100%;
/*text-transform: uppercase; */
font-family:arial;
```

Don't let the large number of ".nav" and "#navFish" statements alarm you. They are needed to style our fancy pull down menu. In essence they provide the functionality of the pull down menu by providing the menu's unordered listings and links with font characteristics, background color information, and other formatting. See the comments in the template.css file listing for further detail.

The search box area is defined in the "TopRight" section of the index.php file. We bring in the search box by calling the appropriate Joomla module, <jdoc:include type="modules"

name="TopRight" style="xhtml" />. This statement says bring in the module that is supposed to go in the div area named "TopRight." You tell Joomla which module to use, and where to display it, using the "Module Manager" within Joomla's "Extentions" area, see Figure 2.

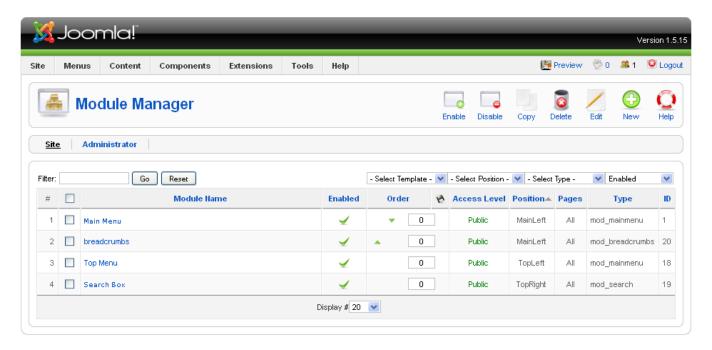
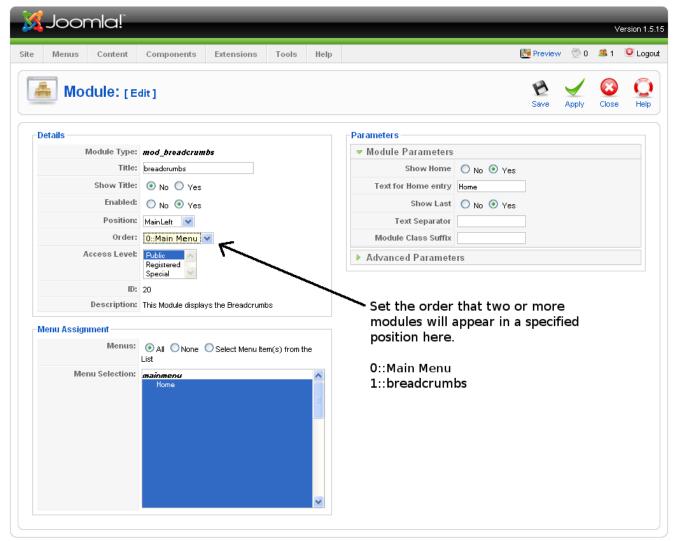


Figure 2

In Figure 2 we see that our search box is named "Search Box" and that it is assigned to position TopRight. Likewise our pull down menu is called "Top Menu" and it is assigned to position TopLeft. The key is to use the module manager to assign the modules you intend to use to areas within your index.php file. The areas being defined by <div id="area"> tags within the index.php file.

Continuing with Figure 2, we see that we intend to place the modules named "Main Menu" and "breadcrumbs" in the "MainLeft" area of our web page. We do this in our index.php file by providing a <div tag="MainLeft"> area.

In this case the order in which "Main Menu" and "breadcrumbs" appears in the "MainLeft" area is determined in Joomla's module manager, see Figure 3. This is another key concept. You are free to name template positions anyway you like, just be consistent throughout your template's design. Use the same position names for div ids located in index.php, class and id statements as used in template.css, module position names as used in Joomla's module manager, and, finally, positions as used in templateDetails.xml.



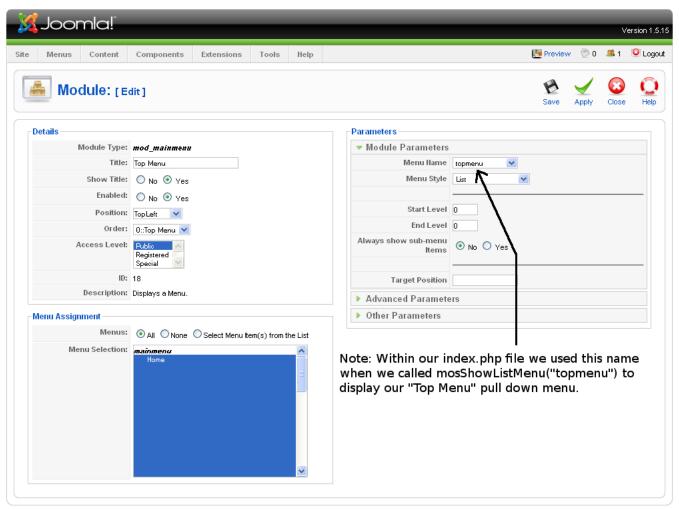
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Figure 3

Now, you may recall, that within our index.php file we brought in our suckerfish pull down menu with the PHP statement <?php mosShowListMenu("topmenu"); ?>. This statement brought the suckerfish pull down menu into our "TopLeft" div area.

If we left mouse click on the "Top Menu" entry in the Module Manager's "Module Name" column, as in Figure 2, we will get a screen similar to that as shown in Figure 4. Figure 4 provides a detailed view of the Module Manager's mainmenu module.

The mainmenu module has the title "Top Menu". And it has "topmenu" listed as its "Menu Name". This name must match the parameter name that we used in our PHP statement, <?php mosShowListMenu("topmenu"); ?>.



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Figure 4

We display our web page's main content in the div area named "MainRight." This is done within section 3 of index.php using the following statements...

```
<div id="MainRight"><!--Right section of main display area-->
<jdoc:include type="component" /></div>
```

The jdoc statement pulls in the appropriate content as determined from the "Main Menu" or "Top Menu" selection. Note, the "Main" area is located just below the "Top" area, and it encompasses both the "MainLeft" and "MainRight" areas. This can be seen more clearly in Figure 1.

Lastly, we simply output some text to fill in our "Footer" area. This is simply done in our index.php by the following statements...

```
<div id="Footer"><!--Footer display area / Footer-->
<h6>This is a Joomla 1.5 template example by Jim Yuzwalk.</h6>
</div>
```

templateDetails.xml:

Now, let's take a look at our example templateDetails.xml file where we have highlighted our positions in yellow and our templates required files in green...

```
<?xml version="1.0" encoding="utf-8"?>
<install version="1.5" type="template">
    <name>example</name>
    <version>1.0</version>
    <creationDate>04/28/2010</creationDate>
    <author>James Yuzwalk</author>
    <authorEmail>jjy@someplace.com</authorEmail>
    <authorUrl>http://www.someplace.com</authorUrl>
    <copyright>2010</copyright>
    <description>Jim's example template</description>
    <files>
          <filename>index.html</filename>
          <filename>favicon.ico</filename>
          <filename>index.php</filename>
          <filename>suckerfish.php</filename>
          <filename>template_thumbnail.png</filename>
          <filename>templateDetails.xml</filename>
          <filename>images/index.html</filename>
          <filename>images/banner.png</filename>
          <filename>css/index.html</filename>
          <filename>css/template.css</filename>
    </files>
    <positions>
         <position>Banner</position>
         <position>TopLeft</position>
          <position>TopRight</position>
         <position>MainLeft</position>
          <position>MainRight</position>
          <position>Footer</position>
    </positions>
</install>
```

The positions are all intuitively named, or at least I think so. More importantly, they match the position names as found in index.php, template.css, and the module manager. Again, they are arbitrary; you just have to be consistent. Each of these positions is listed in Figure 1 in red.

Each file that is needed for our template is included within the <files> section of templateDetails.xml -- see green highlighted text. If you eventually want to distribute your template this is very important.

Distributing Your Template:

To distribute your template to others, all you have to do is make a zip file of your template's root directory. The name of your template's root directory must match the name of your template. And the zip file's name must also match the name of your template. For our example template, the root directory and zip file must be named "example". See the <name> tag, highlighted in light blue, within the templateDetails.xml file listed above.

The zip file must include all of your template directory's contents including subdirectories like css and images. Lastly, all files needed by your template must be included in the <files> section of your templateDetails.xml file.

Summary:

As with any web page content that is formatted with a style sheet, there are complexities. In particular, Internet Explorer (IE) and FireFox sometimes render styled pages differently. There are a few tricks buried in the examples given to provide consistent rendering between IE and FireFox. At least they are clearly commented. Fixing these quirks is where the majority of time seems to be spent in designing a Joomla template.

The thing to go away with is that the positions called out in the index.php file are really just arbitrary. Pick something that makes sense to you. Then be consistent throughout your design: position names match throughout index.php, template.css, and the module manager. Doing this will aid you in understanding template design.

Once you get the hang of it, you can use the names as found in typical Joomla templates. That way your template will fit in with the rest of the crowd – it will be easier to switch between various templates if they all use the same naming scheme. But I would strongly resist this until you master your first template. Use names that make sense to you.

Perhaps the most important things to remember are these:

Use a picture to graphically layout your web page. Use Figure 1 as an example, and choose area and content names that make sense to you. From this labeled picture, develop your index.php and template.css files.

Use the module manager to assign the modules you intend to use to areas within your index.php file. The areas being defined by <div id="area"> tags within your index.php file. Position and style your content using template.css.

You are free to name template positions anyway you like, just be consistent throughout your template's design. Use the same position names for div ids

located in index.php, class and id statements as used in template.css, module position names as used in Joomla's module manager, and, finally, positions as used in templateDetails.xml.

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http://docs.joomla.org/JEDL

Best regards,

Jim Yuzwalk August 26, 2010