

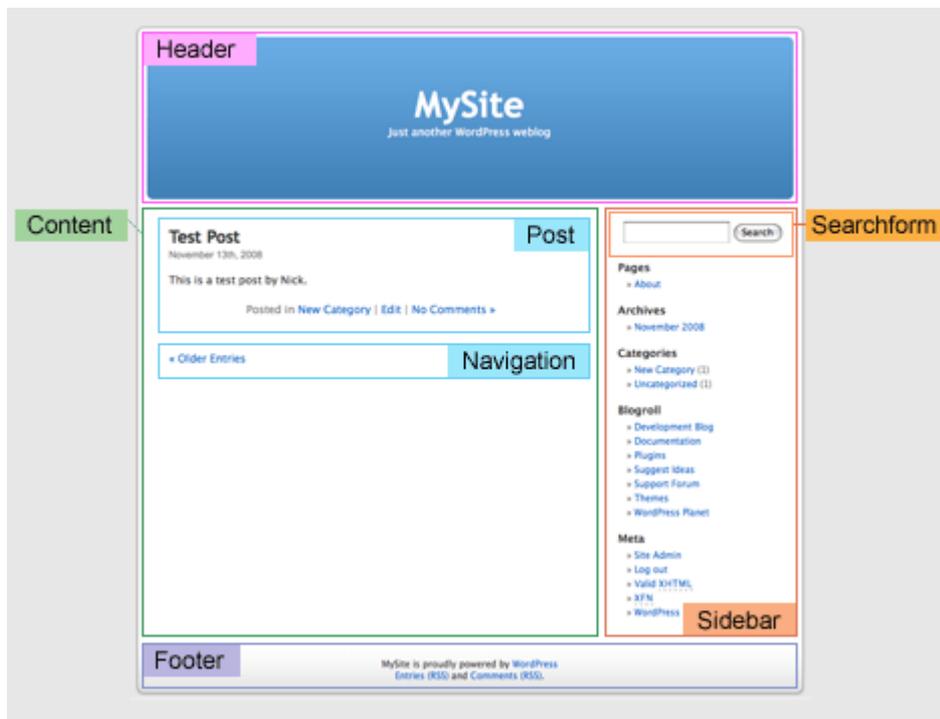
# Building Custom WordPress Theme

Src: <http://webdesignerwall.com/tutorials/building-custom-wordpress-theme>

In this tutorial, I will explain the basics of how WordPress theme works and show you how to convert a static HTML template into a theme. No PHP skill is required, but you need Photoshop and CSS skills to create your own design.

## 1. The Blog Frontend

Before you start, let's take a look at the WordPress default theme and see how it is structured. Take note of the elements (header, post title, search form, navigation, footer, etc.).



*Default Frontpage (index.php)*



Default Single (*single.php*)

## 2. Photoshop Mockups

Based on the information gathered from the default theme, design a Photoshop mockup of your blog. Or use the exercise files – a preview is below



Homepage



Single

### 3. HTML + CSS

After the PSD design is done, you would create a static HTML+CSS template of each page. But for the exercise we are going to use the prepared html files so Extract the zip and take a look at the *index.html*, *single.html*, and *page.html*

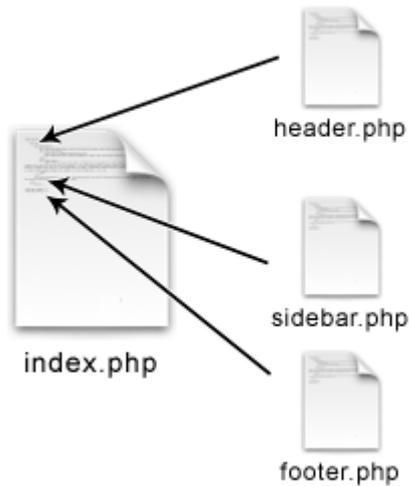


#### *Why Create a Static HTML File First?*

Mainly because it will make the development process a lot easier. I usually create a HTML file for every template that I need, test it across all browsers, validate both HTML and CSS markups, then all I have to do is cut & paste the WordPress code. By doing so, I don't have to worry about HTML or CSS bugs during my theme making process.

### 4. How WordPress Theme Works

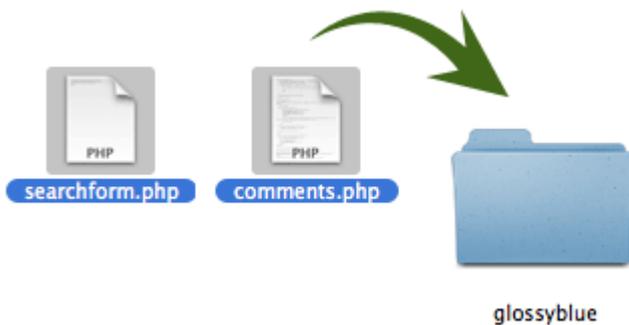
If you go the default theme folder (*wp-content/themes/default*), you should see many PHP files (called template file) and one *style.css* file. When you are viewing the front page, WordPress actually uses several template files to generate the page (*index.php* << *header.php*, *sidebar.php*, and *footer.php*).



For more details, check out [Site Architecture](#) and [Template Hierarchy](#) at Codex.

## 5. Duplicate The Template Files

Copy the GlossyBlue HTML folder into your *wp-content/themes* folder. Then, go to the *default* theme folder, copy the *comments.php* and *searchform.php* file to the *glossyblue* folder.



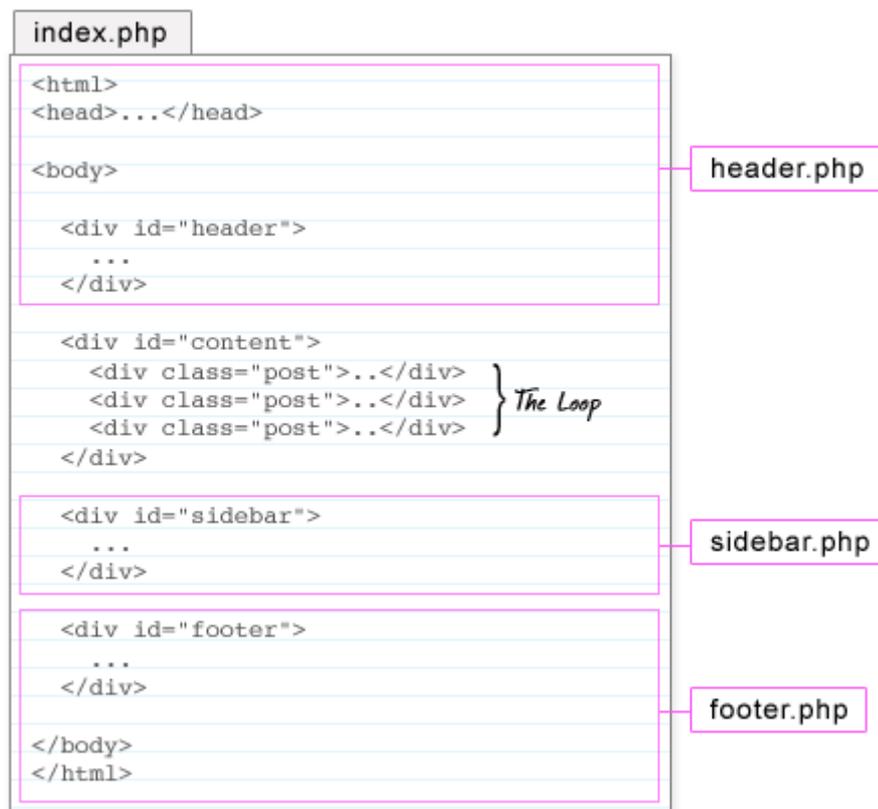
## 6. Style.css

Go to the WordPress *default* theme folder, open the *style.css* file. Copy the commented code at the top and paste it to the GlossyBlue *style.css* file. Change the theme name and the author information as you desire.

```
1  /*
2  Theme Name: GlossyBlue
3  Theme URI: http://www.ndesign-studio.com
4  Description: A theme by <a href="http://www.ndesign-studio.com">N.Desi
5  Version: 1
6  Author: Nick La
7  Author URI: http://www.ndesign-studio.com
8
9  */
10
```

## 7. Splitting The Files

Now you need to understand where to split the file into several files: *header.php*, *sidebar.php*, and *footer.php*. The image below shows a simplified version of my *index* file and how the markups should split.



## 8. Header.php

Open the *index.html* file. Cut from the top to where the `<!--/header -->` ends, paste it in a new PHP file, and save the file as *header.php*.

```

1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:
2 <html xmlns="http://www.w3.org/1999/xhtml">
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-
5 <title>index.html</title>
6 <link href="style.css" rel="stylesheet" type="text/css" />
7 </head>
8 <body>
9 <div id="page">
10 <div id="header">
11 <div id="headerimg">
12 <h1><a href="#">My Blog</a></h1>
13 <div class="description">Blog Description</div>
14 </div>
15 <ul id="nav">
16 <li><a href="#">Home</a></li>
17 <li><a href="#">About</a></li>
18 <li><a href="#">Portfolio</a></li>
19 <li><a href="#">Links</a></li>
20 <li><a href="#">Contact</a></li>
21 </ul>
22 </div>
23 <!--/header -->
24

```

Go to the *default* theme folder, open the *header.php*. Copy and replace the tags where it requires PHP code (Template Tag): `<title>`, `<link>` stylesheet, `<h1>`, and `<div class=description>`.

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />
<title><?php bloginfo('name'); ?> <?php if ( ! is_single() ) { ?> &raquo; Blog Archive <?php ?> <?php wp_title(); ?></title>
<link rel="stylesheet" href="<?php bloginfo('stylesheet_url'); ?>" type="text/css" media="screen" />
</head>
<body>
<div id="page">
<div id="header">
<div id="headerimg">
<h1><a href="<?php echo get_option('home'); ?>/"><?php bloginfo('name'); ?></a></h1>
<div class="description"><?php bloginfo('description'); ?></div>
</div>
<ul id="nav">

```

## Navigation Menu (*wp\_list\_pages*)

Replace the `<li>` tags in the `<ul id=nav>` with `<?php wp_list_pages('sort_column=menu_order&depth=1&title_li='); ?>`

```

<div id="page">
<div id="header">
<div id="headerimg">
<h1><a href="<?php echo get_option('home'); ?>/"><?php bloginfo('name'); ?></a></h1>
<div class="description"><?php bloginfo('description'); ?></div>
</div>
<ul id="nav">
<?php wp_list_pages('sort_column=menu_order&depth=1&title_li='); ?>
</ul>
</div>
<!--/header -->

```

Reference: [wp\\_list\\_pages](#).

## 9. Sidebar.php

Back to the *index.html* file, cut from where the `<form id=searchform>` start to the closing tag of `<div id=sidebar>` and paste it in a new PHP file, save it as *sidebar.php*.

- Replace the `<form id=searchform>` wrap with `<?php include (TEMPLATEPATH . '/searchform.php'); ?>`.
- Replace the category `<li>` tags with `<?php wp_list_categories('show_count=1&title_li='); ?>`
- Replace the archive `<li>` tags with `<?php wp_get_archives('type=monthly'); ?>`

```
1 <?php include (TEMPLATEPATH . '/searchform.php'); ?>
2
3 <div id="sidebar">
4   <h3>Category</h3>
5   <ul class="ul-cat">
6     <?php wp_list_categories('show_count=1&title_li='); ?>
7   </ul>
8   <h3>Archives</h3>
9   <ul class="ul-archives">
10    <?php wp_get_archives('type=monthly'); ?>
11  </ul>
12 </div>
13 <!--/sidebar -->
14
```

References: [wp\\_list\\_categories](#) and [wp\\_get\\_archives](#).

## 10. Footer.php

Back to the *index.html* file, cut from the `<div id=footer>` tag to the end of `</html>` and paste it in a new PHP file, save it as *footer.php*.

```

18 <div id="footer">
19 <div class="left-col">
20 <h4>Recent Posts </h4>
21 <ul class="recent-posts">
22 <li><a href="#">Blog Title Text</a><br />
23 10/23/2006</li>
24 <li><a href="#">Blog Title</a><br />
25 10/23/2006</li>
26 <li><a href="#">Title Text</a><br />
27 10/23/2006</li>
28 <li><a href="#">Sample Blog Title</a><br />
29 10/23/2006</li>
30 </ul>
31 </div>
32 <div class="left-col">
33 <h4>Recently Commented</h4>
34 <ul class="recent-comments">
35 <li><a href="#">Nick:</a> This is a test comment</li>
36 <li><a href="#">Jen:</a> Hello, nice day!</li>
37 <li><a href="#">Someone:</a> Wow, this is another test com
38 <li><a href="#">Admin:</a> This is a comment</li>
39 </ul>
40 </div>
41 <div class="right-col">
42 <h4>About</h4>
43 <p>Welcome to my design blog and portfolio showcase. Duis aute
44 facilisis.</p>
45 <p>Feel free to <a href="#"> contact me.</a></p>
46 </div>
47 <hr class="clear" />
48 </div>
49 <!--/footer -->
50 </div>
51 <!--/page -->
52 <div id="credits"><span class="left">Powered by <a href="http://www.wor
53 class="right"><a href="#" class="rss">Entries RSS</a> <a href="#" class
54 </body>
55 </html>

```

## Recent Posts

Here I used the `query_post` to display the 5 latest posts.

```

<div id="footer">
  <div class="left-col">
    <h4>Recent Posts </h4>

    <?php query_posts('showposts=5'); ??>
    <ul class="recent-posts">
      <?php while (have_posts()) : the_post(); ??>
        <li>
          <strong><a href="<?php the_permalink() ??>" rel="bookmark" title
          <small><?php the_time('m-d-Y') ??></small>
        </li>
      <?php endwhile;??>
    </ul>
  </div>

```

## Recent Comments

Recent comments are generated by a plugin (included in the theme folder).

```

<div class="left-col">
  <?php include (TEMPLATEPATH . '/simple_recent_comments.php'); /* recent c
  <?php if (function_exists('src_simple_recent_comments')) { src_simple_rec
</div>
<div class="right-col">
  <h4>About</h4>
  <p>Welcome to my design blog and portfolio showcase. Duis autem vel eum ir
  sis.</p>
  <p>Feel free to <a href="#"> contact me.</a></p>
</div>

```

Plugin

## 11. Index.php

Now in your *index.html* file, you should only have the `<div id=content>` wrap. Save the file as *index.php*. Insert the line: `get_header`, `get_sidebar`, and `get_footer` in the same order as your layout structure.

```

1  <?php get_header(); ??>
2
3  <div id="content">
4    <div class="post">
5      <div class="post-date"><span class="post-month">0ct</span> <span class="post-date"></span></div>
6      <div class="post-title">
7        <h2><a href="#">Sample Blog Entry</a></h2>
8        <span class="post-cat"><a href="#">News</a></span> <span class="post-date"></span></div>
9      </div>
10     <div class="entry">
11       <p>Duis autem vel eum iriure dolor in hendrerit in vulputa
12       odio dignissim qui blandit praesent luptatum zzril delenit augue dui
13       euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. <a href="#">
14       </div>
15     </div>
16     <div class="navigation"> <span class="previous-entries"><a href="#">
17     </div>
18   </div>
19   <?php get_sidebar(); ??>
20   <?php get_footer(); ??>
21 </div>

```

## 12. Understanding The Loop

The image below illustrates how The Loop works. The Loop is used to display blog posts and it also lets you control what to display. Basically, The Loop checks if there are posts in your blog, while there are posts, display it, if no post found, say "Not Found".

```

<?php if (have_posts()) : ?>
    <?php while (have_posts()) : the_post(); ?>
        <div class="post">
            ..
            </div>
        <?php endwhile; ?>
    <?php else : ?>
        <h2>Not Found</h2>
    <?php endif; ?>

```

### 13. Copy The Loop

Go to the *default* theme folder, open the *index.php* file. Copy The Loop from the default *index.php* and paste it in between the `<div id=content>..</div>`. Then, replace the static text with the WordPress Template Tags: post date, title, category, comments, next and previous link.

```

1 <?php get_header(); ?>
2 <div id="content">
3
4 <?php if (have_posts()) : ?>
5
6 <?php while (have_posts()) : the_post(); ?>
7
8 <div class="post">
9 <div class="post-date"><span class="post-month"><?php the_time('M'); ?></span> <span class="post-day"><?php the_time('j'); ?></span></div>
10 <div class="post-title">
11 <h2><?php the_title(); ?></h2>
12 <div class="post-content"><?php the_content(); ?></div>
13 <div class="post-comments"><?php comments_popup_link('No Comments', '1 Comment', '% Comments'); ?></div>
14 <div class="post-navigation">
15 <span class="next"><?php the_next_posts_link(''); ?></span>
16 <span class="previous"><?php the_previous_posts_link(''); ?></span>
17 </div>
18 </div>
19 <?php endwhile; ?>
20
21 <div class="navigation">
22 <span class="next"><?php the_next_posts_link('Older Entries'); ?></span>
23 <span class="previous"><?php the_previous_posts_link('Newer Entries'); ?></span>
24 </div>
25
26 <?php else : ?>
27 <h2>Not Found</h2>
28 <p>Sorry, but you are looking for something that isn't here.</p>
29 </div>
30 <?php endif; ?>
31 </div>
32 <!-- /content -->
33 <?php get_sidebar(); ?>
34 <?php get_footer(); ?>

```

### 14. Preview The Theme

Congrats! You've done the front page (the main part of the theme). Now, login to your admin panel, go to the Design tab, you should see the GlossyBlue theme, activate it and go to the front page to preview the theme.

### 15. Single.php

Now, it is time to do the *single.php* template. If you want, you can go through the same process — cut & paste from the *default* theme. But, I find it easier to use the *index.php*

that you just created and save it as *single.php*. Open the *default* theme *single.php* file and copy the Template Tags over. Then include the `comments_template`. The image below highlights what I've changed:

```
1 <?php get_header(); ??
2
3 <div id="content">
4
5 <?php if (have_posts()) : ??
6
7 <?php while (have_posts()) : the_post(); ??
8
9 <div class="post">
10 <div class="post-date"><span class="post-month"><?php the_time
11 <div class="post-title">
12 <h2><?php the_title(); ??</h2>
13 <span class="post-cat"><?php the_category(', ') ??</span>
14 </div>
15 <div class="entry">
16
17 <?php the_content('Read the rest of this entry &raquo;'); ??
18
19 <?php wp_link_pages(array('before' => '<p><strong>Pages:</s
20
21 </div>
22
23 <?php comments_template(); ??
24
25 </div>
26
27 <?php endwhile; ??
28
29 <div class="navigation">
30 <span class="previous-entries"><?php previous_post_link('%link
31 <span class="next-entries"><?php next_post_link('%link') ??</s
32 </div>
33
34 <?php else : ??
35
36 <h2>Not Found</h2>
37 <p>Sorry, but you are looking for something that isn't here.</p>
38
39 <?php endif; ??
40
41 </div>
42 <!--/content -->
43
44 <?php get_sidebar(); ??
45 <?php get_footer(); ??>
```

## 16. Page.php

With the *single.php* template you just created, save it as *page.php*. Remove the post date, comment form, next/previous link... and that's it.. there goes your *page.php* template.

## 17. Delete The HTML Files

Delete all the HTML files in the *glossyblue* folder (we don't need them anymore).

Technically, that is enough for a basic WordPress theme. You may notice there are more

PHP files in the *default* theme. Well, you don't really need those files if you just want a basic theme. For example, if the *search.php* or *404.php* is not present in the theme folder, WordPress will automatically use the *index.php* to render the page. Read the [Template Hierarchy](#) for more details.

## 18. WordPress Page Template

Ok, final example. I will show you how to use [Page Template](#) to create an archive page that will list all posts on your blog (good for sitemap). Copy the *archives.php* file from the *default* theme folder. Delete the unwanted code and you should have something like this:

```
1 <?php
2 /*
3  Template Name: Archives
4  */
5  ?>
6
7  <?php get_header(); ?>
8
9  <div id="content">
10
11     <h2><?php the_title(); ?></h2>
12
13
14
15 </div>
16
17 <?php get_sidebar(); ?>
18 <?php get_footer(); ?>
```

Here I'm using the [query\\_post](#) (`showposts=-1` means display all posts) to display a list of all posts.

```

1  <?php
2  /*
3  Template Name: Archives
4  */
5  ?>
6
7  <?php get_header(); ?>
8
9  <div id="content">
10
11     <h2><?php the_title(); ?></h2>
12
13     <?php query_posts('showposts=-1'); ?>
14
15     <ul>
16         <?php while (have_posts()) : the_post(); ?>
17         <li>
18             <h3><a href="<?php the_permalink() ?>" title="<?php the_title
19             <?php the_time('M d Y') ?> | <?php comments_popup_link('No Co
20             </li>
21         <?php endwhile;?>
22     </ul>
23
24 </div>
25
26 <?php get_sidebar(); ?>
27 <?php get_footer(); ?>
28

```

Now, login to your admin panel, write a new page, title it Archives. On the Page Template dropdown, select Archives.