

Intro to WordPress Development

The Template Hierarchy In Detail

The following sections describe the order in which template files are being called by WordPress for each query type.

The Main page

1. home.php
2. index.php

Single Post page

1. single.php
2. index.php

WordPress Page

1. The template selected from the "Page Template" dropdown when editing the [Page](#).
2. [page.php](#)
3. index.php

Note: This section refers to *WordPress Pages*, not generic posts or web pages from your blog. Please see [WordPress Pages](#) for details.

Category page

1. The Category Template with a matching ID. If the category's ID were **6**, WordPress would look for [category-6.php](#)
2. [category.php](#)
3. [archive.php](#)
4. index.php

Note: See [Category Templates](#) for details.

Tag page

1. The Tag Template with a matching slug. If the tag's slug were `sometag`, WordPress would look for [tag-sometag.php](#)
2. [tag.php](#)
3. [archive.php](#)
4. `index.php`

Note: See [Tag Templates](#) for details.

Author page

1. [author.php](#)
2. [archive.php](#)
3. `index.php`

Note: The [Author Template](#) can be used to display information about authors.

Date page

For example, a monthly archive page.

1. `date.php`
2. [archive.php](#)
3. `index.php`

Search Result page

1. [search.php](#)
2. `index.php`

Note: See [Creating a Search Page](#) for more information about the search template.

404 (Not Found) page

1. [404.php](#)
2. `index.php`

Note: See [Creating an Error 404 Page](#) for more information about the 404 template.

Stepping into Templates

Template files are the building blocks of your WordPress site. They fit together like the pieces of a puzzle to generate the web pages on your site. Some templates (the header and footer template files for example) are used on all the web pages, while others are used only under specific conditions.

A traditional web page consists of two files:

- The [XHTML page](#) to hold the structure and content of the page and
- the [CSS Style Sheet](#) which holds the presentation styles of the page.

In WordPress, the (X)HTML structure and the CSS style sheet are present but the *content* is generated "behind the scenes" by various [template files](#). The template files and the style sheet are stored together as a [WordPress Theme](#). To learn more about creating Themes, read [Theme Development](#).

The WordPress Page Structure

A simple WordPress web page structure is made up of three basic building "blocks": a header, the content, and a footer. Each of these blocks is generated by a template file in your current WordPress Theme.

Header

Content

Footer

- The **header** contains all the information that needs to be at the *top* — i.e. inside the `<head>` tag — of your XHTML web page, such as the `<doctype>`, `<meta>` tags and links to style sheets. It also includes the opening `<body>` tag and the visible [header](#) of your blog (which typically includes the title of your site, and may also include navigation menus, a logo bar, the description of your site, etc.).
- The **content** block contains the posts and pages of your blog, i.e. the "meat" of your site.
- The **footer** contains the information that goes at the bottom of your page, such as links to other [Pages](#) or categories on your site in a [navigation menu](#), copyright and contact information, and other details.

Basic Template Files

To generate such a structure within a [WordPress Theme](#), start with an `index.php` template file in your Theme's directory. This file has two main functions:

- Include or "call" the other template files
- Include the [WordPress Loop](#) to gather information from the database (posts, pages, categories, etc.)

For our simple structure, we only need to include two other template files: the **header** and the **footer**. These must be named `header.php` and `footer.php`. The [Template Tags](#) that include them look like this:

```
<?php get_header(); ?>
```

```
<?php get_footer(); ?>
```

In order to display the posts and pages of your blog (and to customize how they are being displayed), your `index.php` file should run the [WordPress Loop](#) between the header and footer calls.

More Complex Page Structures

Header

Content

Sidebar

Footer

Many WordPress themes include one or several **sidebars** that contains [navigation features](#) and more information about your website. The sidebar is generated by a template file called `sidebar.php`. It can be included in your `index.php` template file with the following [template tag](#):

```
<?php get_sidebar(); ?>
```

Where's the Beef?

Notice that we have not included a template tag to "get" *the content* of our web page. That is because the content is generated in the [WordPress Loop](#), inside `index.php`.

Also note that the Theme's style sheet determines the look and placement of the header, footer, sidebar, and content in the user's browser screen. For more information on styling your WordPress Themes and web pages, see [Blog Design and Layout](#)...

Template Files Within Template Files

You have seen how WordPress includes standard template files (header, footer, and sidebar) within the `index.php` template file. You can also include other template files within any of your template files.

For example, `sidebar.php` might contain a template file that generates a search form — `searchform.php`. Because this is not one of WordPress's standard template files, the code to include it is a little different:

```
<?php include (TEMPLATEPATH . '/searchform.php'); ?>
```

Instead of using a WordPress template tag to include the file, we'll use the [PHP command `include`](#) (<http://us3.php.net/manual/en/function.include.php>), which needs to know where the file is located (`TEMPLATEPATH` is a special variable within WordPress that points to the theme's template file directory).

Header

Content

Comment Form

Sidebar

Search Form

Footer

Most WordPress Themes include a variety of template files within other templates to generate the web pages on the site. The following template files are typical for the main template ([index.php](#)) of a WordPress site:

- [header.php](#)
 - [theloop.php](#) (The Content)
 - [wp-comments.php](#)
- [sidebar.php](#)
 - [searchform.php](#)
- [footer.php](#)

However, this structure can be changed. For instance, you could put the search form in your header. Perhaps your design does not need a footer, so you could leave that template out entirely.

Special Template Files

WordPress features two **core page views** of web pages in a WordPress site. The **single post view** is used when the web pages displays a single post. The **multi-post view** lists multiple posts or post summaries, and applies to category archives, date archives, author archives, and (usually) the "normal" view of your blog's home page. You can use the [index.php](#) template file to generate all of these types of pages or rely on WordPress' [template hierarchy](#) to choose different template files depending on the situation.

The WordPress Template Hierarchy answers the following question:

What template file will WordPress use when a certain type of page is displayed?

WordPress automatically recognizes template files with certain standard names and uses them for certain types of web pages. For example, when a user clicks on the title of a blog post, WordPress knows that they want to view just that article on its own web page. The WordPress [template hierarchy](#) will use the [single.php](#) template file rather than [index.php](#) to generate the page — if your Theme has a [single.php](#) file. Similarly, if the user clicks on a link for a particular category, WordPress will use the [category.php](#) template if it exists; if it doesn't, it looks for [archive.php](#), and if that template is also missing, WordPress will go ahead and use the main [index.php](#) template. You can even make special template files for specific categories (see [Category Templates](#) for more information).

Template File Tips

Here are some tips for creating WordPress template files:

Tracking Opening and Closing Tags

Template files include the use of [XHTML](#) tags and [CSS](#) references. HTML elements and CSS references can cross template files, beginning in one and ending in another. For example, the `html` and `body` HTML elements typically begin in `header.php` and end in `footer.php`. Most WordPress themes make use of HTML `div` elements, which can also span several files. For instance, the main `div` for the page content might start in `header.php` and end in either `index.php` or `single.php`. Tracking down where an HTML element begins and ends can get complicated if you are [developing, designing, or modifying a Theme](#). Use [comments](#) to note in the template files where a large container tag opens and where it closes so you can track which `div` is which at the end of different sections.

Test Template Files Under Different Views

If you have made changes to the comments, sidebar, search form, or any other template file, make sure you test them using different web page views (single post, different types of archives, and pages).

Comment Deviations

If you are [designing Themes for public release](#), keep in mind that someone who downloads your Theme will probably want to modify it slightly for their own use. So, it is helpful if you make notes in your template files where you have made changes from the logic of the Default and/or Classic Themes. It is also a good idea to add comments in your Theme's main style file if you have style information elsewhere (such as in your `header.php` file or in HTML tags).

Close the Tag Door Behind You

If you start a HTML tag or `div` in one template file, make sure you include the closing tag in another template file. The WordPress Forum gets a lot of questions about "what happened to my theme" when they remove the footer template file without closing the tags that began in the header template file. Track down your tags and make sure they are closed. (A good way to verify that this is correct is to test your single and archive page views with an [HTML validator](#) (<http://validator.w3c.org>)).

CSS Styles in Templates

You are free to use whatever HTML and CSS tags and styles you like in your templates. However, you are encouraged to follow the standard WordPress theme structure (see [Site Architecture 1.5](#)). This will make your Themes more understandable to your users.

Template Tags

Note: Some of these tags are new as of some version of WordPress (and are noted as, for instance, "Version 2.1" in the lists below). Some tags were deprecated in versions 2.0.x (and are noted as "Deprecated" below). Some tags from have been deprecated in 2.1 (and are noted as "Deprecated in 2.1" below).

Author tags

- [the author](#)
- [the author description](#)
- [the author login](#)
- [the author firstname](#)
- [the author lastname](#)
- [the author nickname](#)
- [the author ID](#)
- [the author email](#)
- [the author url](#)
- [the author link](#) (Version 2.1)
- [the author icq](#) (Deprecated)
- [the author aim](#)
- [the author yim](#)
- [the author msn](#) (Deprecated)
- [the author posts](#)
- [the author posts link](#)
- [list authors](#) (Deprecated)
- [wp list authors](#)

Category tags

- [the category](#)
- [the category rss](#)
- [the category ID](#) (Deprecated)
- [the category head](#) (Deprecated)
- [single_cat_title](#)
- [category description](#)
- [wp_dropdown_categories](#)
(Version 2.1)
- [dropdown_cats](#) (Deprecated in 2.1)
- [wp_list_categories](#) (Version 2.1)
- [list_cats](#) (Deprecated in 2.1)
- [wp_list_cats](#) (Deprecated in 2.1)
- [in_category](#)
- [get_category_parents](#)
- [get_the_category](#)

Comment tags

- [comments number](#)
- [comments link](#)
- [comments rss link](#)
- [comments popup script](#)
- [comments popup link](#)
- [comment ID](#)
- [comment author](#)
- [comment author IP](#)
- [comment author email](#)
- [comment author url](#)
- [comment author email link](#)
- [comment author url link](#)
- [comment author link](#)
- [comment type](#)
- [comment text](#)
- [comment excerpt](#)
- [comment date](#)
- [comment time](#)

Date and Time tags

- [the date xml](#)
- [the date](#)
- [the time](#)
- [the modified date](#) (Version 2.1)
- [the modified time](#)
- [get the time](#) (Version 1.5)
- [single_month_title](#)
- [get_calendar](#)
- [the weekday](#)
- [the weekday date](#)

- [comment_author_rss](#)
- [comment_text_rss](#)
- [comment_link_rss](#)
- [permalink_comments_rss](#)



General tags

- [bloginfo](#)
- [bloginfo_rss](#)
- [get_bloginfo](#)
- [get_bloginfo_rss](#)
- [wp_title](#)
- [wp_get_archives](#)
- [get_archives](#) (Deprecated in 2.1)
- [get_calendar](#)
- [get_posts](#)
- [wp_list_pages](#) (Version 1.5)
- [wp_dropdown_pages](#)
- [wp_loginout](#) (Version 1.5)
- [wp_register](#) (Version 1.5)
- [query_posts](#) (Version 1.5)
- [rss_enclosure](#) (Version 1.5)
- [wp_tag_cloud](#) (Version 2.3)

- [the_search_query](#) (Version 2.1)

Geo tags

Geo features were moved to a plugin implementation with WordPress 1.5. Tags in parentheses are the plugin version.

- [print_Lat](#) (the_Lat)
- [print_Lon](#) (the_Lon)
- [print_UrlPopNav](#) (the_UrlPopNav)
- [print_AcmeMap_Url](#) (the_AcmeMap_Url)
- [print_GeoURL_Url](#) (the_GeoURL_Url)
- [print_GeoCache_Url](#) (the_GeoCache_Url)
- [print_MapQuest_Url](#) (the_MapQuest_Url)
- [print_SideBit_Url](#) (the_SideBit_Url)
- [print_DegreeConfluence_Url](#) (the_DegreeConfluence_Url)
- [print_TopoZone_Url](#) (the_TopoZone_Url)
- [print_FindU_Url](#) (the_FindU_Url)
- [print_MapTech_Url](#) (the_MapTech_Url)

Link tags

- [edit_post_link](#)
- [edit_comment_link](#)
- [wp_link_pages](#)
- [link_pages](#) (Deprecated in 2.1)
- [get_year_link](#)
- [get_month_link](#)
- [get_day_link](#)
- [previous_posts_link](#)

Links Manager tags

- [get_links_list](#) (Deprecated in 2.3)
- [wp_get_links](#) (Deprecated in 2.3)
- [get_links](#) (Deprecated in 2.3)
- [wp_list_bookmarks](#) (Version 2.1)
- [wp_get_linksbyname](#) (Deprecated in 2.1)
- [get_linksbyname](#) (Deprecated in 2.1)

- [next_posts_link](#)

Permalink tags

- [permalink_anchor](#)
- [get_permalink](#)
- [the_permalink](#)
- [permalink_single_rss](#)

Post tags

- [the_ID](#)
- [the_title](#)
- [single_post_title](#)
- [the_title_rss](#)
- [the_content](#)
- [the_content_rss](#)
- [the_excerpt](#)
- [the_excerpt_rss](#)
- [previous_post_link](#)
- [previous_post](#) (Deprecated)
- [next_post_link](#)
- [next_post](#) (Deprecated)
- [posts_nav_link](#)
- [the_meta](#)
- [the_tags](#) (Version 2.3)

Tag tags

- [wp_tag_cloud](#) (Version 2.3)
- [the_tags](#) (Version 2.3)
- [get_the_tags](#) (Version 2.3)
- [get_the_tag_list](#) (Version 2.3)
- [single_tag_title](#) (Version 2.3)
- [wp_generate_tag_cloud](#) (Version 2.3)

Trackback tags

- [trackback_url](#)
- [trackback_rdf](#)

Useful Links

http://codex.wordpress.org/Working_with_WordPress#WordPress_Features

http://codex.wordpress.org/Template_Hierarchy

http://codex.wordpress.org/Conditional_Tags

<http://codex.wordpress.org/Templates>

http://codex.wordpress.org/Customizing_Your_Sidebar