

WordPress Intensive: From blogging to building dynamic web sites

Handout

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Overview

This seminar starts with a review of basic blogging and site administration with WordPress, and then moves into installation on a hosting provider, customizing templates, and a discussion about using WordPress as a content management platform with or without blogging features. This will be demonstrated by creating and customizing the new web site for MediaTechTonic live during the session.

Blogging with WordPress

WordPress is a simple and elegant open source blogging platform with a crisp set of features including a nice administration interface, which most people can handle. It's east to compose a post and publish posts with very little effort.

If you don't require any customization, you can easily be up and running with a free WordPress blog hosted on wordpress.com. If you want to create a custom template with custom code, and/or extend the site with special plug-ins, you'll need to host your own site using code available from wordpress.org.

When you host your own site, you can easily customize your web site with templates and change the functionality with plug-ins. WordPress has a large supporting community of developers who have created plug-ins to extend WordPress to do most anything you would imagine, and a community of designers have created many free or modest fee templates so you can choosing a look and feel that's right for you, and change it further depending on your needs.

You will need a hosting package, and if your hosting provider does not provide automatic WordPress installation, you'll have to download the WordPress source code and install it yourself. Check with your hosting provider to make sure you have what you need to install WordPress. To run WordPress on a shared hosting provider, you need PHP version 4.3 or greater, MySQL version 4.0 or greater, and the `mod_rewrite` Apache module. Most hosting providers support this, but it's good to check. The creators of WordPress recommend Apache or Litespeed as the most robust server for running WordPress, but any web server that supports PHP and MySQL will do.

Themes

There are many templates available for WordPress, here are some pointers to get you started:

WordPress Theme Viewer

<http://themes.wordpress.net/>

Andreas Viklund

<http://andreasviklund.com/templates/>

83 Beautiful Wordpress Themes You (Probably) Haven't Seen

<http://tinyurl.com/35bumy>

Revolution (professional magazine style theme)

<http://www.revolutiontheme.com/>

Mimbo Pro (professional magazine style theme)

<http://prothemedesign.com/themes/mimbo-pro/>

Creating custom themes

The easiest way to get started with your own themes is to start with one that's close and study it. Then make the changes you need to the template files. Here's an outline of essential knowledge for tweaking templates.

Structure of a WordPress blog

A WordPress blog consists of the following components, each of which appears in the default template:

- Header
- Body
- Sidebar
- Footer

Five Required Templates

For any custom WordPress template, there are five template files that must be defined. One for each component of the blog, plus a style sheet:

- header.php
- index.php
- sidebar.php
- footer.php
- style.css

Take a look at the default template for an example of a simple, clean template. It makes a good starting point for developing your own.

Other Templates

For any custom WordPress template, there are five template files that must be defined. One for each component of the blog, plus a style sheet:

- comments.php
- single.php
- page.php
- search.php
- 404.php

Template Tags

WordPress templates are mostly HTML with little snippets of PHP code called template tags. The snippets of code are nestled between open and close PHP tags. These tags insert the dynamic portions of the page when the page is requested from the server, before being sent to the browser the Apache web server replaces the template tags with the result of whatever code executes within the tags. The format of template tags is:

```
<?php bloginfo('description'); ?>
```

This particular tag prints out the description of the blog. In template it looks like above, but what gets sent to the browser is:

```
Just another WordPress blog
```

If you take a look at the default template, you'll see that various template tags are used to fill in content that's specific to the blog or to a page (or post), here are some of them:

```
<?php bloginfo('name'); ?>  
<?php wp_title(); ?>  
<?php bloginfo('stylesheet_url'); ?>  
<?php bloginfo('rss2_url'); ?>
```

```

<?php bloginfo('pingback_url'); ?>
<?php bloginfo('stylesheet_directory'); ?>
<?php echo get_option('home'); ?>
<?php bloginfo('description'); ?>

```

Take a look at the WordPress Codex for complete documentation on the many template tags available.

The Loop

The heart of most pages is the loop, in which WordPress fills the page with content. The key to understanding how WordPress generates Posts and Pages lies in an understanding of the loop. We'll discuss how this works in the session, here's the loop from the default template you can write notes on:

```

<?php if (have_posts()) : ?>
    <?php while (have_posts()) : the_post(); ?>
        <div class="post" id="post-<?php the_ID(); ?>">
            <h2><a href="<?php the_permalink() ?>" rel="bookmark"
                title="Permanent Link to <?php the_title_attribute(); ?>">
            <?php the_title(); ?></a></h2>
            <small><?php the_time('F jS, Y') ?> by <?php the_author() ?> </small>
            <div class="entry">
                <?php the_content('Read the rest of this entry &raquo;'); ?>
            </div>
            <p class="postmetadata">
                <?php the_tags('Tags: ', ' ', ' ', '<br />'); ?> Posted in
                <?php the_category(' ', ' ') ?> |
                <?php edit_post_link('Edit', '', ' | '); ?>
                <?php comments_popup_link('No Comments &#187;',
                    '1 Comment &#187;', '% Comments &#187;'); ?></p>
            </div>
        <?php endwhile; ?>
        <div class="navigation">
            <div class="alignleft">
                <?php next_posts_link('&laquo; Older Entries') ?></div>
            <div class="alignright">
                <?php previous_posts_link('Newer Entries &raquo;') ?></div>
            </div>
    <?php else : ?>
        <h2 class="center">Not Found</h2>
        <p class="center">
            Sorry, but you are looking for something that isn't here.</p>
        <?php include (TEMPLATEPATH . "/searchform.php"); ?>
    <?php endif; ?>

```

Take a look at the WordPress Codex for complete documentation on the Loop.

Extending with plug-ins

WordPress is based on a simple, elegant, and reliable code base. Sometimes you want to do more that WordPress offers. Plug-ins allow you to extend the capability of WordPress, Some useful plug-ins are:

Shadowbox JS

<http://sivel.net/category/wordpress/plugins/>

A media viewer that display pictures, movies, and websites in all major browsers without navigating away from the page. Similar to Lightbox or Thickbox.

Akismet

<http://akismet.com/>

Checks your comments against the Akismet web service to see if they look like spam or not. You need a WordPress.com API key to use it (create an account on wordpress.com to get one). This is essential for reducing you comment management work load.

Breadcrumb Navigation XT

<http://mtekk.weblogs.us/code/breadcrumb-nav-xt/>

Adds breadcrumb navigation showing the visitor's path to their current location.

Limit Posts

<http://labitacora.net/comunBlog/limit-post.phps>

Limits the displayed text length on the index page entries and generates a link to a page to read the full content if its bigger than the selected maximum length.

My Page Order

<http://www.geekyweekly.com/mypageorder>

Lets you set the order of your pages with a nice drag and drop interface.

Post Thumb Revisited

<http://www.alakhnor.com/post-thumb>

Thumbnails images from your posts, good for listing popular posts, post list, etc.

tags4page

<http://michelem.org/wordpress-plugin-tags4page/>

Add tags to pages too (native Wordpress 2.3 tagging support), works only with Wordpress 2.3 and above.

WP 2.3 Related Posts

<http://fairyfish.net/2007/09/12/wordpress-23-related-posts-plugin/>

Generate a related posts list via tags of WorPdress version 2.3 and later.

PodPress

<http://mightyseek.com/podpress/>

Provides complete podcasting support including automatic RSS feed generation, iTunes metadata, and a media player that supports MP3, OGG, MP4, MOV, FLV, SWF, YouTube, and several other formats.

WordPress Database Backup

<http://www.ilfilosofo.com/blog/wp-db-backup>

Provides on-demand backup of your WordPress database.

Search Unleashed

<http://urbangiraffe.com/plugins/search-unleashed/>

A search engine that provides full text searching across posts, pages, comments, titles, and URLs. Searches take into account any data added by other plugins, and all search results are contextually highlighted. You can also highlight incoming searches from popular search engines.

This is just the tip of the iceberg. More plug-ins may be found at the WordPress plug-in directory at

<http://wordpress.org/extend/plugins/>

Resources for Further Study

Books

Hayder, Hasin. *WordPress Complete: set up, customize, and market your blog*, Packt Publishing, 2006.

Langer, Maria & Jordan, Miraz. *WordPress 2 (Visual QuickStart Guide)*, Peachpit Press, 2006.

Sabin-Wilson, Lisa. *WordPress for Dummies*, Wiley Publishing, 2008.

There are lots of good books I could recommend on CSS, XHTML, PHP, MySQL but the focus here is on WordPress.

Web Sites

WordPress

<http://wordpress.com> (commercial side hosting blogs)

<http://wordpress.org> (open source side providing code and documentation)

WordPress Codex

<http://codex.wordpress.org>

This will become your most valuable starting point for documentation, most questions have an answer here. If you don't find it here, then try a Google search.

PHP

<http://php.net>

PHP is the popular programming language that WordPress is written in and it is very well documented. If you need to dive into PHP to tweak your template, here's a good starting point for answers.

MySQL

<http://mysql.com>

A List Apart

<http://www.alistapart.com>

Explores the design, development, and meaning of web content, with a focus on web standards and best practices. A good starting point when dealing with style sheet tweaks.

Hosting Providers

So you want to have your own WordPress blog. You will need a web server. Most people opt for shared hosting from one of the many hosting providers in the market. Some, like Dreamhost, provide special offers for WordPress users. Shop around, compare, and talk with people who are currently using hosting services. Most experienced web developers are happy to tell you which hosting providers they like and why. There are obvious and not so obvious differences between the many hosting providers out there. Seven hosting providers with good reputations (in alphabetical order) are:

AN Hosting

<http://www.anhosting.com>

Blue Host

<http://www.bluehost.com>

DreamHost

<http://www.dreamhost.com/wordpress.html>

HostICan

<http://www.hostican.com>

Laughing Squid

<http://laughingsquid.net>

MediaTemple

<http://mediatemple.net>

pair networks

<http://pair.com>

Editorial

I use pair networks for my blog and I've set up several clients with pair. They cost a little more, but in performance comparisons, time and time again I find them to be two to three times faster than a certain popular inexpensive hosting provider, so there is a difference between \$6.95/month hosting and \$19.95/month hosting, not just in terms of bandwidth quotas and storage, but also in terms of performance, which is one thing none of the hosting providers publish, you have to figure that out on your own. It depends on how many sites a hosting provider hosts on each of their shared servers (as all low-cost hosting is). In response to the need for low-cost and quality hosting for less demanding clients, Pair recently added a new offering called **pairLite**, <http://pairlite.com>

Tools of the Trade

The following are the tools I use everyday when working on tweaking WordPress themes, coding PHP, and beating CSS into cross-browser submission. It reflects my bias, but is there anything natural in this world?

Intel Based Macintosh

<http://apple.com>

In addition to elegant design, great content creation applications, and lower technical support costs, an Intel-based Mac allows you to run both Windows and Macintosh (using Parallels or VMWare), so with one machine you can test the site using Windows running concurrently with MacOS. You'll have the best of both worlds in one computer. Regardless how painful it is to deal with Windows, a web designer sometimes has to work with both platforms.

But wait, a Macintosh is really three platforms in one! Lurking below the glossy sheen of OS X is a BSD Unix subsystem. This means you can use the Macintosh for back-end Unix server development too. With the Apache web server, PHP, and MySQL on the Mac you have an industrial strength web server you can use for software development. When you're ready you can then migrate your application to a Unix-based server with little or no changes (there are some subtle differences between the Mac OS BSD and Linux flavors of Unix, but they are pretty minor if you're doing WordPress, PHP and MySQL based development). So there you have it, the Macintosh is the perfect web development platform that does it all, letting you work in three environments simultaneously: Mac OS X, Windows, and Unix. When you add it up, the Mac is actually the most economical platform for developing web applications, contrary to popular opinion that the Macintosh is expensive.

BBEdit

<http://www.barebones.com/products/bbedit/>

An excellent text editing program with a clean interface, language specific syntax coloring, scripting and clipping capabilities, extensive customization, regular expression search, nice integration with CyberDuck, excellent documentation, and many more features.

Cyberduck

<http://cyberduck.ch>

A file transfer program a.k.a. CyberDuckie for uploading and downloading files from your hosting provider, very nice drag and drop interface and integration with BBEdit. Fetch was nice, but the Duck has taken over.

Firefox Browser

<http://www.mozilla.com>

The best standards-based browser provides a good platform to work with, though you always need to test your site with Internet Explorer (one or two versions back) and Safari too.

WebDeveloper

<http://chrispederick.com/work/web-developer/>

An extension for Firefox that adds a menu and a toolbar to the browser with various web developer tools)

Parallels

<http://www.parallels.com/>

Parallels allows you to run multiple operating systems at a time, for example, Windows and Mac OS X side-by-side, any Intel-powered Mac, without rebooting. You can even drag-and-drop files between desktops! And with Parallels Coherence you can run Windows programs like native Mac applications, with Expose and transparent windows support. This is all made possible by leveraging Intel's virtualization technology built into their processors. I used Parallels during the year I was working at MIT when I needed two machines but only wanted to carry one. It was a delight. Right now I'm not running it and using an older Windows XP PC for cross-browser testing, but if I ever want to be mobile again with Windows, I'd use Parallels again.