



PHP WORDPRESS CUSTOMIZATION

Take the Good Parts, Then Bend It To Your Will

By David F. Carr

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SELF INTRODUCTION

- Freelance writer, editor, and web consultant
- Write for Forbes.com on cloud computing, technology for small to midsize businesses
- Technology Editor for WebWeek / Internet World Magazine in 1990s, Baseline Magazine 2001-2008
- Webmaster for small businesses, community organizations, political campaigns
- WordPress replaced a lot of custom hacks
- Will mostly be talking about plugins to modify the behavior of the system



OVERVIEW

- Why start with WordPress?
- A Plugin Is Just PHP, a Theme Is PHP/CSS
 - JavaScript / AJAX, too
- Files, system load, and The Loop
- Hooking into Filters and Actions
- Customizing the admin screens
- Customizing the front end
- Creating a custom post type
- Where to learn more



WHEN A PLUGIN MAKES YOU POPULAR



WHY START WITH WORDPRESS?

- Faster than starting from a clean sheet of paper (blank screen of code)
- Content management for blogs, web pages
- SEO friendly
- Availability of vast array of free themes and plugins, plus commercial options
- Lots of tutorial material
- Strong developer community



A PLUGIN IS JUST PHP

```
<?php

/*
Plugin Name: Demo by carrcommunications.com
Plugin URI: http://www.carrcommunications.com
Description: Demo of plugin programming techniques.
Author: David F. Carr
Version: 1.0
Author URI: http://carrcommunications.com/
*/

include WP_CONTENT_DIR."/plugins/demo/dashboard.php";
include WP_CONTENT_DIR."/plugins/demo/menu.php";
include WP_CONTENT_DIR."/plugins/demo/shortcode.php";
include WP_CONTENT_DIR."/plugins/demo/contact_form.php";
include WP_CONTENT_DIR."/plugins/demo/quote_post.php";
include WP_CONTENT_DIR."/plugins/demo/filter.php";
include WP_CONTENT_DIR."/plugins/demo/options.php";
include WP_CONTENT_DIR."/plugins/demo/load-jquery.php";

add_action('wp_footer', 'your_function');

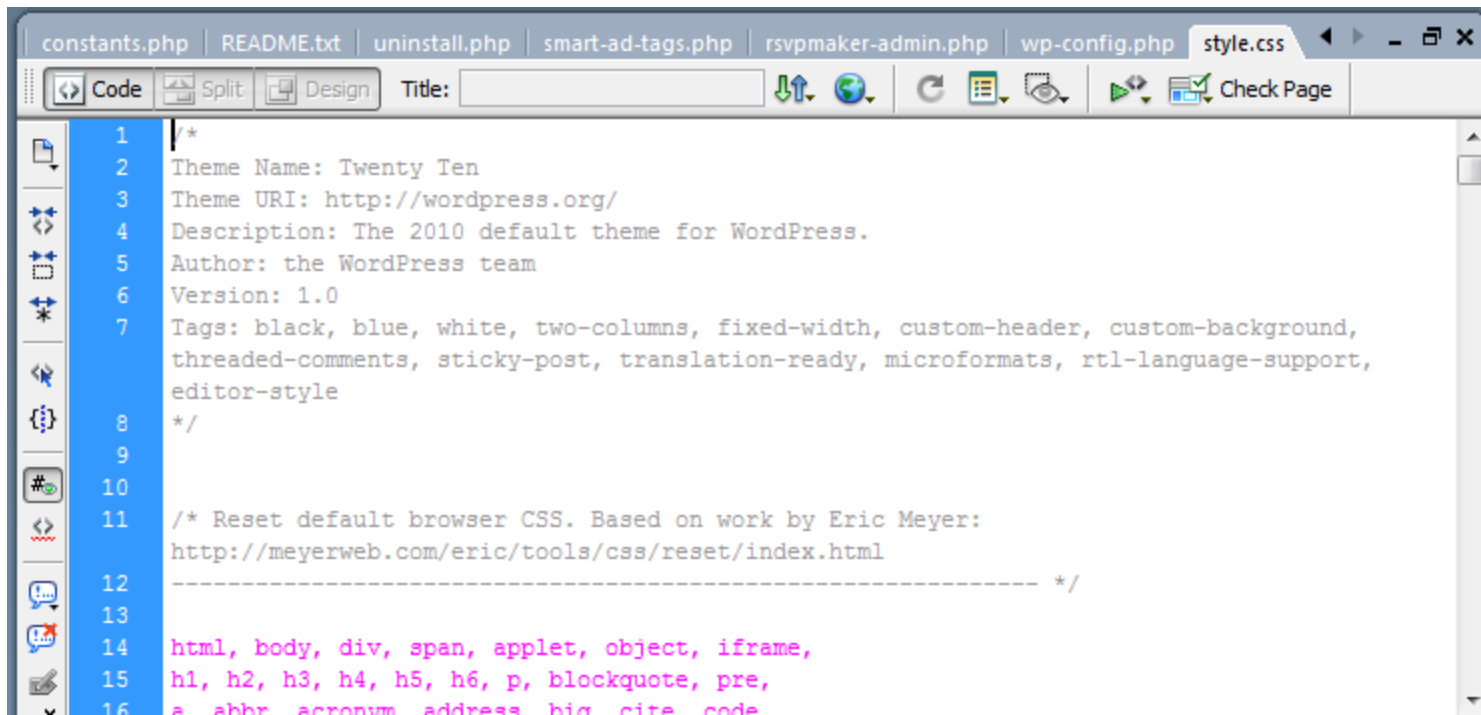
function your_function() {
$content = '<p>This is a wp_footer action call.</p>';

echo $content;
}
?>
```



ANATOMY OF A THEME

- Themes have a similar header in style.css.
- Theme loads index.php (or page.php, single.php, archive.php) to execute “the loop.” Each also loads header.php, footer.php, and usually sidebar.php



```
constants.php | README.txt | uninstall.php | smart-ad-tags.php | rsvpmaker-admin.php | wp-config.php | style.css
Code | Split | Design | Title:
1  /*
2  Theme Name: Twenty Ten
3  Theme URI: http://wordpress.org/
4  Description: The 2010 default theme for WordPress.
5  Author: the WordPress team
6  Version: 1.0
7  Tags: black, blue, white, two-columns, fixed-width, custom-header, custom-background,
8  threaded-comments, sticky-post, translation-ready, microformats, rtl-language-support,
9  editor-style
10 */
11 /* Reset default browser CSS. Based on work by Eric Meyer:
12 http://meyerweb.com/eric/tools/css/reset/index.html
13 ----- */
14 html, body, div, span, applet, object, iframe,
15 h1, h2, h3, h4, h5, h6, p, blockquote, pre,
16 a, abbr, acronym, address, big, cite, code
```



THE LOOP

```
get_header(); ?>

<div id="container">
  <div id="content" role="main">

<?php if ( have_posts() ) while ( have_posts() ) : the_post(); ?>

    <div id="post-<?php the_ID(); ?>" <?php post_class(); ?>>
      <?php if ( is_front_page() ) { ?>
        <h2 class="entry-title"><?php the_title(); ?></h2>
      <?php } else { ?>
        <h1 class="entry-title"><?php the_title(); ?></h1>
      <?php } ?>

      <div class="entry-content">
        <?php the_content(); ?>
        <?php wp_link_pages( array( 'before' => '<div class="page-link">' . __( 'Pages:', 'twentyten' ), 'after' => '
</div>' ) ); ?>
        <?php edit_post_link( __( 'Edit', 'twentyten' ), '<span class="edit-link">', '</span>' ); ?>
      </div><!-- .entry-content -->
    </div><!-- #post-## -->

    <?php comments_template( '', true ); ?>

  <?php endwhile; ?>

  </div><!-- #content -->
</div><!-- #container -->

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



GLOBALS AND LOOKUP FUNCTIONS

- `site_url()`
- `admin_url()`
- `content_url()` or `WP_CONTENT_URL`
- `plugins_url()` or `WP_PLUGIN_URL`
- `includes_url()`
- `home_url()`
- `WP_PLUGIN_DIR`
- `WP_CONTENT_DIR`
- `ABSPATH` – directory including trailing /
- None of the rest include trailing /
 - So `$url = plugins_url() . /demo/report.php`



MORE GLOBALS, CONDITIONAL FUNCTIONS

- Need to use global keyword at top of function to access
 - global \$wpdb – database object
 - global \$post
 - \$post-ID, \$post->post_type
 - global \$current_user
 - \$current_user->first_name
- Conditional functions
 - is_user_logged_in()
 - is_single() or is_single(10)
 - is_page or is_page(10) or is_page('about_us')
 - is_admin() – is this an admin page?



WORDPRESS FILE HIERARCHY

- The wp-content directory has subdirectories for **plugins** and **themes**
- The index.php in web root loads the system, loads **activated** plugins and themes
- Plugins: **functionality**
- Themes: **look and feel**
 - functions.php – theme-specific behavior

Remote Site	Size	Type	Modified
/home/bizghost/public_html/			
cg-bin		Folder	12/2/2010 9:17 PM
wp-admin		Folder	7/2/2010 6:43 PM
wp-content		Folder	7/26/2010 9:10 PM
plugins		Folder	7/26/2010 8:55 PM
akismet		Folder	12/2/2010 8:46 PM
all-in-one-seo-pack		Folder	7/26/2010 8:52 PM
eblast		Folder	10/5/2009 11:56 ...
google-sitemap-generator		Folder	7/26/2010 8:54 PM
sociable		Folder	7/26/2010 8:55 PM
stats		Folder	12/2/2010 8:50 PM
theme-test-drive		Folder	10/3/2009 8:34 PM
hello.php	3KB	PHP Script	12/2/2010 8:38 PM
index.php	1KB	PHP Script	12/2/2010 8:38 PM
shared.php	1KB	PHP Script	10/5/2009 1:41 PM
themes		Folder	7/2/2010 6:44 PM
classic		Folder	10/3/2009 8:59 PM
default		Folder	10/3/2009 8:59 PM
twentyten		Folder	7/2/2010 6:44 PM
index.php	1KB	PHP Script	12/2/2010 8:38 PM
uploads		Folder	7/26/2010 8:56 PM
index.php	1KB	PHP Script	12/2/2010 8:38 PM
wp-includes		Folder	7/2/2010 6:48 PM
.htaccess	1KB	HTACCE...	10/3/2009 8:56 PM
index.php	1KB	PHP Script	12/2/2010 8:37 PM
license.txt	15KB	Text Doc...	12/2/2010 8:37 PM
readme.html	9KB	Chrome ...	12/2/2010 8:37 PM
sitemap.xml	0KB	XML Doc...	10/3/2009 8:56 PM
sitemap.xml.gz	0KB	GZ File	1/6/2010 4:13 PM
wp-activate.php	5KB	PHP Script	12/2/2010 8:37 PM
wp-app.php	40KB	PHP Script	12/2/2010 8:37 PM
wp-atom.php	1KB	PHP Script	12/2/2010 8:37 PM
wp-blog-header.php	1KB	PHP Script	12/2/2010 8:37 PM
wp-comments-post.php	4KB	PHP Script	12/2/2010 8:37 PM
wp-commentsrss2.php	1KB	PHP Script	12/2/2010 8:37 PM
wp-config-sample.php	4KB	PHP Script	12/2/2010 8:37 PM
wp-cron.php	2KB	PHP Script	12/2/2010 8:37 PM
wp-feed.php	1KB	PHP Script	12/2/2010 8:37 PM
wp-links-opml.php	2KB	PHP Script	12/2/2010 8:37 PM
wp-load.php	3KB	PHP Script	12/2/2010 8:37 PM
wp-login.php	76KB	PHP Script	12/2/2010 8:37 PM



HOOKING INTO WORDPRESS

- Core WordPress API built around 2 kinds of hooks:
 - Filter hooks – intercept some bit of content, modify it, return it. Mostly UI but also some back end filters.
 - A filter on ‘the content’ modifies the content of a post.
 - A filter on ‘posts_orderby’ modifies the ORDER BY clause in the SQL for retrieving posts.
 - Action hooks – triggered by an event in WordPress initialization or loading of template files.
 - The ‘init’ action comes after database is loaded but before page display starts. Can be used to act on a `$_POST`, then redirect.
 - The ‘wp_header’ and ‘wp_footer’ actions called from header.php and footer.php output custom content
 - Other actions specific to admin screens, like ‘admin_menu’



KEY ACTIONS PUBLIC PAGE

- `muplugins_loaded`
- `plugins_loaded`
- `setup_theme`
- `load_textdomain`
- `set_current_user`
- **`init`**
- `wp_loaded`
- `parse_request`
- `send_headers`
- `parse_query`
- `pre_get_posts`
- **`posts_selection`**
- `wp`**
- `template_redirect`
- `wp_head`**
- `wp_enqueue_scripts`**
- `wp_print_styles`**
- `wp_print_scripts`**
- `loop_start`
- `the_post`**
- `loop_end`
- `get_sidebar`
- `wp_footer`**
- `wp_print_footer_scripts`**
- `shutdown`



SAMPLE FILTERS

- wp_title (page title)
- the_title (post title)
- the_content
- the_content_feed
- the_excerpt
- the_excerpt_rss
- the_category
- the_tags
- the_time
- the_date
- the_weekday
- comment_text
- comment_save_pre
- the_editor_content
- wp_list_pages
- save_post
- wp_insert_post_data
- login_redirect
- cron_schedules
- mce_css (rich text editor)
- posts_request
- posts_join
- posts_orderby
- posts_where



MODIFYING ADMIN SCREENS

WordPress 3.0.2 is available! [Please update now.](#) Screen Options Help

Dashboard

Posts

- Posts
- Add New
- Categories
- Post Tags

Media

Links

Pages

Comments **1**

Appearance

Plugins **2**

Users

Tools

Settings

Dashboard

Right Now

Content	Discussion
4 Posts	3 Comments
3 Pages	2 Approved
1 Category	1 Pending
0 Tags	0 Spam

Theme **Amazing Grace** with **2 Widgets** Change Theme
You are using **WordPress 3.0.1**. Update to 3.0.2

Akismet has protected your site from 4 spam comments already, but there's nothing in your [spam queue](#) at the moment.

Recent Comments





Incoming Links

Plugins

Most Popular
[WordPress Importer](#) (Install)
Import posts, pages, comments, custom fields, categories, and tags from a WordPress export file.

QuickPress

Title

Upload/Insert    

Content

Tags

Save Draft Reset Publish

Recent Drafts

There are no drafts at the moment

WordPress Development Blog

[WordPress 3.0.2](#) November 30, 2010
WordPress 3.0.2 is available and is a mandatory security update for all previous WordPress versions. Haiku has become traditional: Fixed on day zero One-click update makes you safe This used to be hard This maintenance release fixes a moderate security issue that could allow a malicious Author-level user to gain further access to the site, [...]

[WordPress 3.1 Beta 1](#) November 25, 2010

CUSTOM DASHBOARD

WordPress logo Pack 179 Cub Scouts New Post Howdy, David F. Carr | Log Out

WordPress 3.0.2 is available! [Please update now.](#) Screen Options Help

Dashboard

Dashboard

Pack 179 Dashboard

You are now logged in and can view content marked private for pack members and comment on posts.

Please update your contact info to make sure we have your correct phone numbers and have your information associated with the right dens.

[Return to web site](#)

Post News and Events

[Post an Event to Calendar](#)
[Post News or Photos](#)
[Instructions for posting events, news, and photos](#)

Pack Contacts List

[View/Edit Contacts](#)

Editor / Administrator Options





[Edit Pages](#) (Home Page, Leaders Etc.)
[Create Email Broadcast](#)

Events (click to edit)

[Popcorn Show~N~ Sell, December 4th](#) December 4th
[Webelos Show N Do Weekend](#) December 4th December 5th
[SCOUT DAY: Miami Dolphins vs. Cleveland Browns](#) December 5th
[Wolf Den](#) December 6th

QuickPress

Title

Upload/Insert    

Content

Tags

Save Draft Reset Publish



CUSTOM ADMIN MENUS

```
<?php

add_action('admin_menu', 'my_demo_menu');

function my_demo_menu() {

$page_title = "My Demo Menu";
$menu_title = "My Demo Menu";
$capability = "edit_posts";
$menu_slug = "demo_menu";
$function = "demo_menu_function";
$icon_url = "";
$position = "";

add_menu_page( $page_title, $menu_title, $capability, $menu_slug, $function, $icon_url,
$position );

$parent_slug = "edit.php";
$page_title = "Demo Submenu";
$menu_title = "Demo Submenu";
$capability = "edit_posts";
$menu_slug = "demo_post_submenu";
$function = "demo_post_submenu_function";

add_submenu_page( $parent_slug, $page_title, $menu_title, $capability, $menu_slug,
$function);

}
```



FUNCTION TO OUTPUT MENU PAGE



Web Liberation Now!

My Demo Menu

Dashboard

- Dashboard
- Updates 3
- Akismet Stats

Posts

- Posts
- Add New
- Categories
- Post Tags
- Demo Submenu

Media

- Library
- Add New

Current user's posts

Hello world!: publish
Home: publish
Blog: publish
Home: inherit
This is a test event: publish
Auto Draft: auto-draft
This is a test event: inherit
Home: inherit
Home: inherit
Auto Draft: auto-draft
Auto Draft: auto-draft
Auto Draft: auto-draft
Demotag Demo: publish
Demotag Demo: inherit
Demotag Demo: inherit
Demotag Demo: inherit
Demotag Demo: inherit

```
function demo_menu_function () {  
    global $current_user;  
    global $wpdb;  
  
    echo "<h2>Current user's posts</h2>\n";  
  
    $results = $wpdb->get_results("SELECT * FROM $wpdb->posts WHERE  
    post_author=".$current_user->ID, ARRAY_A);  
  
    if($results)  
        foreach($results as $row)  
        {  
            echo $row["post_title"].": ".$row["post_status"]."<br />";  
        }  
    }  
}
```



ADMIN DATA ENTRY PAGE

```
function demo_post_submenu_function () {  
if($_POST)  
{  
    print_r($_POST);  
    if(wp_verify_nonce($_POST["qnonce"], "qday") )  
        echo "<p>Verified</p>";  
    else  
        echo "<p>NOT Verified</p>";  
}  
  
if($id = $_GET["success"])  
    echo "<p>Inserted quote as Post # $id </p>";  
?  
<div class="wrap">  
<div id="icon-edit" class="icon32"><br /></div>  
<h2>Quote of the Day</h2>  
<form name="form1" method="post" action="<?=admin_url()>page=demo_post_submenu">  
<p>Quote<br />  
<textarea name="quote" id="quote" cols="45" rows="5"></t  
</p>  
<p>Author:  
<input type="text" name="author" id="author">  
</p>  
<p>Source:  
<input type="text" name="source" id="source">  
</p>  
<p>  
<input name="live" type="radio" id="live" value="0" checked="checked" />  
Test  
<input type="radio" name="live" id="live2" value="1" />  
Live</p>  
<p>  
<?php  
wp_nonce_field("qday","qnonce");  
?>  
</p>  
<input type="submit" name="button" id="button" value="Submit" />  
</form>  
</div>  
<?php  
}
```

The screenshot displays a WordPress admin dashboard with a custom menu item 'My Demo Menu' containing 'Dashboard', 'Updates' (with a notification badge), and 'Akismet Stats'. The 'Posts' menu is also visible. The main content area features a 'Quote of the Day' section with a text area containing 'To be or not to be.' Below this are input fields for 'Author: William Shakespear' and 'Source: Hamlet', radio buttons for 'Test' (selected) and 'Live', and a 'Submit' button.



NONCE SECURITY

- **Number used once**
- Make sure requests coming from authenticated user with unique code
- `$nonce= wp_create_nonce ('my-nonce');`
- `wp_nonce_field("qday", "qnonce")` is the same as:
`<input type="text" name="qnonce" value="<?=$nonce?>">`
- Test:
 - Code: `if(wp_verify_nonce($_POST["qnonce"], "qday"))`



CATCHING \$_POST AT INIT / ADMIN-INIT

```
<?php
function quote_post() {
if($_POST["qnonce"] && $_POST["live"])
    {
        $url = admin_url(). 'edit.php?page=demo_post_submenu';
        if(wp_verify_nonce($_POST["qnonce"], "qday" ) )
            {
                $posting = stripslashes_deep($_POST);

                $quote = sprintf('<p style="font-size: 20px;">%s</p><p><em>
<strong>%s</strong><br />%s</em>
</p>', $posting["quote"], $posting["author"], $posting["source"]);

                global $current_user;
                $my_post = array(
                    'post_title' => 'Quote of the Day for '.date('l jS \of F Y'),
                    'post_content' => $quote,
                    'post_status' => 'publish',
                    'post_author' => $current_user->ID
                );

                // Insert the post into the database
                $id = wp_insert_post( $my_post );
                header("Location: ".$url."&success=".$id);
                exit();
            }
        else
            {
                header("Location: ".$url."&error=security");
                exit();
            }
    }
}

add_action("admin_init", "quote_post");
?>
```



PROCESS, THEN REDIRECT

- Separate UI from server processing
- Helps avoid double-submit issues
- Redirect with different parameters for success / failure
- Exit after redirect
- Similar pattern can be used for AJAX (echo json, then exit)



WRAPPER FUNCTIONS FOR WP DATABASE

- Create a post with code using `wp_insert_post`
- Retrieve and change settings using `get_option` and `update_option`

```
global $current_user;
$my_post = array(
    'post_title' => 'Quote of the Day for ' . date('l jS \of F Y'),
    'post_content' => $quote,
    'post_status' => 'publish',
    'post_author' => $current_user->ID
);

// Insert the post into the database
$id = wp_insert_post( $my_post );
```

```
function demo_options()
{
    $options = get_option('demo');

    if ( isset($_POST['notification']) ) {
        check_admin_referer('demo_action', 'demo_nonce_field');

        $options['notification']=$_POST['notification'];
        $options['thank_you_message']=stripslashes($_POST['thank_you_message']);

        update_option('demo', $options);
        echo '<div class="updated fade"><p>Plugin settings saved.</p></div>';
    }
}
```



SETTINGS API

```
function add_demo_options_menu() {
add_options_page( "Demo Options", "Demo Options", "manage_options", "demo_options", "demo_options");
}

add_action('admin_menu', 'add_demo_options_menu');

//call register settings function
add_action( 'admin_init', 'register_demo_settings' );

function register_demo_settings() {
    //register our settings
    register_setting( 'demo-settings-group', 'demo_options' );
}

function demo_options()
{
    $options = get_option('demo_options');
    ?>
    <div class="wrap">
    <div id="icon-options-general" class="icon32"><br /></div>
    <h2>RFQ Options</h2>
    <form name="form1" method="post" action="options.php">
    <?php settings_fields( 'demo-settings-group' ); ?>
    <p>Notification Email:<br />
        <input type="text" name="demo_options[notification]" id="notification" value="<?=$options["notification"]?>">
    </p>
    <p>Thank you message:<br />
        <textarea name="demo_options[thank_you_message]" id="thank_you_message" ><?=$options["thank_you_message"]?></textarea>
    </p>
    <input type="submit" name="button" id="button" value="Submit" />
    </form>
    </div>
    <?php
}
}
```



THE WORDPRESS DATABASE

localhost ▶ carrhost_wptutorial

Structure SQL Search Query Export Import Operations Privileges

	Table ▲	Action						Records ¹	Type	Collation
<input type="checkbox"/>	wpcc_commentmeta							0	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_comments							1	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_links							7	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_options							143	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_postmeta							1	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_posts							3	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_terms							2	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_term_relationships							8	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_term_taxonomy							2	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_usermeta							14	MyISAM	utf8_general_ci
<input type="checkbox"/>	wpcc_users							1	MyISAM	utf8_general_ci
	11 table(s)	Sum						182	MyISAM	latin1_swedish_ci

⬅ Check All / Uncheck All / Check tables having overhead With selected: ▼



DATABASE PROGRAMMING WITH WORDPRESS

- Global \$wpdb data access object
- Get results with \$wpdb->get_results
- Get row with \$wpdb->get_row
- Format/quote SQL with \$wpdb->prepare

```
<?php

function volunteer_report() {

global $wpdb;

if($search = $_GET["search"])
    $sql = $wpdb->prepare(" SELECT * FROM volunteers WHERE last_name=%s ", $search);
else
    $sql = "SELECT * FROM volunteers ORDER BY last_name";

$results = $wpdb->get_results($sql, ARRAY_A);
if($results)
foreach($results as $row)
    echo $row["first_name"].' '.$row["last_name"]."<br />";

}

?>
```



INSERT / UPDATE

- Remember security
 - Check nonce
 - Filter values
 - Compensate for “magic quotes” with
`$postdata = array_map('stripslashes_deep', $_POST);`
 - Use `$wpdb->prepare` to quote properly
- Execute insert / update with `$wpdb->query($sql)`



DB PROGRAMMING PITFALLS

- Forgetting to declare `$wpdb` as global
- Use `ARRAY_A` parameter to get associative array from `$wpdb->get_results` or `$wpdb->get_row` if you want results to be accessible as `$row["field_name"]`
- Default is object format `$row->field_name`
- Use `$wpdb->show_errors()` to debug SQL
- Return value from `$wpdb->query` is false on error, or number of rows affected (could be 0)
 - Test for error: `if($return_value == false) echo 'error';`



ALLOW FOR ALTERNATE TABLE NAMES

- Default table names like wp_posts can have alternate prefixes, so use \$wpdb->posts instead
- Custom table \$wpdb->prefix . "rsvpmaker"

```
<?php

function content_revisions($content) {

if($_GET["show_revisions"])
{
    global $wpdb;
    global $post;
    $sql = "SELECT post_status, post_name, post_date FROM $wpdb->posts WHERE
post_parent = $post->ID";
    $results = $wpdb->get_results($sql,ARRAY_A);
    if($results)
    {
        $content .= "<h3>Revisions of this Post</h3>";
        foreach($results as $row)
        {
            $content .= $row["post_status"]." ".$row["post_name"]."
".$row["post_date"]."<br />";
        }
    }
}

return $content;
}

add_filter('the_content','content_revisions');

?>
```



SHORTCODES

```
<?php
function demotag_func($atts = array(), $content = '') {
    if(!$atts["title"])
        $atts["title"] = "Default Title";

    $output = "<h3>".$atts["title"]."</h3>\n".$content;
    if($atts["server"] == "yes")
        $output .= "<pre>".var_export($_SERVER,true)."</pre>";

    if($atts["date"])
        $output .= "<p>".date($atts["date"])."</p>";


    return $output;
}
add_shortcode('demotag', 'demotag_func');
?>
```

- Placeholder codes site editors can include in pages and posts
- Standard:
[embed] <http://www.youtube.com/watch?v=nTDNLUzjkpg>[/embed]
- Custom:
[demotag title="Date" date="r"] Date in RFC822 Format [/demotag]



CONTACT FORM EXAMPLE

Web Liberation Now!
WordPress Will Set You Free

 News

Demo Form

Request a Quote

Name:

Email:

Project:

[Show Instructions](#)

- Use a shortcode to display form
- Process `$_POST` on 'init' then redirect
- Use JavaScript jQuery library to enhance



ENQUEUE BUNDLED / CUSTOM JAVASCRIPT

```
<?php
function load_my_js() {
    if(is_admin() )
        return; // never mind if this is an admin page, should only load on public pages

    global $post;

    if(strpos($post->post_content,'[demoform]') == false)
        return;

    wp_register_script( 'js_test', plugins_url() . '/demo/test.js', array('jquery')
    );
    //don't need to enqueue jquery if included in dependencies array
    //wp_enqueue_script('jquery');
    wp_enqueue_script('js_test');
}

// official docs say to do wp_enqueue_script on 'init' but 'wp' action lets us test for
post identifier
add_action('wp','load_my_js');

?>
```

- Load scripts in right order with `wp_enqueue_script`
- Register custom scripts, dependencies with `wp_register_script`



JQUERY AND FRIENDS

Default scripts included with WordPress

Script Name	Handle
Scriptaculous Root	scriptaculous-root
Scriptaculous Builder	scriptaculous-builder
Scriptaculous Drag & Drop	scriptaculous-dragdrop
Scriptaculous Effects	scriptaculous-effects
Scriptaculous Slider	scriptaculous-slider
Scriptaculous Sound	scriptaculous-sound
Scriptaculous Controls	scriptaculous-controls
Scriptaculous	scriptaculous
Image Cropper	cropper
SWFObject	swfobject
SWFUpload	swfupload
SWFUpload Degarade	swfupload-degrade
SWFUpload Queue	swfupload-queue
SWFUpload Handlers	swfupload-handlers
jQuery	jquery
jQuery Form	jquery-form
jQuery Color	jquery-color
jQuery UI Core	jquery-ui-core
jQuery UI Tabs	jquery-ui-tabs
jQuery UI Sortable	jquery-ui-sortable
jQuery UI Draggable	jquery-ui-draggable
jQuery UI Droppable	jquery-ui-droppable
jQuery UI Selectable	jquery-ui-selectable
jQuery UI Resizable	jquery-ui-resizable
jQuery UI Dialog	jquery-ui-dialog
jQuery Interface	interface
jQuery Schedule	schedule
jQuery Suggest	suggest


```
jQuery(document).ready(function($){  
  
    //hidden to start with  
    $(".stuff").hide('fast');  
  
    $("#showhide").toggle(function(){  
        $(".stuff").show('fast');  
    },function(){  
        $(".stuff").hide('slow');  
    });  
});
```

“No Conflict” mode so start with
`jQuery(document).ready(function($)`

Warning: Textbook jQuery examples
usually start with this shortcut:
`$(document).ready(function()`



LIVE EXAMPLE - RSVPMAKER

 **WORDPRESS.ORG**
Home Showcase **Extend** About Docs Blog Forums Hosting **Download**

Plugin Directory

Username Password (forgot?) or Register

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RSVPmaker

Event scheduling and RSVP tracking.

[Description](#) [Installation](#) [Faq](#) [Screenshots](#) [Other Notes](#) [Changelog](#) [Stats](#)

RSVPmaker is an event scheduling and RSVP tracking plugin for WordPress, using the custom post types feature introduced in WP3.0 to track events as an alternate post type with associated dates.

Site editors and administrators have the option to request RSVPs for any given event and specify an email address for notifications when someone responds. RSVP Reports can also be run from the administrator's dashboard.

If a fee is to be charged for the event, RSVPMaker can collect payments online using PayPal (requires manual setup of a PayPal account and creation of a configuration file with API credentials).

[RSVPmaker.com](#)

Author: davidcarr

Tags: [calendar](#), [custom post type](#), [event](#), [paypal](#), [RSVP](#)

Requires WordPress Version:
3.0 or higher

Compatible up to: 3.01


Last Updated: 2010-12-2


Average Rating

★★★★★
(1 ratings)


FYI

[Other Versions »](#)

[Forums Posts](#) 

[Development Log](#) 

Compatibility



CREATING A CUSTOM POST TYPE

- Add a content type that can use common editing controls but be organized separately

```
add_action( 'init', 'rsvpmaker_create_post_type' );

function rsvpmaker_create_post_type() {

    register_post_type( 'rsvpmaker',
        array(
            'labels' => array(
                'name' => __( 'RSVP Events' ),
                'add_new_item' => __( 'Add New Event' ),
                'edit_item' => __( 'Edit Event' ),
                'new_item' => __( 'Events' ),
                'singular_name' => __( 'Event' )
            ),
            'menu_icon' => WP_PLUGIN_URL.'/rsvpmaker/calendar.png',
            'public' => true,
            'publicly_queryable' => true,
            'show_ui' => true,
            'query_var' => true,
            'rewrite' => array( 'slug' => 'rsvpmaker', 'with_front' => FALSE ),
            'capability_type' => 'post',
            'hierarchical' => false,
            'menu_position' => 5,
            'supports' => array( 'title', 'editor', 'author', 'excerpt', 'custom-fields' ),
            'taxonomies' => array( 'rsvpmaker-type', 'post_tag' )
        )
    );
};
```



EDITING SCREEN WITH CUSTOM OPTIONS

- Standard formatting / uploading controls
- Custom panels: `add_meta_box`
- Process `$_POST` on `save_post` action
- Save custom data: `update_post_meta`

Add New Event

Enter title here

Upload/Insert

Visual HTML

B *I* ABC

Path:

Word count: 0

Event Dates, RSVP Options

Enter one or more dates. For an event starting at 12:30 p.m., you would select 12 p.m. and 30 minutes. Specifying the duration is optional.

Date: Month: Day: Year:

Time: Hour: Minutes: - Duration:

[Add More Dates](#)

Loading default values for RSVPs - check the checkbox to collect RSVPs online

Collect RSVPs



CUSTOM DISPLAY FOR CUSTOM POST TYPE

Cub Scout Popcorn Sale

Sunday December 5th, 2010 4:00 PM to 8:00 PM

Here, we're trying to sign up volunteers to man a popcorn sale booth in front of the local supermarket.

We would like to have two volunteers for each timeslot. The RSVP form shows how many people have already signed up for each time and provides check marks for volunteers to add their names to the list.



RSVP Now!

- Filter 'the_content', check post type, look up and format dates for events, display form if is_single() otherwise show RSVP Now! button



SUMMARY

- WordPress provides a foundation / framework
- Create / customize themes to change look and feel
- Download or create your own plugins to alter WordPress system behavior
- Filters hooks alter content, return results
- Action hooks triggered by initialization stages, function calls in theme templates, administration screen access
- Create your own administration reports / data entry screens.
- Use wrapper functions and \$wpdb global to update DB
- Use shortcodes, filters, output functions for JavaScript and CSS to enhance public website



FOLLOW UP

- Email: david@carrcommunications.com
- Recommended book:
WordPress Plugin Development – Beginner's Guide by Vladimir Prelovac
- Presentation/Code/Links:
www.carrcommunications.com/wordcamp/
www.carrcommunications.com/wordpress-plugins/
- Developer documentation codex.wordpress.org
- Forums wordpress.org/support/
- Mailing lists (wp-hackers etc.) lists.automattic.com

