

# Custom Post Types

@DustinHartzler



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Engineer<sup>WEE</sup>

# Today's Outline

- ✓ What are Custom Post Types, Custom Taxonomies, Post Meta Boxes and Custom Fields?
- ✓ Examples of Uses
- ✓ Explore the Code
- ✓ Special Offer



# Custom Post Types (CPTs)

- ✓ WordPress can hold and display many different types of content.
- ✓ Internally, all of the content for your site is stored in the exact same spot: wp\_posts table
- ✓ WordPress differentiates the different content with a column called post\_type

# Custom Post Types (CPTs)

post_modified_gmt	post_content_filtered	post_parent	guid	menu_order	post_type	post_mime_type
2010-12-21 02:58:08		15	http://localhost:8888/YWE/html/15-revision-11/	0	revision	
2012-07-06 13:34:32		0	http://localhost:8888/YWE/html/?page_id=2	0	page	
2012-11-22 14:19:58		0	http://localhost:8888/YWE/html/?p=55	0	post	
2010-12-11 03:13:01		41	http://localhost:8888/YWE/html/41-revision-6/	0	revision	
2010-12-06 22:18:33		0	http://localhost:8888/YWE/html/wp-content/uploads/...	0	attachment	image/png



# Custom Post Types (CPTs)

- ✓ There are FIVE major post types:
  - ✓ Post
  - ✓ Page
  - ✓ Attachment
  - ✓ Revisions
  - ✓ Nav Menus



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# Posts

- ✓ A post in WordPress is the main type used by the blog
- ✓ Posts are displayed in reverse sequential order by time
- ✓ Posts are also used for creating feeds

# Page

- ✓ A page in WordPress is much like a post, but it lives outside the normal time based structure of posts
- ✓ They have their own URLs directly off the main site URL
- ✓ Pages can also use special Page Templates to display them
- ✓ Pages can be organized by hierarchical structure

# Attachment

- ✓ An Attachment is a special post that holds information about files uploaded through the Media Library
- ✓ It holds all the description, name and other information about uploaded files
- ✓ For images, the metadata is linked that holds information about the size of the images and thumbnails generated from the images.



# Revisions

- ✓ A Revision is used to hold draft posts as well as any past revisions of existing posts or pages
- ✓ These are basically identical to the main post / page



## Revisions

[31 December, 2012 @ 12:23](#) by Dustin Hartzler

[31 December, 2012 @ 12:22](#) by Dustin Hartzler

[31 December, 2012 @ 12:22](#) by Dustin Hartzler

[31 December, 2012 @ 12:21](#) by Dustin Hartzler

[27 December, 2012 @ 21:32](#) by Dustin Hartzler

# Nav Menus

- ✓ The `nav_menu_item` type holds information about a single item in the Navigation Menu system
- ✓ The Nav Menus are the first examples of entries in the post table for something other than content

# Custom Post Types (CPTs)

- ✓ A custom post type is a post type that you define
- ✓ Adding the custom type is simple by using the `register_post_type` function

# Why Should I use CPTs?

- ✓ The custom post type will show up in the back end as a separate menu item with its own post list and “add new” page
- ✓ Navigating to <http://mysite.com/customposttype/> will take you to the archive page for the post type. This is akin to visiting the front page for latest posts from the “post” post type.
- ✓ Categories and tags can be made available to the custom post type, or you can create custom taxonomies.

# Why Should I use CPTs?

- ✓ Different types of content have different data requirements:

## Posts:

- ✓ Author
- ✓ Category
- ✓ Date

## Books:

- ✓ Author
- ✓ Page Count
- ✓ Publisher

# Other Uses of CPTs

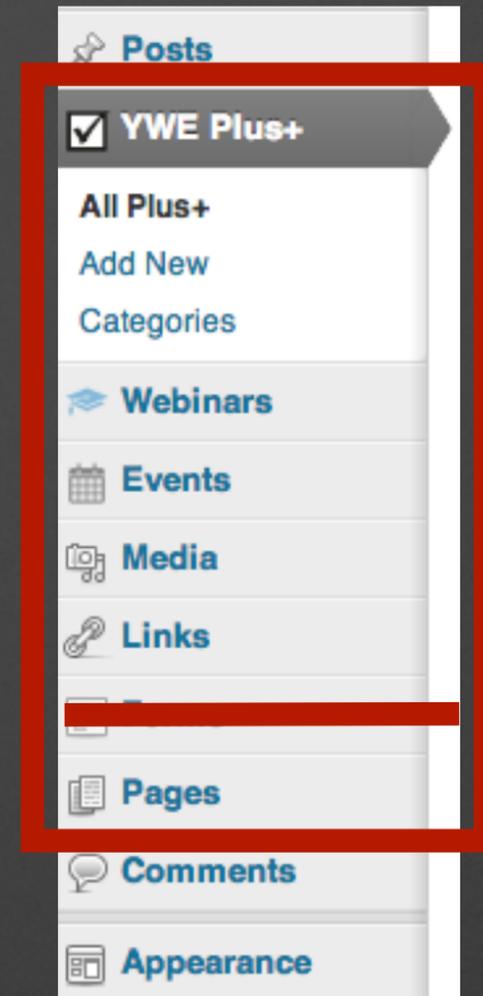
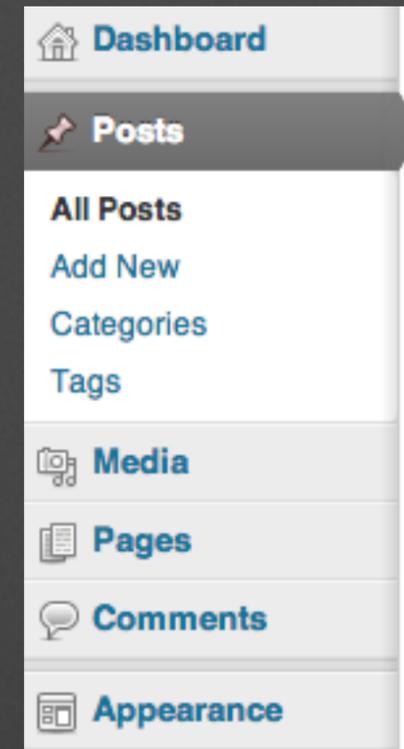
- ✓ Testimonials
- ✓ FAQ Pages
- ✓ Sliders
- ✓ Events Calendar
- ✓ Portfolio
- ✓ Tutorials
- ✓ Product Catalog
- ✓ Meet the Team
- ✓ Videos
- ✓ and many more!

# When to use CPTs

- ✓ Not a blog post or static page
- ✓ Repeatable, when you need content pieces with the same format.
- ✓ Complicated, i.e. when there's a need for meta boxes and other controls that you don't want displayed on the Page or Post editor.
- ✓ HTML-heavy. To avoid having clients wade through HTML in the WordPress editor, I break up content into individual mini-posts.

# Look at the Dashboard

- ✓ These items go in the wp\_posts table in your WordPress database

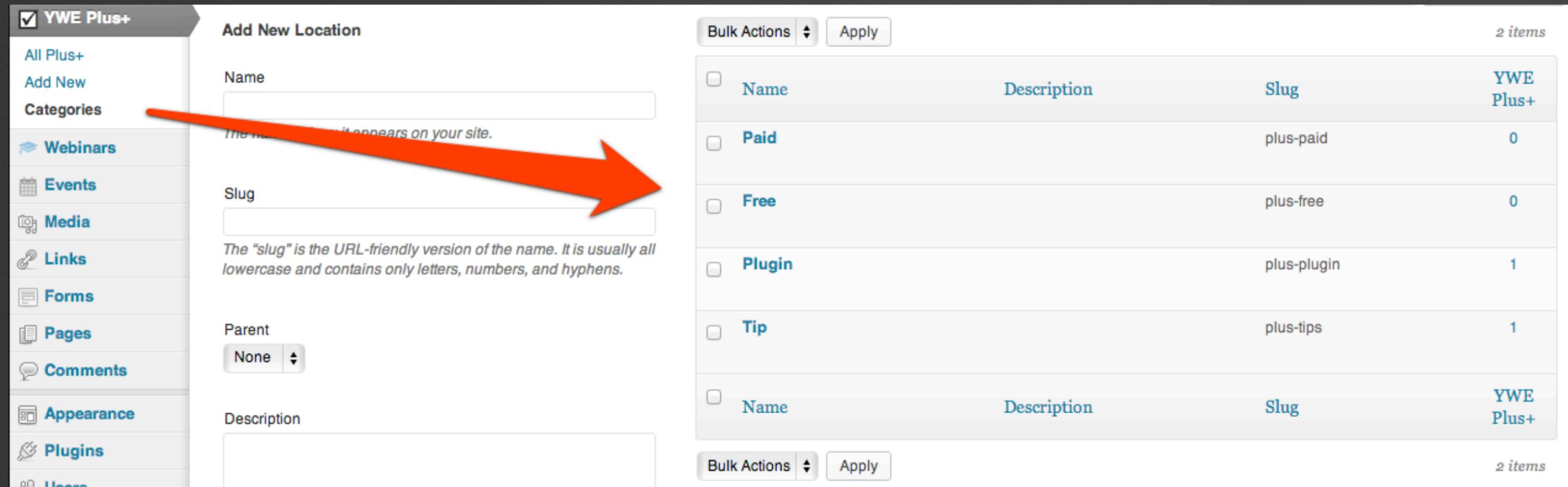




# Custom Taxonomies

- ✓ Regular blog posts use categories and tags to create an organization structure
- ✓ But these categories won't work well for your custom post type of products.

# Custom Taxonomies



The screenshot displays the WordPress admin interface for the 'YWE Plus+' plugin. On the left, a sidebar menu includes 'All Plus+', 'Add New', 'Categories', 'Webinars', 'Events', 'Media', 'Links', 'Forms', 'Pages', 'Comments', 'Appearance', 'Plugins', and 'Users'. The main content area is titled 'Add New Location' and contains a form with fields for 'Name', 'Slug', 'Parent', and 'Description'. A red arrow points from the 'Categories' menu item to the 'Slug' field. Below the 'Add New Location' form, there are two tables showing taxonomy items. The top table has 2 items and the bottom table has 2 items. Both tables have columns for 'Name', 'Description', 'Slug', and 'YWE Plus+'.

<input type="checkbox"/>	Name	Description	Slug	YWE Plus+
<input type="checkbox"/>	<b>Paid</b>		plus-paid	0
<input type="checkbox"/>	<b>Free</b>		plus-free	0
<input type="checkbox"/>	<b>Plugin</b>		plus-plugin	1
<input type="checkbox"/>	<b>Tip</b>		plus-tips	1

<input type="checkbox"/>	Name	Description	Slug	YWE Plus+
--------------------------	------	-------------	------	-----------

# Post Meta Boxes

- ✓ Post Meta Boxes are the draggable boxes in the WordPress edit screen
- ✓ Meta boxes are much easier for clients to put information in the proper place

# Post Meta Boxes

```
</strong>  
His website is taking up a lot of room on his server. He wonders how he can make it smaller.  
- Are you storing full size images on your site?  
- Are you backing up your site to your host?  
- My site is 309MB and that includes all plugins and theme files as well.  
  
<strong>Jacob (<a href="http://inticemedia.com" target="_blank">inticemedia.com</a></strong>  
Jacob provides a great resource to find people to do work for us. It's a site called <a  
href="http://odesk.com" target="_blank">http://odesk.com</a>. You can find people who work locally or  
overseas. One benefit of hiring someone overseas is that they are working while you sleep.  
  
Word count: 408 Last edited by Dustin Hartzler on December 31, 2012 at 12:23 pm
```

### Your Website Engineer Post Images

Using the "Add an Image" option, upload your media files and paste the "Link URL" in these image fields.

**Main Image or Video** 

*The default image or video associated with your post (full size image). From your portfolio pages this is the image or video shown in the lightbox window.*

**Medium Image**

*This is the medium size image used for portfolio item previews. If you have added a "Main Image" this field is optional. Images only. Recommended size: 261px \* 174px.*

### Tags



Separate tags with commas

[Choose from the most used tags](#)

---

**Benchmark Email Lite** 

---

### Featured Image



[Set featured image](#)

# Post Meta Boxes - Example



## MEET MORE OF OUR PEOPLE

RHEA CAMPBELL  
MICHAEL LICKERMAN  
CHRIS KOERNER  
JAMES HARRINGTON  
HOPE PRINKEY

## RHEA CAMPBELL

[rhea.campbell@bellaterrapartners.com](mailto:rhea.campbell@bellaterrapartners.com)

Rhea Campbell is the Founding Partner and CEO of Bella Terra Partners. In addition to her fierce dedication to the firm's client experience, she leads portfolio strategy development and executes transactions.

Rhea views her strategic approach to real estate transactions as a means by which clients can re-energize their operations, change the dynamics of their business, refresh and/or re-launch their brand resulting in greater profitability, productivity and marketplace presence. Rhea specializes in creating business solutions that integrate an organization's real estate portfolio into its strategy and vision. Clients rely on Rhea to lead and direct the overall approach to solving their business problems through real estate of which tasks include: strategic consulting, project management, lease administration and corporate real estate finance.

Throughout her career, Rhea has represented a variety of clients from diverse industries including brand marketing & consulting, finance, insurance, not-for-profit, law, travel and meeting planning services. Prior to founding Bella Terra Partners, she spent 5 years as a tenant representation professional at CB Richard Ellis and over 13 years in luxury hotel sales and management with Four Seasons Hotels & Resorts, Fairmont Hotels & Resorts and Tourism Vancouver. Rhea holds a B.S. from Southern New Hampshire University.

[\(Back to Our People\)](#)

BALANCED REAL ESTATE SOLUTIONS



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# Post Meta Boxes - Example

## ✓ To Add an Email Address:

- ✓ Type out the email address
- ✓ Highlight
- ✓ Select Link
- ✓ In link box type <mailto:email@address.com>
- ✓ Then add `<span>INSERT_EMAIL_HERE</span>`

OR

<b>Enter Email Address Here</b>
<a href="mailto:rhea.campbell@bellaterrapartners.com">rhea.campbell@bellaterrapartners.com</a>

# Post Meta Boxes - Example

- ✓ The second is easier for the client
- ✓ The second guarantees that the formatting is the same every time

# Custom Fields

- ✓ Custom Fields are a lot like post meta boxes, but they are built in by WordPress
- ✓ Much easier to set up than post meta boxes, but more difficult for a client to use



# Custom Fields

- ✓ This meta data is handled with keys/value pairs.
- ✓ Key = meta-data element (think of it as a variable)
- ✓ Value = information that will appear in the meta-data for each post

# Custom Fields Example

Add New Custom Field:

Name	Value
<input type="text" value="email"/>	<input type="text" value="Dustin@YourWebsiteEngineer.com"/>

[Cancel](#)

Custom fields can be used to add extra metadata to a post that you can [use in your theme](#).

```
<?php echo get_post_meta($post_id, $key, $single); ?>
```

```
<?php echo get_post_meta($post->ID, 'email', true); ?>
```

# Some Cool Uses of Custom Fields

- ✓ Set an Expiration Time for Posts
- ✓ Embed Custom CSS Styles
- ✓ Re-Define the <title> tag
- ✓ Disable Search Engine Indexing for Individual Posts

All (132) | Published (132)

<input type="checkbox"/>	Title	Categories		Date	Featured
<input type="checkbox"/>	<a href="#">109 – Important Things to Focus on in 2013 - Standard</a>	Podcast		2013/01/02 Published	
<input type="checkbox"/>	<a href="#">108 – The Dangers of the functions.php File</a>	Podcast		2012/12/26 Published	
<input type="checkbox"/>	<a href="#">New Features WordPress 3.5</a>	Video		2012/12/20 Published	
<input type="checkbox"/>	<a href="#">107 – Five Reasons Your Site Loads Slowly</a>	Podcast		2012/12/19 Published	
<input type="checkbox"/>	<a href="#">106 – How to Teach Someone WordPress</a>	Podcast		2012/12/12 Published	

# Let's Look At Some Code

✓ ARE YOU READY?



# Custom Post Type

```
function my_custom_post_product() {  
    $args = array();  
    register_post_type( 'product', $args );  
}  
add_action( 'init', 'my_custom_post_product' );
```

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}  
add_action( 'init', 'my_custom_post_product' );
```



# Custom Post Type

```
function my_custom_post_product() {
    $labels = array(
        'name'                => _x( 'Products', 'post type general name' ),
        'singular_name'       => _x( 'Product', 'post type singular name' ),
        'add_new'             => _x( 'Add New', 'book' ),
        'add_new_item'        => __( 'Add New Product' ),
        'edit_item'           => __( 'Edit Product' ),
        'new_item'            => __( 'New Product' ),
        'all_items'           => __( 'All Products' ),
        'view_item'           => __( 'View Product' ),
        'search_items'        => __( 'Search Products' ),
        'not_found'           => __( 'No products found' ),
        'not_found_in_trash'  => __( 'No products found in the Trash' ),
        'parent_item_colon'   => '',
        'menu_name'           => 'Products'
    );
    $args = array(
        'labels'                => $labels,
        'description'           => 'Holds our products and product specific data',
        'public'                => true,
        'menu_position'         => 5,
        'supports'              => array( 'title', 'editor', 'thumbnail', 'excerpt', 'comments' ),
        'has_archive'           => true,
    );
    register_post_type( 'product', $args );
}
add_action( 'init', 'my_custom_post_product' );
```



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# Custom Taxonomies

```
function my_taxonomies_product() {  
    $args = array();  
    register_taxonomy( 'product_category', 'product' $args );  
}  
  
add_action( 'init', 'my_taxonomies_product', 0 );
```

# Custom Taxonomies

```
function my_taxonomies_product() {  
    $args = array();  
    register_taxonomy( 'product_category', 'product' $args );  
}  
  
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# Custom Taxonomies

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function my_taxonomies_product() {  
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    register_taxonomy( 'product_category', 'product' $args );  
}  
  
add_action( 'init', 'my_taxonomies_product', 0 );
```



# Post Meta Boxes

- ✓ Defining the Post Meta Boxes requires 3 steps
  - ✓ Define the box itself
  - ✓ Define the content of the meta box
  - ✓ Define how the data from the box is handled

# Defining the Meta Box

```
add_action( 'add_meta_boxes', 'product_price_box' );
function product_price_box() {
    add_meta_box(
        'product_price_box',
        __( 'Product Price', 'myplugin_textdomain' ),
        'product_price_box_content',
        'product',
        'side',
        'high'
    );
}
```

- ✓ The unique identifier for the meta box (it does not have to match the function name)
- ✓ The title of the meta box (visible to users)
- ✓ The function which will display the contents of the box
- ✓ The post type the meta box belongs to
- ✓ The placement of the meta box
- ✓ The priority of the meta box (determines “how high” it is placed)



# Defining the Content of the Meta Box

```
function product_price_box_content( $post ) {  
    wp_nonce_field( plugin_basename( __FILE__ ), 'product_price_box_content_nonce' );  
    echo '<label for="product_price">Price of item</label>';  
    echo '<input type="text" id="product_price" name="product_price" placeholder="enter a price">';  
}
```

## Notes:

- This meta box only contains a price
- A nonce field is also present, which adds security to the data submission

# Handling Submitted Data

```
add_action( 'save_post', 'product_price_box_save' );
function product_price_box_save( $post_id ) {

    if ( defined( 'DOING_AUTOSAVE' ) && DOING_AUTOSAVE )
        return;

    if ( !wp_verify_nonce( $_POST['product_price_box_content_nonce'],
        plugin_basename( __FILE__ ) ) )
        return;

    if ( 'page' == $_POST['post_type'] ) {
        if ( !current_user_can( 'edit_page', $post_id ) )
            return;
    } else {
        if ( !current_user_can( 'edit_post', $post_id ) )
            return;
    }

    $product_price = $_POST['product_price'];
    update_post_meta( $post_id, 'product_price', $product_price );
}
```

- ✓ If an autosave is being performed nothing happens
- ✓ The nonce is checked
- ✓ Permissions are checked
- ✓ When everything passes, the data is added to the post using: `update_post_meta()`

### Price per night

amount:

currency:

price type:  
 per person  
 per apartment

maximum guests:

# Displaying Meta Data

```
<?php
    // If we are in a loop we can get the post ID easily
    $price = get_post_meta( get_post_ID(), 'product_price', true );
    // To get the price of a random product we will need to know the ID
    $price = get_post_meta( $product_id, 'product_price', true );

    echo $price;
?>
```



# Final Thoughts

- ✓ Adding custom functionality can be used to create customized areas for anything you can think of.
- ✓ Since setting up CPTs, taxonomies, post meta boxes are completely up to you, you have the power to create additional features to make your clients very happy



# Want to Learn More?

- ✓ Are you interested in learning about custom post types in a step by step approach?
- ✓ Do you want to improve your development skills in 2013 so you can program more efficiently and make more money?



# Introducing Advanced Developer Training



- ✓ This is a complete course with exact step-by-step instructions to speed up your development time
- ✓ It works even if you're starting from scratch or you've been at it a while
- ✓ The "Advanced Developer Training" is an end-to-end system for making you a more efficient / profitable website developer



# Week 1: Building Theme Essentials



- ✓ WordPress Overview
- ✓ Child Themes
- ✓ Set up a local dev environment
- ✓ Overview of Useful PHP Commands
- ✓ A Look at the Frameworks



# Week 2: Make Your Site Future Proof



- ✓ Discover Plugin Basics (filters, hooks, etc.)
- ✓ Develop theme Shortcodes
- ✓ Build a twitter widget from scratch
- ✓ Using WP\_Cron to Schedule Events

## Latest Tweets

-  Only a few more hours to register for my first webinar in 2013 about custom post types.  
<http://t.co/H4xUZRJX> Register now!
-  Up early adding finishing touches to today's webinar (<http://t.co/H4xUZRJX>), plus a load of other good stuff today. Enjoy your Friday :)
-  WordPress Blogs at Risk Due to Plug-In Flaw <http://t.co/fxiiRBVc> //Disable it today! A slower site is better than a hacked site.
-  The Local Method presents Lets Talk New Media Expo, my interview with [@albertHathazi](#) about [#NMX](#). Only 2 more days! <http://t.co/u2RrEnqQ>
-  Pulled into the gas station just as the low fuel light came on [#PerfectTiming](#)





# Week 3: Add Functionality



- ✓ Custom Post Types
- ✓ Custom Taxonomies
- ✓ Post Meta Boxes
- ✓ Add Theme Options

# Week 4: Become More Proficient



- ✓ Use the Terminal / Command Line
- ✓ Learn Version Control with GIT
- ✓ Write Faster CSS with SASS
- ✓ Make Your Website Encrypted with SSL



# How much would this training cost @ a University?



✓ \$3000?

✓ \$2000?

✓ \$1000?



# How the Course Works



- ✓ Each module is pre recorded
- ✓ At the beginning of each week you will receive an email with the weekly assignments
- ✓ On Friday of each week there will be a training call



# How the Course Works

- ✓ Mon, Jan 28: Week 1 goes live
- ✓ Fri, Feb 1: Group Training Call
- ✓ Mon, Feb 4: Week 2 goes live
- ✓ Fri, Feb 8: Group Training Call

- ✓ Mon, Feb 11: Week 3 goes live
- ✓ Fri, Feb 15: Group Training Call
- ✓ Mon, Feb 18: Week 4 goes live
- ✓ Fri, Feb 22: Group Training Call

# Advanced WordPress Developer Training



✓ Retails for: \$799

✓ Exclusive Offer: \$499

Must Register by Next Friday!

A screenshot of a website page for "Advanced Developer Course". The page has a header with a logo "Your WEBSITE Engineer" and a navigation menu with "Home", "About", "Resources", "Products", and "Contact". The main content area features a "Register Now" button and a list of topics covered in the course, organized into two columns. The topics include "Introduction to WordPress Development", "Child Themes", "HTML5 / CSS3 Overview", "Introduction to Frameworks", "Plugin Basics", "Plugin Development: Shortcodes", "Plugin Development: Widgets", and "WP\_Cron".

**Advanced Developer Course**

Home » Advanced Developer Course

In early 2012, I realized I had a passion for teaching others how to use WordPress. There were tons of resources available for beginners when it came to WordPress, but no great solution for developers who want to become more advanced.

As I have slowly learned WordPress myself, I saw a void in the market and decided to create my own course for developers. The course is called "Advanced Developers WordPress Course" and I'm confident that it will turn any WordPress novice into a great developer.

This course can be yours for the low one time payment of \$799 only \$499! But must register before **January 11th** as the price will increase!

[Register Now](#)

**What Topics Will The Course Cover?**

This course will cover the MAIN things that WordPress developers should know to create amazing websites for their clients. Here are the topics:

**Week One: Building Theme Essentials**

- Introduction to WordPress Development**
  - How the loop works
  - How to create theme templates
  - Set up a development site
- Child Themes**
  - Useful PHP / WP Commands
  - Child Themes
- HTML5 / CSS3 Overview**
  - Benefits
  - Differences
  - Brief demo
- Introduction to Frameworks (hands on with different frameworks)**
  - Thesis
  - Genesis
  - Headway
  - Builder
  - Standard

**Week Two: Make Your Site Future Proof**

- Plugin Basics**
  - Filter Hooks
  - Action Hooks
  - Benefits of Using Plugins
- Plugin Development: Shortcodes**
  - Activate Plugin
  - Add Shortcode Method
  - Attributes
  - Specifying Content
- Plugin Development: Widgets**
  - Intro to Widgets
  - The Skin for a Widget
  - The Form Method
  - Building the Twitter Widget
  - Regular Expression
  - Completing the Widget
- WP\_Cron**
  - Schedule Recurring Events
  - Custom Intervals for Events
  - Create an Options Page



To join the advanced training, register now:  
<http://YourWebsiteEngineer.com/awdt>

# Life Time Access



- ✓ You will become a member for life!
- ✓ If the course gets updated, you will have access to that as well.



To join the advanced training, register now:  
<http://YourWebsiteEngineer.com/awdt>

# 100% Satisfaction Guarantee



- ✓ Try the Advanced WordPress Developers Course for 30 days
- ✓ ... and if you don't love it, simply ask for a refund by emailing [Dustin@YourWebsiteEngineer.com](mailto:Dustin@YourWebsiteEngineer.com) and I'll happily refund your money



To join the advanced training, register now:  
<http://YourWebsiteEngineer.com/awdt>



# Any Questions?



To join the advanced training, register now:  
<http://YourWebsiteEngineer.com/awdt>