APRIL 27-28TH, 2013

WordCamp

MCTC | DOWNTOWN MPLS

MINNEAPOLIS

— 2013 —

The Power Of Custom Types

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About Me

- WordPress user since 2005
- Plugin Developer since 2006
  - Breadcrumb NavXT (~875k downloads)
- Admin for weblogs.us
- Personal site: mtekk.us

Agenda

- Motivation
- CPTs
- Taxonomies
- CPTs vs Taxonomies vs Meta vs Others
- Showcase

The Problem

- Creating a site with a portfolio
  - Using categories to separate portfolio projects from news/blog posts
  - End up using "hidden" categories and other hacks
- Everything breaks (plugins in particular)

The solution

USE A CUSTOM POST TYPE

What's a CPT?

- Custom Post Types (CPTs) are content types you define
- Come in 2 flavors
  - Hierarchical
  - Flat

Who's Using CPTs?

- bbPress 2.0+
- Meteor Slides
- WP e-Commerce (GetShopped)
- Many more

How to Create a CPT

- Use register_post_type($post_type, $args);
  - $post_type is the unique post type name
  - $args is the array of arguments to customize the CPT
- Call using a hook into the init action
- Do this in a plugin
  - functions.php is not portable between themes

Example Code

```php
add_action('init','create_my_project');
function create_my_project()
{
    register_post_type('mtekk_project',
        array(
            'labels' =>
            array(
                'name' => __('Projects'),
                'singular_name' => __('Project')
            ),
            'public' => true,
            'has_archive' => true)
    );
}
```

Dashboard

Posts

Media

Links

Pages

Comments 2

No Taxonomy

Hierchy

Runs

Projects

Projects
Add New

Appearance

Plugins 9

Users

Tools

Settings

Collapse menu

Screen Options ▼

Add New Post

Enter title here

Upload/Insert

Visual | HTML

B *I* ABC | ≔ ≔ " | ≡ ≡ ≡ | ∞ ∞ ☰ | ABC ▾ | ⛶ | ⌨

Paragraph ▾ | U | ≡ | A ▾ | 📋 📋 ✐ | Ω | ⇥ ⇥ | ↶ ↷ | ?

Path: p

Word count: 0

Publish

Save Draft   Preview

Status: **Draft** Edit

Visibility: **Public** Edit

📅 Publish **immediately** Edit

Move to Trash   Publish

Naming Your CPT

- Make it unique
  - BAD: project
  - GOOD: mtekk_project
- Max length of 20 characters
- NO:
  - s p a c e s
  - UPPERCASE
  - wp_ prefix

The $args

- Key attributes to investigate:
  - labels – array of labels for the CPT
  - show_ui
  - capabilities – array of permissions
  - supports – array of features in the edit page
  - rewrite – array of rewrite arguments
  - hierarchical
- Checkout the Codex for more info: http://codex.wordpress.org/Function_Reference/register_post_type

More Complex Example

```php
//Our lecture labels
$labels = array(
    'name' => __('Lectures', 'wp_courseware'),
    'singular_name' => __('Lecture', 'wp_courseware'),
    'add_new' => __('Add New', 'wp_courseware'),
    'add_new_item' => __('Add New Lecture', 'wp_courseware'),
    'edit_item' => __('Edit Lecture', 'wp_courseware'),
    'new_item' => __('New Lecture', 'wp_courseware'),
    'view_item' => __('View Lecture', 'wp_courseware'),
    'search_items' => __('Search Lectures', 'wp_courseware'),
    'not_found' => __('No lectures found', 'wp_courseware'),
    'not_found_in_trash' => __('No lectures found in Trash', 'wp_courseware'),
    'parent_item_colon' => '',
    'menu_name' => __('Lectures', 'wp_courseware')
    );
//Our lecture capabilities
$capabilities = array(
    'edit_post' => 'wptc_edit_lecture',
    'edit_posts' => 'wptc_edit_lectures',
    'edit_others_posts' => 'wptc_edit_others_lectures',
    'publish_posts' => 'wptc_publish_lectures',
    'read_post' => 'wptc_read_lecture',
    'read_private_posts' => 'wptc_read_private_lectures',
    'delete_post' => 'wptc_delete_lecture'
    );
//Assemble our post type arguments, keeping capabilities default until later
$args = array(
    'labels' => $labels,
    'public' => true,
    'publicly_queryable' => false,
    'exclude_from_search' => true,
    'show_ui' => true,
    'show_in_menu' => false,
    'menu_icon' => plugins_url('/lecture-icon-20x20.png', __FILE__),
    'capability_type' => 'lecture',
    'capabilities' => $capabilities,
    'map_meta_cap' => true,
    'hierarchical' => false,
    'supports' => array('title', 'page-attributes'),
    'taxonomies' => array('course'),
    'has_archive' => false,
    'rewrite' => false,
    'query_var' => true,
    'can_export' => true,
    'show_in_nav_menus' => false
);
register_post_type('lecture', $args);
```

- 📌 Dashboard
- 📌 Posts
- Media
- Links
- Pages
- Comments
- Appearance
- Plugins **3**
- Users
- Tools
- Settings
- Courses
- ◁ Collapse menu

📌 Edit Lecture   Add New

How to Peel a Head of Garlic

Lecture Video

from SAVEUR.com **PLUS**

01:00 ▶ |||||| HD :: vimeo

http://vimeo.com/29605182

Followup Remarks

Visual   HTML

B *I* U 66 ABC ☰ ☰ ☰ ☰ ☰ ↺ ↻ 🔗 ✂ ⛶

Remember:

1. Don't use forehead to smash head of garlic

Publish

Preview Changes

Status: **Published** Edit

Visibility: **Public** Edit

📅 Published on: **Mar 25, 2012 @ 18:21** Edit

Move to Trash   **Update**

Courses

All Courses   Most Used

- ☑ Cooking Basics
- ☐ Advanced Cooking
- ☐ Off-Sale
- ☐ On-Sale

+ Add New Course

Attributes

Order

0

Screen Options ▼

An Easier Way

- ## Custom Post Type UI
  - http://wordpress.org/extend/plugins/custom-post-type-ui

Displaying CPTs

- Templates for the frontend:
  - single-{posttype}.php (since 3.0)
  - archive-{posttype}.php (since 3.1)
- Custom WP_Query instance:
  - $projects = new WP_Query(array('post_type' => 'mtekk_project', 'posts_per_page' => 10));
  - while($projects->have_posts){$projects->the_post(); /*your code here*/}
  - Can use this anywhere
  - Can use get_posts() wrapper for WP_Query

Organize all the things with
TAXONOMIES

What's a Taxonomy?

- Taxonomies are a way to classify/organize content (post) types.
- Come in 2 flavors
  - Hierarchical
  - Flat

How to Create a Taxonomy

- Use register_taxonomy($taxonomy, $object_type, $args);
  - $taxonomy is the unique taxonomy name
  - $object_type array of post types that this taxonomy can be used on
  - $args is the array of arguments to customize the taxonomy
- Checkout the Codex for info on $args http://codex.wordpress.org/Function_Reference/register_taxonomy
- Call using a hook into the init action
- Do this in a plugin
  - functions.php is not portable between themes

Example Code

```php
add_action('init','create_my_medium');
function create_my_medium()
{
    register_taxonomy('mtekk_medium',
        array('mtekk_project'),
        array(
            'labels' =>
            array(
                'name' => __('Mediums'),
                'singular_name' => __('Medium')
            ),
            'public' => true)
    );
}
```

Naming Your Taxonomy

- Make it unique
  - BAD: medium
  - GOOD: mtekk_medium
- Max length of 32 characters
- NO:
  - s p a c e s
  - UPPERCASE
  - wp_ prefix

Don't Custom Post Type all the things

CPTS VS TAXONOMIES VS META VS OTHERS

When to Use a CPT

- When for anything "post" or "page" like
  - Most things that would have required a custom table in the past
  - Products for a ecommerce site
  - Events for event calendars
- When you want WordPress to do most of the heavy lifting
  - Attachments, featured images, Dashboard UI, templates, etc.

When to Use a Taxonomy

- When you need to logically organize a collection of posts (of same or mixed type)
    - Mediums for projects in a portfolio

When to Use Postmeta

- When you need to add extra information to a post

  - Project completion date for a portfolio project

- When you need to sort by that information

DEMO

Questions?

Find me on Twitter @mtekkmonkey

Resources

- http://kovshenin.com/2010/extending-custom-post-types-in-wordpress-3-0/
- http://codex.wordpress.org/Function_Reference/register_post_type
- http://codex.wordpress.org/Post_Types
- http://ottopress.com/2011/when-to-not-use-a-custom-taxonomy/
- http://codex.wordpress.org/Function_Reference/register_taxonomy
- http://codex.wordpress.org/Taxonomies