





A Brief Overview

CREATING A PLUGIN

- 
- Review creating a basic plugin
 - Who, What, Where, When, Why
 - Look at the plugin header
 - Find where to start
 - Choose what to do
 - Look at the code
 - Discuss some useful tools



*Necessity,
who is the mother
of invention.*

Plato, *The Republic*

Greek author & philosopher in Athens (427 BC - 347 BC)

Who, What, Where, When

```
1 <?php
2 /*
3 Plugin Name: BNS Category Plus
4 Plugin URI: http://buynowshop.com/plugins/bns-corner-logo/
5 Description: Category widget with more
6 Version: 0.1
7 Author: Edward Caissie
8 Author URI: http://edwardcaissie.com/
9 License: GPL2
10 */
11
12 /* Copyright 2010 Edward Caissie (email : edward.caissie@gmail.com)
13
14 This program is free software; you can redistribute it and/or modify
15 it under the terms of the GNU General Public License version 2,
16 as published by the Free Software Foundation.
17
18 You may NOT assume that you can use any other version of the GPL.
19
20 This program is distributed in the hope that it will be useful,
21 but WITHOUT ANY WARRANTY; without even the implied warranty of
22 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
23 GNU General Public License for more details.
24
25 You should have received a copy of the GNU General Public License
26 along with this program; if not, write to the Free Software
27 Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA
28
29 The license for this software can also likely be found here:
30 http://www.gnu.org/licenses/gpl-2.0.html
31 */
32
```

Categories Plugin (default)

- The Categories Option Panel

The image shows a screenshot of the WordPress Categories Option Panel, divided into two main sections: widget options on the left and sidebar configuration on the right.

Widget Options (Left Column):

- BNS Corner Logo:** Widget to display a logo; or, used as a plugin displays image fixed in one of the four corners.
- BNS Support:** Widget to display and share common helpful support details.
- Links:** Your blogroll.
- Meta:** Log in/out, admin, feed and WordPress links.
- Recent Posts:** The most recent posts on your blog.
- Tag Cloud:** Your most used tags in cloud format.

Sidebar Configuration (Right Column):

- Sidebar 2:** Contains the **BNS Support: My New Blog** widget and the **Categories** widget.
- Sidebar 3:** Contains the **BNS Add Widget** button.

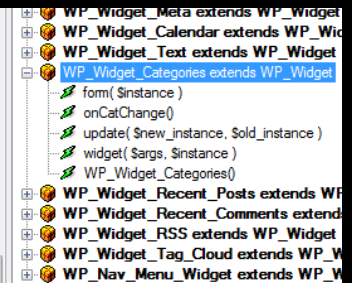
Categories Widget Options:

- Title: [Text input field]
- Show as dropdown
- Show post counts
- Show hierarchy
- Buttons: Delete | Close, Save

Categories Code

- The beginning of the Categories code

```
414 /**
415  * Categories widget class
416  *
417  * @since 2.8.0
418  */
419 class WP_Widget_Categories extends WP_Widget {
420
421     function WP_Widget_Categories() {
422         $widget_ops = array( 'classname' => 'widget_categories', 'description' => __( "A list or dropdown of categories" ) );
423         $this->WP_Widget('categories', __('Categories'), $widget_ops);
424     }
425
426     function widget( $args, $instance ) {
427         extract( $args );
428
429         $title = apply_filters('widget_title', empty( $instance['title'] ) ? __( 'Categories' ) : $instance['title'], $instance, $this);
430         $c = $instance['count'] ? '1' : '0';
431         $h = $instance['hierarchical'] ? '1' : '0';
432         $d = $instance['dropdown'] ? '1' : '0';
433
434         echo $before_widget;
435         if ( $title )
436             echo $before_title . $title . $after_title;
```



BNS Categories Plus

- The Widget Option Panel

The screenshot shows the WordPress widget management interface. On the left is a list of available widgets, and on the right is the configuration panel for the selected 'BNS Categories Plus' widget in 'Sidebar 3'.

Available Widgets:

- BNS Corner Logo**: Widget to display a logo; or, used as a plugin displays image fixed in one of the four corners.
- BNS Support**: Widget to display and share common helpful support details.
- Links**: Your blogroll
- Meta**: Log in/out, admin, feed and WordPress links
- Recent Posts**: The most recent posts on your blog
- Tag Cloud**: Your most used tags in cloud format

Widget Configuration Panel (Sidebar 3):

- Widget: **BNS Categories Plus**
- Title:
- Show as dropdown
- Show post counts
- Show hierarchy
- Hide Empty
- Buttons: [Delete](#) | [Close](#) | [Save](#)

Other sidebar widgets visible: **Navigation Menu**, **WPFirstAid Sample: WPFirstAid Sa**, and **BNS Add Widget**.

BNS Categories Plus Code

- The beginning of the BNS Category Plus code

```
32
33 /* Add our function to the widgets_init hook. */
34 add_action( 'widgets_init', 'load_my_bns_categories_plus_widget' );
35
36 function load_my_bns_categories_plus_widget() {
37     register_widget( 'BNS_Categories_Plus' );
38 }
39
40 /**
41  * Based on Categories widget class
42  *
43  */
44
45 class BNS_Categories_Plus extends WP_Widget {
46
47     function BNS_Categories_Plus() {
48         $widget_ops = array( 'classname' => 'bns_widget_categories_plus', 'description' => __( "A BNS list or dropdown of categories"
49         $this->WP_Widget('bns_categories_plus', __('BNS Categories Plus'), $widget_ops);
50     }
51
52     function widget( $args, $instance ) {
53         extract( $args );
54
55         $title = apply_filters('widget_title', empty( $instance['title'] ) ? __( 'Categories' ) : $instance['title'], $instance, $thi
56         $c = $instance['count'] ? '1' : '0';
57         $h = $instance['hierarchical'] ? '1' : '0';
58         $d = $instance['dropdown'] ? '1' : '0';
59         $e = $instance['empty'] ? '1' : '0';
60
61         echo $before_widget;
62         if ( $title )
63             echo $before_title . $title . $after_title;
```

The screenshot shows a code editor interface. On the right side, there is a file explorer panel. The 'Functions' section is expanded, showing a file named 'load_my_bns_categories_plus_widget()'. The 'Variables' section is also expanded, showing a variable named 'BNS_Categories_Plus extends WP_Widget'. Below this variable, there are several methods listed: 'form(\$instance)', 'onCatChange()', 'update(\$new_instance, \$old_instance)', and 'widget(\$args, \$instance)'. The code editor on the left shows the beginning of the PHP code for the 'BNS_Categories_Plus' widget class, with the class definition highlighted in yellow.

More BNS Categories Plus

```
99 function update( $new_instance, $old_instance ) {
100     $instance = $old_instance;
101     $instance['title'] = strip_tags($new_instance['title']);
102     $instance['count'] = !empty($new_instance['count']) ? 1 : 0;
103     $instance['hierarchical'] = !empty($new_instance['hierarchical']) ? 1 : 0;
104     $instance['dropdown'] = !empty($new_instance['dropdown']) ? 1 : 0;
105     $instance['empty'] = !empty($new_instance['empty']) ? 1 : 0;
106
107     return $instance;
108 }
```

```
110 function form( $instance ) {
111     //Defaults
112     $instance = wp_parse_args( (array) $instance, array( 'title' => '' ) );
113     $title = esc_attr( $instance['title'] );
114     $count = isset($instance['count']) ? (bool) $instance['count'] : false;
115     $hierarchical = isset( $instance['hierarchical'] ) ? (bool) $instance['hierarchical'] : false;
116     $dropdown = isset( $instance['dropdown'] ) ? (bool) $instance['dropdown'] : false;
117     $empty = isset( $instance['empty'] ) ? (bool) $instance['empty'] : false;
```

```
128     <input type="checkbox" class="checkbox" id="<?php echo $this->get_field_id('hierarchical'); ?>" name="<?php echo
    ↳ $this->get_field_name('hierarchical'); ?>"<?php checked( $hierarchical ); ?> />
129     <label for="<?php echo $this->get_field_id('hierarchical'); ?>"><?php _e( 'Show hierarchy' ); ?></label>
130
131     <hr />
132
133     <input type="checkbox" class="checkbox" id="<?php echo $this->get_field_id('empty'); ?>" name="<?php echo $this->
    ↳ get_field_name('empty'); ?>"<?php checked( $empty ); ?> />
134     <label for="<?php echo $this->get_field_id('empty'); ?>"><?php _e( 'Hide Empty' ); ?></label></p>
```

Useful Tools and Resources

- PSPad.exe – <http://pspad.com/>
- Evernote – <http://evernote.com/>
- Screengrab! – <http://www.screengrab.org/>


- <http://phpdoc.wordpress.org/trunk/>
- http://codex.wordpress.org/Main_Page
- <http://google.com/>



Credits

Presented by Edward Caissie
at WPToronto Meetup April 2010

Please contact edward.caissie@gmail.com for
more information and resources.



These slides available at:
<http://edwardcaissie.com/2010/04/wpto-creating-a-plugin/>