Just Enough PHP – for WordPress Users

- PHP runs on the web server before HTML is sent to the web browser.
- The only thing that is sent to the browser from a PHP program is what that program writes out.
- PHP can be embedded in HTML. You can have as many small snippets of PHP code as you'd like in an HTML program.
- The way the web server knows this is PHP, not just HTML is by the file extension. (.html vs .php)
- A PHP snippet in enclosed in <?php *some PHP code* ?>
- Variables start with a $, example $the_post, $wp_username. They can contain letters (both upper and lowercase), numbers and underscores.
- Simple types: Boolean, Integer, Float, String. Ex. TRUE, 12, 3.14159, 'Garfield'.
- Complex types: Array, Object.
  - Arrays – are associative, i.e. instead of $MyArray[1] they are indexed by strings, like $MyArray['name'].
  - Objects – are a collection of variables and operations on those variables that represent a single concept. The way you interact with an object is through the functions defined for that object. To access a function associated with an object use ->, ex. $wp_user->get_name();
- Functions – A collection of PHP statements that complete an action. Functions have a name and arguments (variables) that they operate on.
- Statements – assignment, control (loops, Ifs), function calls, output.
- Comments – several different styles

```
/*
    many lines of interesting things to say
    Date: 2/14/2014
    Author: Norman Crabbs
*/
        $my_name = $wp_user['first_name']; // Get my name
        if ($user->exists()) { $n = $user->get_name(); } # Another comment
```

- Statements end with a semicolon.
- You can group statement together in blocks with curly braces.

```
if ($name == "Jamii") {
        $msg = "You can't do that";
} else {
        $msg = "Go ahead";
}
```

- Assignment statements, $c = 5 / 9 * $f – 32; or $name = "J." . "K." . "Corley";
- Control statements:
  - IF (*Boolean expression*) { *statements* } ELSE { *statements* }
  - IF (*Boolean expression*) { *statements* }
  - FOR (*variable = start; Boolean expression; increment*) { *statements* }
  - WHILE (*Boolean expression*) { *statements* }

- Output statements: echo or print.
- Testing – results in a Boolean (TRUE or FALSE).
    - Equals ==
    - Greater than >
    - Less than <
    - Not equal !=
    - Greater than or equal to >=
    - Less than or equal to <=
- Boolean operations
    - AND, OR, NOT (&&, ||, !=)
    - ex. If ($a != 10 || $a > 100) { … }
- Some Short hand:
    - $a += 10; is the same as $a = $a + 10;
    - $name .= " Bunny"; is the same as $name = $name . " Bunny"; // concatenate ' Bunny' to the end of $name.
- Escaping characters: Use \
    - Example: print "<input type=text name=\"my_name\">";
- Some special characters:
    - \n – new line
- Special variables:
    - $_POST – array that contains values from a form.
    - $_GET – array that contains values from the URL
    - $_COOKIES - Cookies

To find more information on the syntax of PHP:
http://www.php.net/manual/en/language.basic-syntax.php
To look up any PHP function
http://www.php.net

Example 1. Some PHP to display the current date.

```
<html>
<head>
<title>My first PHP</title>
</head>
<body>
<h1>Today is <?php echo date("l"); ?></h2>
Date/Time: <?php echo date("F j,Y h:i:s a T"); ?>
</body>
</html>
```

Example 2. Build a table of Celsius to Fahrenheit conversions

```
<html>
<head>
<title>Celsius to Fahrenheit</title>
</head>
<body>
<h1>Celsius to Fahrenheit Conversions</h1>

<center>
<table border=1>
<tr>
<th>Celsius</th>
<th>Fahrenheit</th>
</tr>
<?php
  for ($c = 0; $c <= 100; $c += 10) {
    $f = 9/5 * $c + 32;
    print "<tr>\n";
    print "<td>$c</td>\n";
    print "<td>$f</td>\n";
    print "</tr>\n";
  }
?>
</table>
</center>
</body>
</html>
```

What happens if you break it.
Error message example:
Parse error: syntax error, unexpected T_PRINT
in **/users/jamii/public_html/blackjaic.com/c2f.php** on line **18**

How does all this apply to WordPress

WordPress is written in PHP.
The way a page gets built in WordPress involves theme descriptions and code, and plugin additions. All these have some PHP involved.

Let's build a child theme and modify some of it's PHP code.

WP directory structure:
Main (which contains wp_config.php – your database information is kept here)
wp-admin – Admin area
wp-includes – WordPress code
wp-content – Things that change
cache
plugins
themes
uploads

Within the themes directory there is a subdirectory for each theme you have installed. Within a theme there are a bunch of files including style.css, header.php, footer.php, image.php, single.php, and index.php.

To make a child theme we create a subdirectory with the name of our theme, for example: jkc_2011_child_theme.
Create a style.css file inside this directory:

```
/*
 Theme Name:   Twenty Eleven Child
 Theme URI:    http://example.com/jkc_2011_child_theme/
 Description:  Twenty Eleven Child Theme
 Author:       Jamii
 Author URI:   http://blackjaic.com
 Template:     twentyeleven
 Version:      1.0.0
 Tags:         light, dark, two-columns, right-sidebar, responsive-layout,
accessibility-ready
 Text Domain:  twenty-eleven-child
*/

@import url("../twentyeleven/style.css");

/* =Theme customization starts here
---------------------------------------------------------------- */
```

We' add any CSS changes here.

Suppose we want to change the header to be a slider instead of an image.

Copy over header.php from the twentyeleven theme directory.

We take a look at header.php and find the following code:

```
<img src="<?php header_image(); ?>"
      width="<?php echo $header_image_width; ?>"
      height="<?php echo $header_image_height; ?>"
```

We have found the short-code that displays a slider that we have installed:
[metaslider id=844]

We comment out the <img src … and replace it with a call to a WordPress routine that processes short codes.

```
/*
   <img src="<?php header_image(); ?>"
      width="<?php echo $header_image_width; ?>"
      height="<?php echo $header_image_height; ?>" alt="" />
*/
   echo do_shortcode('[metaslider id=844]');
```

Where to find out more about WordPress functions: http://codex.wordpress.org