In Tutorial 06 we will wrap up our WordPress learning experience.   
After creating a shared web host we will cover role based security.  
We will then import a MySQL table and write a custom plugin to query it and display its content on a WordPress page.   
We will then create a WordPress site on Codeanywhere account from a GitHub repository.  
  
Note: There is a tutorial template file to download, rename and submit to D2L. Tutorials are required.

Web host tools used in the Tutorial:  
(1) Shared Web Host SiteGround

(2) Pantheon as a Service (PaaS)   
 – Substitute for Shared web host for those with PaaS accounts.

(3) Cloud Web Host – Codeanywhere

**Part G – GitHub - is worth 20 points**

**Part A – Getting started with this tutorial**

1. Download the Tutorial 06 assets zip file, template and instruction files from D2L.
2. Expand the asset file on your computer
3. Rename the template file by adding your full name to the front of the template file name.
4. Open the renamed template file for editing.   
   Go to **Part A** and add your name and contact info to **Part A**.

Part B - Create a WordPress CMS on Shared Web Host or Pantheon

Create a WordPress CMS on your shared web host (or Pantheon PaaS) account.

(B.1) If using a Share web host account:

* 1. **Software setup:**
     1. Protocol: http:
     2. Domain: Select the default domain
     3. In Directory: “**tutorial06**” (***all lower case***)
  2. **Site Settings:**

1. Site Name: [**Your First Name]** - **Tutorial 06**
   1. Substitute your first name for **[Your First Name]**
2. Site Description: **Tutorial 06 WordPress CMS**
3. **Enable Multisite (WPMU): Do not enable Multisite** 
   1. **Admin Account:**
4. **Admin Username:** select default or create one
5. **Admin Password:** select default or create one
6. **Admin Email:** Accept default or add one
   1. Only use default email if you established an admin email on your web host
   2. **Choose Language:** - **Set language to the default of English**
   3. **Select Plugins**
      1. **Limit Login Attempts – Uncheck this option**
      2. **Classic Editor – Do Not Enable this option**
   4. Easy setup:

WordPress Starter – Uncheck this option \*We do not want this!

* 1. Advanced Options:
     1. Database Name: select default
     2. Table Prefix: select default
     3. Do not change the Backup location
  2. ***PRESS the install button***, open the Tutorial 06 Template and record following information in Part B [B1]
  3. ***Press the Install button and wait for confirmation page to display***
  4. ***Press the Install button and wait for confirmation***

**-OR, if using Parthenon instead of a shared web host-**

**(B.2) If using Pantheon:**

1. Create Your Pantheon Site
   * + Name Your Pantheon Site: **[Your First Name] – Tutorial 06 PA**
     + Choose an Organization for the Site: Set to None
2. Choose Your CMS: Select the Deploy button for WordPress
3. Select the "Visit your Pantheon Site Dashboard" button
4. Select the Install WordPress button
5. Configure your WordPress Site as follows:
   * + Language: English (United States)
     + Site Title: **[Your First Name] –Tutorial 06 PA**
     + Username: enter in a username
     + Password: use default or enter a strong password
     + Email: use your Pantheon login email
6. Press Install the WordPress site
7. ***Press the “Install WordPress” button***,
8. ***Press the Install button and wait for confirmation***

Open the Tutorial 06 Template and record site and login credentials in Part B.

**Part C -** Flesh out the Tutorial WordPress site with Images, a Theme, and a Menu, Page, Post, Category and Tags.

**Part C.1 Add Images**

1 Add the following images from the Assets “Tutorial Site Page Images” folder to the WordPress **Media Library**

* BlackSquirrel001.png
* RedSquirrel001.png

Part C.2 – Extend WordPress with Themes

1. On the WordPress site Administrative Back-End dashboard select Appearance
2. Under Appearance select Themes
3. Make sure the Twenty Twenty theme is the Active theme. If it is not, set the Active theme to Twenty Twenty

Part C.3 – Extend WordPress with Menus

1. Create a new main menu “**My Menu**”
   1. Select: **Dashboard > Appearance >Menus**
   2. Enter a Menu Name of “My Menu” where it says “enter menu name here” and press the “Create menu” button
   3. After creating the menu, select (check) all the check boxes at the bottom of the menu page then press the “**Save menu**” button
   4. Checking the boxes at the bottom:  
      (1) Auto add pages – Select Automatically add new top-level pages to this menu   
      (2) Display location – Select Desktop Horizontal Menu & Mobile Menu.

Part C.4 – Extend WordPress pages and Posts

1. Use Gutenberg for all Page and Post content entry
2. Create 2 Pages with 1 paragraph of Ipsum conent and 1 image below the content paragraph.   
   Name the Pages **Page Test 1**” to “**Page Test 2**”
3. Create a Category “Squirrel”
4. Create Tags Black and Red
5. Create 2 Posts with 1 paragraph of Ipsum content and 1 image block below the content.   
   Name the Posts   
   “**Post Test 1**” to “**Post Test 2**”  
   Add Squirrel Category and appropriate tags to each post.  
   Select Tags based on the type of squirrel image used on the Post.

Open the Tutorial 06 Template and record following information in Parts C.1 - C.4

**Part D –** Review of Role Based Security

1. Review the role based security presentation and web article https://themeisle.com/blog/wordpress-user-roles/

Open the Tutorial 06 Template and record answers to the questions on Part D

**Part E –** Review PHP Money Function

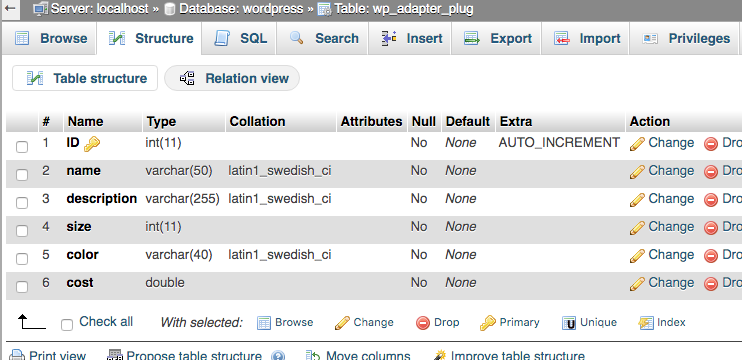
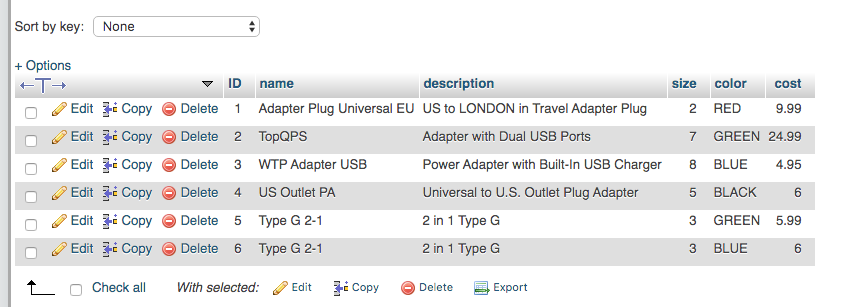
1. Review the PHP Money Format function presentation.
2. Review some PHP code in PHPTester
3. Review a PHP Custom Plugin that uses the money function on all 3 platforms

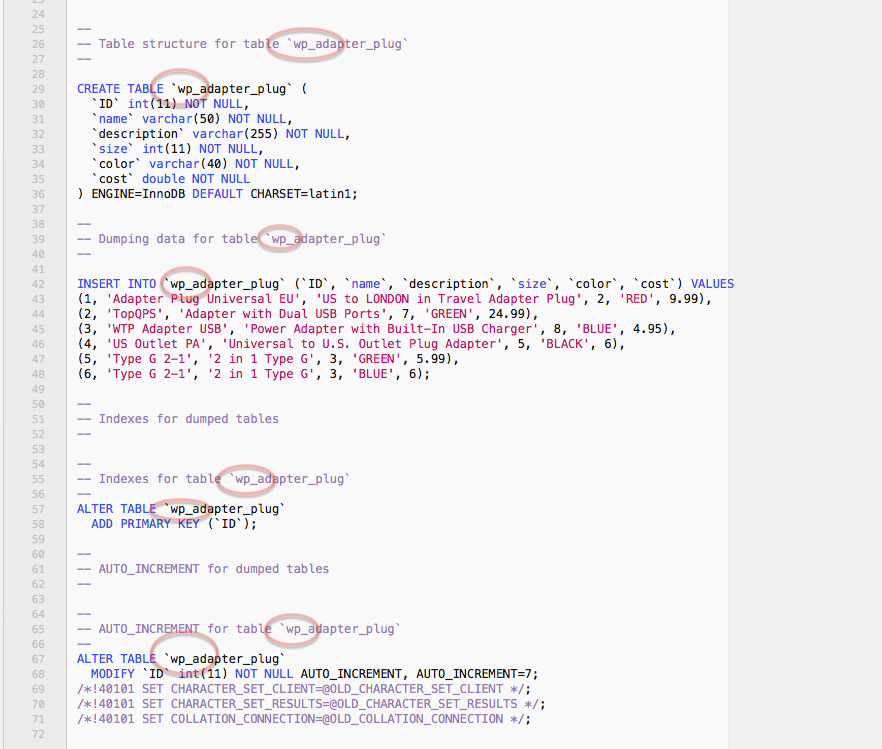
There are no template screen captures or template questions on Part E

**Part F –** Review PHP Date & String To Lower (strtolower) Function

1. Review the PHP Date Format function presentation.
2. Review some Date PHP code in PHPTester
3. Review some String To Upper and String To Lower PHP code in PHPTester
4. Review a PHP Custom Plugins that uses the Date and String to Lower functions

There are no template screen captures or template questions on Part F

**Part G –** Import the Adapter Plug table and records  
  
Table Structure:  
  
  
Table Records:

Adapter Plug Table Backup File Contents:  
Database source DB Table Prefix was wp\_ ****

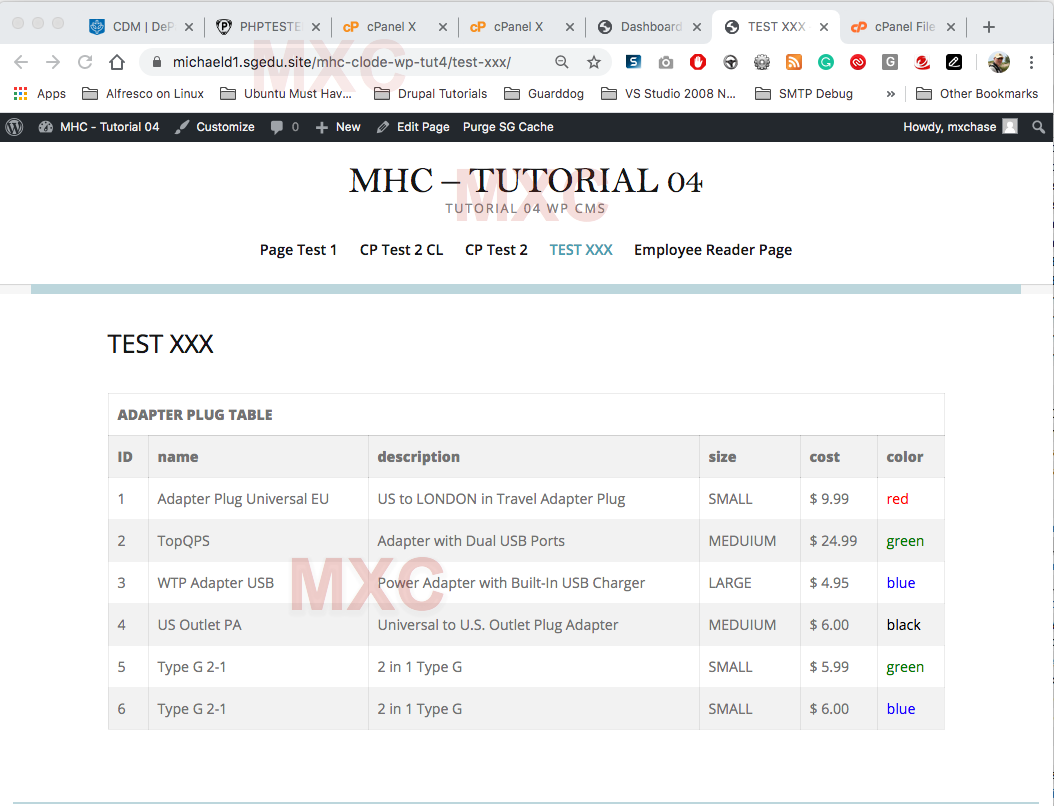
1. Walk through importing the Adapter Plug table into the current shared web host MySQL database.  
   - DB prefix modifications

- Import and verification steps

1. Walk through importing the Adapter Plug table into a Pantheon as a Service (PaaS) web host MySQL database.
2. Open the Tutorial 06 Template and record answers to the questions on Part G

**Part H –** Create an Advanced Custom Plugin

1. Activate the Classic Editor Plugin
2. Install and change the active Theme to **Camer**
3. Walk through creating an Adapter Plug table reader custom plugin
4. Review Adapter Plug Reader Custom Plugin requirement specifications:
   1. Query table and display table contents on a WP page in an HTML table
   2. For the size data, use a switch statement or conditional statements (IF-THEN-ELSE) to evaluate the integer size value and format the output as a string value as follows:
      1. For values 1-3 – display SMALL
      2. For values 4-7 – display MEDIUM
      3. For values 8-10 – display LARGE
   3. For cost, use the money format function to format the cost as US currency with a leading $ and a decimal point with two integers to the right of the decimal point.
      1. Recommended Money Format String: '%(#10n'
   4. For the color data, display the color value as colored text. Make the formatted output value and color using an HTML font color statement.
      1. Example: for $color variable: <font color=\"$color\">$color</font>

Example HTML Table Output on WP Page:  


1. Walk through implementing and testing the Adapter plugin on the Shared Web Host site and Pantheon as a Service (PaaS) sites.
   1. Make sure that the Classic Editor Plugin is activated
   2. Install and change the active Theme to **Camer**

Open the Tutorial 06 Template and record answers to the questions on Part H

**Part I - Create a WordPress CMS from a GitHub Repository on Codeanywhere**Part I can only be done on the Codeanywhere platform.For detailed screen captures on how to build WordPress site on Codeanywhere from a GitHub Repository, please refer to the Module 06 Presentation:M06 -04- WP Site Build From GitHub Repo

1. Open a web browser and navigate to the Codeanywhere website - <https://codeanywhere.com/>
2. Select the Login link and Login using your email and password
3. Delete the existing container – our student accounts allow only 1 live container at a time
4. Create a new Connection > Git from URL
   1. File > New Connection > Git from URL
5. We will be using the following GitHub Repo Clone URL:

<https://github.com/mikehchase/it320tutorial05.git>

1. Fill out the Connection Wizard container form
   1. Name: [your lower case initials]tutorial6ca - no spaces all lowercase
   2. Choose a PHP stack
      1. PHP development Stack with Apache, PHP, MySQL, phpMyAdmin and Composer preinstalled  
         Ubuntu 16.04
   3. Do not enable **Always on** – This wont work with our accounts
2. Be patient while Codeanywhere deploys your container server
   1. This may take a while, so please be patient
   2. When its done, notice that the File Manager is populated with all the WordPress folders and files plus:
      1. vendor folder – with the dotenv program
      2. composer,json file
      3. .env-sample file
      4. .gitignore file
      5. .htaccess – with file max fix applied
      6. wp-config.php – with dotenv code + .env MySQL settings
      7. my-wp-backup.sql.gpg – the encrypted MySQL DB backup fie
3. Create a new .env file & set its permissions to 755
4. Edit the .env - add the contents form the dot-env tutorial assets file
5. Access the phpMyAdmin
6. Change the phpMyAdmin root password to the one we used last module – Winter2020
   1. General settings – Change password link
7. Restart the Container/Connection
8. Access phpMy Admin and create a MySQL database named “wordpress” 🡨 All lowercase
9. On Codeanyhwere, open an SSH Terminal window
10. Decrypt the encrypted sql backup file

gpg -d my-wp-backup.sql.gpg > my-dbbackup.sql

1. Use a SQL command statement to import the decrypted sql backup file into the empty wordpress database

mysql -u root --password='Winter2020' wordpress < my-dbbackup.sql

1. Refresh the wordpress database and verify that the DB import worked
2. Restart the connection/container
3. Open the WordPress site and verify that its working
4. Fix any image issues
5. Open the Tutorial 06 Template. Take and post screen captures for Part I

**Part J – Questions or problems with this tutorial?**

**If you have questions or issues about this tutorial please contact the instructor immediately.**

**To get help, either submit an IRT, or make an appointment with the DePaul tutor or connect to BlueStar and make an appointment for an office hours appointment for help.  
If you find errors with this tutorial, please fill out a BRECT form and submit it to the instructor ASAP for Extra Credit points.**

Michael H Chase

Mobile: 847-878-6225

Office: 312-362-1352

Email: [mchase2@cdm.depaul.edu](mailto:mchase2@cdm.depaul.edu)

Submit your completed tutorial template to D2L dropbox for the current weeks tutorial.

If you prefer not to navigate by hand to the D2L dropbox, take advantage of the

dropbox link in the current D2L Module Tutorial section. The D2L link will take you

to the correct tutorial dropbox location.

Congratulations on completing this tutorial. Please submit the renamed and completed template to D2L for review and grading.