

ViaNolaVie Plugin Development Research

1. General Resources:

- a. [Writing a Plugin](#) - General information about what a plugin is and logistics for writing and integrating it. Also has a list of general tips to keep in mind during development.
- b. [Plugin API](#) - Wordpress codex.
- c. [Plugin Resources](#) - Contains links to blogs and helpful articles from plugin developers.
- d. [PHP Coding Standards](#)

2. FTP

- a. FTP (File Transfer Protocol) is software that allows the transfer of files from a personal computer to the web hosting server.
- b. In order to upload a plugin to a wordpress site, the WordPress must be accessed using FTP with credentials provided by the hosting service.
- c. We need to know more about if Tulane has an FTP that they use and who has the login credentials we would need to access the VNV website via an FTP Client
- d. <https://www.wpbeginner.com/beginners-guide/how-to-use-ftp-to-upload-files-to-wordpress-for-beginners/>

3. Steps to upload a plugin to a WordPress website

- a. Connect to the WordPress using FTP (above)
- b. Navigate to WordPress plugins folder (/wp-content/plugins)
- c. Create a new folder for the plugin
- d. Create the main PHP file within the folder.
- e. Open the PHP file and add the basic plugin information:

```
<?php
/**
 * Plugin Name: My First Plugin
 * Plugin URI: http://www.mywebsite.com/my-first-plugin
 * Description: The very first plugin that I have ever created.
 * Version: 1.0
 * Author: Your Name
 * Author URI: http://www.mywebsite.com
 */
```

4. Hooks - Actions and Filters

- a. Hooks are provided by WordPress to allow your plugin to modify the default actions of WordPress. Hooks simplify the development process by modifying already developed WordPress code rather than starting from scratch. In general, Hooks call functions into WordPress at specific times and can be divided into two categories:
 - i. Actions - Adds a piece of code to the WordPress system that is triggered and run at specific times.
 - ii. Filters - serve a similar function to action hooks, however it is intended that filters receive a value and return a modified version of that value. For example, a filter could be used to capitalize the first letter of a title before posting it.
- b. The most basic steps to add actions or filters to a WordPress:
 - i. Create a PHP function that should execute when a specific WordPress event occurs, in your plugin file.
 - ii. Hook this function to the event by using the `add_action()` or `add_filter()` function.
 - iii. Put your PHP function in a plugin file, and activate it.
- c. [Plugin API](#) - contains more relevant information on how to create an action or filter and how to hook it to wordpress
- d. Further resources:
 - i. [Action Reference](#) - List of WordPress's action hooks
 - ii. [Filter Reference](#) - List of WordPress's filter hooks

5. Pre Existing Plugins to look into:

a. [WP-o-Matic](#)

- i. What it is: Plugin that automatically creates posts from the RSS/Atom feeds you choose.
- ii. Pros:
 - 1. Free to download from Github
 - 2. Extremely powerful and flexible
 - 3. Automatically updates when the source it pulls from is updated
- iii. Cons/Concerns:
 - 1. Complicated and will require training and research to understand its capabilities
 - 2. Requires SimplePie software - not entirely sure what that is
 - 3. Requires understanding of what an RSS/Atom feed is
 - 4. Not sure if it can be customized to add content to a post or if it is only possible to create a new post
 - 5. Not sure if it can be customized to filter content based on tags
- iv. [More information](#)

b. [WP Web Scraper](#)

- i. What it is: Uses CURL and phpQuery to grab and manipulate data from any public website.
- ii. Pros:
 - 1. Free to download from the WordPress repository
 - 2. Allows content to be uploaded to a specific post.
 - 3. Uses JQuerySelectors allows you to select which elements you want from the external website. (would allow us to filter content by tags)
- iii. Cons/Concerns:
 - 1. Complicated and requires understanding of CSS Selectors

2. New scraping code must be written for each post created. It is unclear if the plugin could be customized to automatically query and upload content for each new post.

c. [Remote Content Shortcode](#)

- i. What it is: Plugin that allows you to use shortcode to upload remotely hosted content into posts or pages of the WordPress.
- ii. Pros:
 1. Seems to be a simplified, streamlined version of WP Web Scraping
 2. Free to download from the WordPress repository
 3. Allows content to be uploaded to a specific post.
 4. Uses JQuerySelectors allows you to select which elements you want from the external website. (would allow us to filter content by tags)
 5. Has the option to add or remove content from the imported data.
- iii. Cons/Concerns:
 1. Requires an understanding of HTML and CSS Selectors.
 2. New scraping code must be written for each post created. It is unclear if the plugin could be customized to automatically query and upload content for each new post.
 3. Less established and not as widely used as WP Web Scraping