**Assignment 3**

**Template Tag:** A template tag is a function that is used within the template file of a theme, among other functions. The template tag also includes functions that can output a variety of information by specifying arguments (parameters). The template tag must end with a semicolon (;) to indicate the end of the code. WordPress Themes contain different templates and theme developers use template tags to fetch and display dynamic data. WordPress has many built-in template tags that can be used in WordPress themes. They are mainly used to display the content according to the templates. the\_title() will display the title of the page and the\_content() will display the content of the page.

**Following are the 9 template tag files:**

Template tags files are stored in the [wp-includes](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes" \l "L0) directory. The files have the suffix of "-template.php". There are 9 template tags files:

* [**General**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/general-template.php#L0)- It will be denoted as [wp-includes/general-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/general-template.php#L0). They can go anywhere in the template. Some of the general template tags are: get\_header(), get\_footer.
* [**Author**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/author-template.php#L0)- It will display the author’s name as defined. It is denoted by [wp-includes/author-template.php](https://core.trac.wordpress.org/browser/trunk/src/wp-includes/author-template.php#L0). These functions must be used within the wordpress Loop.
* [**Bookmark**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0)- it is denoted by [wp-includes/bookmark-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0) It will display the list of bookmarks. This function is used internally by wp\_list()bookmarks() and should not be used by themes.
* [**Category**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/category-template.php#L0)- it is denoted by [wp-includes/category-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It will retrieve the category link URL.
* [**Comment**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/comment-template.php#L0)- it is denoted by [wp-includes/comment-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It will display the number of comments for the given post.
* [**Link**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/link-template.php#L0)- it is denoted by [wp-includes/link-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It will display the Permalink for the current post.
* [**Media**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/media-template.php#L0)- it is denoted by [wp-includes/media-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It will output the markup for an audio tag to be used in the template.
* [**Post**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/post-template.php#L0)**-** it is denoted by [wp-includes/post-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It will get the content of the post in the current loop.
* [**Post-thumbnail**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/post-thumbnail-template.php#L0)- it is denoted by [wp-includes/post-thumbnail-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0) .It will Display the features of the image. In other words, it will determine whether a post has image attached to it or not.
* [**Nav-menu**](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/nav-menu-template.php#L0)- it is denoted by [wp-includes/nav-menu-template.php](https://core.trac.wordpress.org/browser/tags/5.8.1/src/wp-includes/bookmark-template.php#L0). It is used to display the navigation menu.

**Hook:** The main function of hooks is to allow you to modify or add features to WordPress without touching the core files. Actions and Filters in WordPress are functions that can be modified by theme and plugin developers to change the default WordPress functionality.  They make up the foundation for how plugins and themes interact with WordPress Core, but they’re also used extensively by Core itself. Hooks are functions that can be applied to an Action or a Filter in WordPress.

**There are two types of hooks:**

1. [**Actions**](https://developer.wordpress.org/plugins/hooks/actions/)
2. [**Filters**](https://developer.wordpress.org/plugins/hooks/filters/)**.**

* [**Actions**](https://developer.wordpress.org/plugins/hooks/actions/): It allows you to add data or change how WordPress operates. Actions will run at a specific point in the execution of WordPress Core, plugins, and themes. An action interrupts the code flow, and then returns back to the normal flow without modifying anything.
* [**Filters**](https://developer.wordpress.org/plugins/hooks/filters/)**:** Itgives you the ability to change data during the execution of WordPress Core, plugins, and themes. A filter is used to modify the parameters in a specific way so that the modification is then used by code later on.

**Following are the examples of both Action and Filter:**

* Example of a hook applied to a Filter:

|  |
| --- |
| function wpb\_custom\_excerpt( $output ) {    if ( has\_excerpt() && ! is\_attachment() ) {      $output .= wpb\_continue\_reading\_link();    }    return $output;  }  add\_filter( 'get\_the\_excerpt', 'wpb\_custom\_excerpt' ); |

The sample code above creates a function wpb\_custom\_excerpt which is hooked into get\_the\_excerpt filter.

* Example of a hook applied to an Action:

|  |  |
| --- | --- |
|  | function mytheme\_enqueue\_script() {      wp\_enqueue\_script( 'my-custom-js', 'custom.js', false );  }  add\_action( 'wp\_enqueue\_scripts', 'mytheme\_enqueue\_script' ); |

The sample code above creates a function mytheme\_enqueue\_script which is hooked into wp\_enqueue\_scripts action.

**Following are the Parameters to add to a function:**

#### First parameter (the handle): It is the Name that is given to your file for example your project's name.

#### Second parameter (file address): By using *get\_template\_directory\_uri() we can* supply the path to the theme. *get\_stylesheet\_uri()* is used to declare the CSS file in the theme’s root.

#### Array():It is used to have wordpress scripts and stylesheets declared at the beginning.

#### Version number: It is used to indicate the version number of the files. We can update the file by increasing the version number for example 1.1 so that browser's files in cache won't be used.

#### Boolean: A boolean is used last in scripts declaration. If *true*, the script is placed at the end of the page, if *false* the script is placed at the beginning of the page.

#### Jquery: It is used to see the latest version of jquery, since wordpress does it in another way for any older Explorer browsers, we need to have another version.

**To Enqueue a script following parameters are used:**

# wp\_enqueue\_script( *string* $handle, *string* $src = '', *string[]* $deps = array(), *string|bool|null* $ver = false, *bool* $in\_footer = false )

1. **$handle**(string) (Required): It is the name of the script. It should be unique.
2. **$src**(string) (Optional): Full URL of the script, or path of the script relative to the WordPress root directory. Default value: ''
3. **$deps** (string[]) (Optional): An array of registered script handles this script depends on. Default value: array()
4. **$ver** (string|bool|null) (Optional*)* :It is the string specifying script version number, if it has one, which is added to the URL as a query string for cache busting purposes. If version is set to false, a version number is automatically added equal to current installed WordPress version. If set to null, no version is added. Default value: false
5. **$in\_footer** (bool) (Optional): Whether to enqueue the script before </body> instead of in the <head>. Default 'false'. Default value: false

**To Enqueue a CSS stylesheet following parameters are used.**

# wp\_enqueue\_style( *string* $handle, *string* $src = '', *string[]* $deps = array(), *string|bool|null* $ver = false, *string* $media = 'all' )

1. **$handle** (string) (Required): Name of the stylesheet. It should be unique.
2. **$src** (string) (Optional): Full URL of the stylesheet, or path of the stylesheet relative to the WordPress root directory. Default value: ''
3. **$deps** (string[]) (Optional) : It is an array of registered stylesheet. Handling of the stylesheet depends on it. Default value: array()
4. **$ver** (string|bool|null) (Optional): String specifying stylesheet version number, if it has one, which is added to the URL as a query string for cache busting purposes. If version is set to false, a version number is automatically added equal to current installed WordPress version. If set to null, no version is added. Default value: false
5. **$media** (string) (Optional*)*: It is the media for which this stylesheet has been defined. It accepts media types like 'all', 'print' and 'screen', or media queries like '(orientation: portrait)' and '(max-width: 640px)'. Default value: 'all'