

Open Source Programming Digital Assessment-2

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GitHub link for DA-2 :

<https://github.com/tanmay140/Digital-Assignmnet-2>

Introduction to WordPress:

WordPress is an online, open source website creation tool written in PHP. But in non-geek speak, it's probably the easiest and most powerful blogging and website content management system (or CMS) in existence today.

WordPress is highly customizable, and has literally thousands of plugin pieces of software so you can use your site for just about anything. If you're ever curious about who uses WordPress, head on over to the WordPress site showcase and you'll be impressed by the number of well-known sites and famous people using WordPress to power their websites.

You're in good company if you use WordPress to publish on the web. Many famous blogs, news outlets, music sites, Fortune 500 companies and celebrities are using WordPress. For example, famous blogs like Mashable and TechCrunch are both on WordPress. News outlets like The New York Times' blogs and CNN's on-air personality blogs all use WordPress,

too. That should tell you something about how powerful and safe it is to use.

What is a CMS?

- Web Content Management System
- Create/manage HTML & images
- Authoring tools
- Templates for presentation

Why use WordPress?

- Free, Open Source.
- Fantastic community
- 46,750 Free Plugins on WordPress.org
- 4,123 Free Themes on WordPress.org
- Search Engine Friendly
- Tons of online learning resources
- Easy to use and extend

WordPress can be used for:

- Blog
- Business website
- Portfolio

- News Website
- Community
- eCommerce Website
- eLearning

Even if a user is not a developer he can use WordPress as:

- No programming knowledge necessary.
- Easy to use and understand.
- Thousands of plugins and extensions.
- Ready-to-use themes to style your website.
- Tons of online documentation & help.

PROS of choosing WordPress

- **Software is free:** How many times have you been given something for free that is fully functional and ready to use? And if you want to upscale your site a little with premium themes and plugins, you're still going to save tons of money over what you would pay for a custom designed site.
- **Easy to Use:** If you can send an email, use Microsoft Word, or set up a Facebook account, then you can use WordPress. In other words, if you've already used a computer, chances are you are already skilled enough for the WordPress basics.

And even better, it's hard to mess it up. You can easily add and delete pages and posts without accidentally messing up the overall design of your site.

- **Very Large Community Support** **WordPress** isn't just a software, it has become a community. Some might even say a movement. They are informal ,community -organized events put together by other WordPress users just like you. You'll meet people of all backgrounds, ages, and nationalities at WordCamps . Plus, there are thousands of people and hundreds of resource and tutorial sites set up just to help you with your WordPress site.
- **SEO Advantages & SEO Friendly** **Search engines** love sites that are easy to index and that have frequently updated content. That's where blogging comes in to play so nicely. Just by running your business or personal site and communicating with your readers in a way that's natural to you, you'll be producing fresh , relevant content the search engines can't wait to get a hold of.
- **Plugins:** There are over 54,000 mostly free and paid plugins available to WordPress users. These plugins allow you to customize and enhance any WordPress site. If you need to make specific changes to the functionality on your site, chances are there is a plugin to do just that. We wrote a guide on how to assess the quality of these plugins to ensure they don't hurt your site's security.

CONS of using WordPress:

- **Updates:** Installing updates is important to the health of your WordPress site, but can be a nuisance if not done thoughtfully. Premium WordPress themes are updated and improved often. These updates are important to maintain proper security on WordPress websites. Updates may bring some small problems to a website in which case you may have to revert to an older WordPress state.
- **Vulnerability:** Being an open-source platform, WordPress is attractive to potential hackers. To mitigate this risk, again, it is always good to be knowledgeable in choosing plugins and themes for your WordPress site; always assess the quality of a WordPress plugin and install with caution.
- **Speed:** Certain themes contain a lot of unnecessary generic code. This can decrease the speed of the site and cause slow load times. Without prior WordPress experience it can be hard to understand what code you need and what code you can do without.
- **Customization:** We all hesitate to invest in customization, as it can get expensive. WordPress is a very flexible tool unlike many of the other drag and drop web builder tools out there. However, if you aren't a WordPress expert and you didn't have one develop your site, then this can be an

issue. As mentioned above, updating core WordPress may cause some problems on your site. These updates may break up some of the functionality and if you don't have best practices employed when designing the site, this can become an issue.

History of WordPress(2003-2020):

In 2003, two users of b2/cafeblog, Matt Mullenweg and Mike Little, decided to build a new platform on top of b2/cafeblog.

- On **May 27, 2003**, Matt announced the availability of the first version of WordPress. It was well received by the community. It was based on b2 Cafeblog with significant improvements. The first version of WordPress included a new admin interface, new templates, and generated XHTML 1.1 compliant templates. The post editor looked like this:

WordPress

Post / Edit Team Options Categories Template Manage Links My Profile View site Logout

Post / Edit

Title: Category : Post Status: Comments: Pings: Post Password:

General Publish Open Open

Excerpt:

Post:

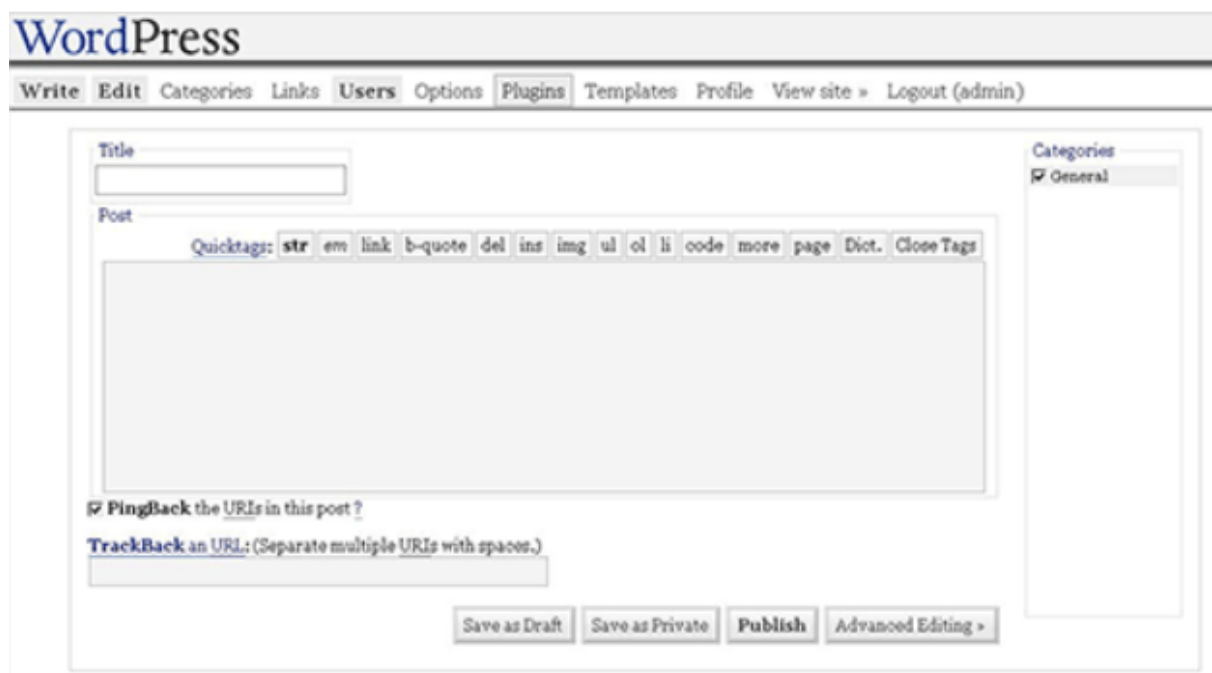
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☒ PingBack the URLs in this post

Blog this!

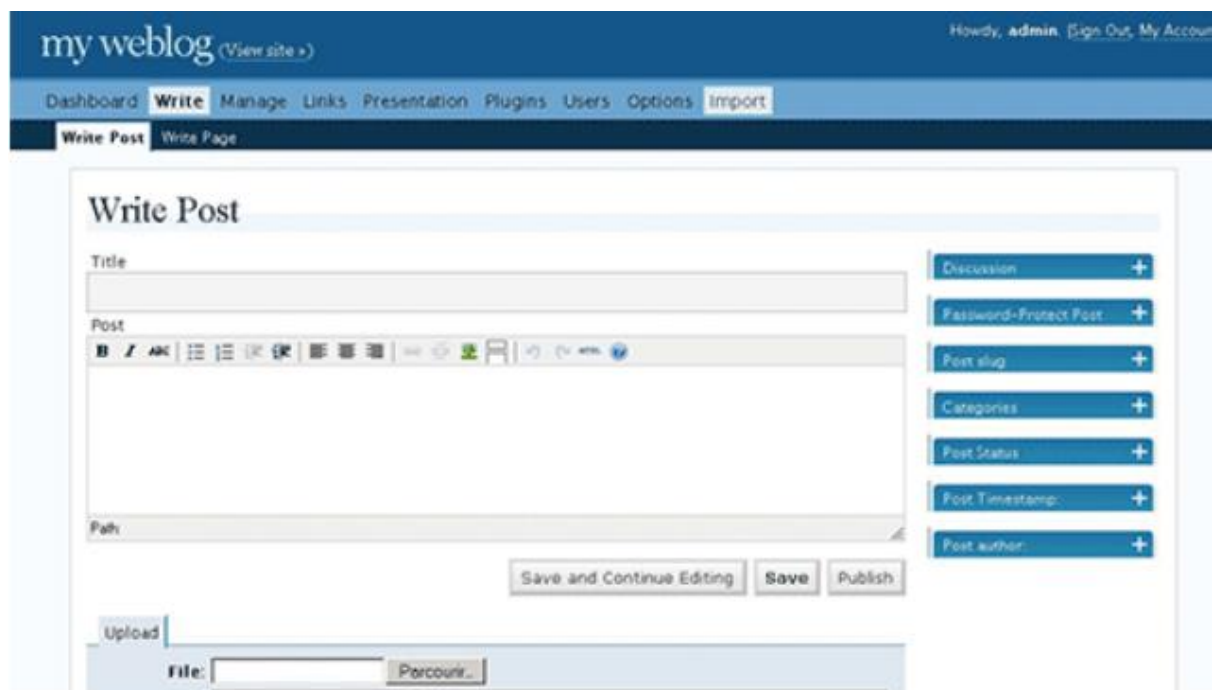
- **In May 2004**, version 1.2 of WordPress came with plugin architecture. This enabled users and developers to extend the functionality of WordPress by writing their own plugins and sharing them with rest of the community.

WordPress 1.2, presented itself as an ambitious project offering users a mature, stable, easy and flexible platform with features that rivalled their proprietary competitors. The adaption rate of WordPress skyrocketed with this release.

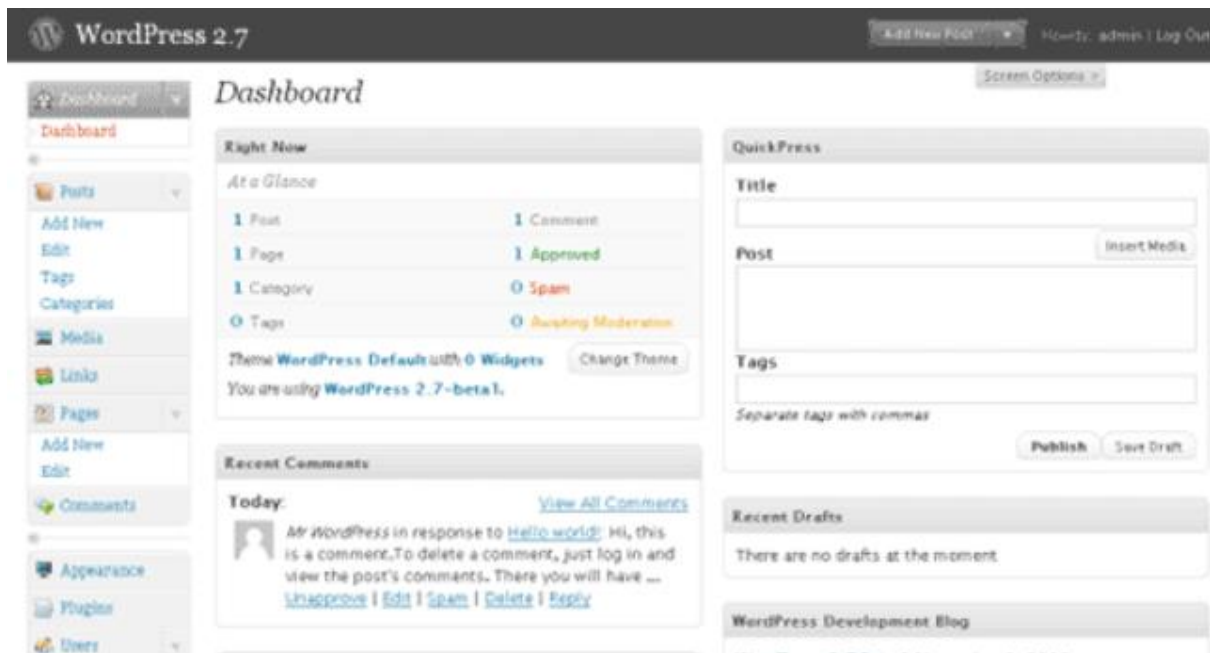


- **In February 2005**, WordPress 1.5 came with Pages, comment moderation tools, new default theme Kubrick, and a completely new Theme System.

- In **December 2005**, WordPress 2.0 was released with a new admin dashboard. This new admin area was a complete overhaul of the administration screens in WordPress. It used JavaScript and DHTML to make a better user interface where users did not need to load a page to perform some simple tasks. Users were now able to add categories and tags to posts without leaving the post editor or delete comments without reloading the comments screen.



- **On March 1, 2006**, Automattic, the company founded by WordPress co-founder Matt Mullenweg, filed the trademark registration for WordPress and WordPress logo.
- **In 2008**, a web design company called Happy Cog joined the WordPress project to help design a new WordPress admin interface. A usability study was conducted to design the admin UI.



- **On June 17, 2010**, WordPress 3.0 was released. It was a major step towards WordPress as CMS. This release introduced several features such as custom post types, better custom taxonomies, custom backgrounds, header, menus, contextual help on admin screens, etc. WordPress MU project was merged into WordPress core to create Multisite networks.
- In **2011**, Post formats and admin bar made their way into WordPress. Around that time, some really cool WordPress plugins were building powerful ecommerce platforms on top of WordPress. These enabled WordPress users to create online stores and build powerful ecommerce websites using WordPress.

- In **2012**, theme customizer, theme previews, and new media manager were introduced. These features tremendously helped new users in creating image galleries and previewing themes before they change to a new theme.
- In **2013**, WordPress 3.7 came with the new automatic updates feature that allowed WordPress to automatically update your site's software for minor releases. The automatic updates feature is very similar to what Google Chrome browser does. Several users didn't like the feature, so we wrote a tutorial on how to disable automatic updates.

By this time WordPress had already become the most popular CMS in the world.

In **December 2013**, WordPress 3.8 was released which introduced WP6, the new WordPress admin interface. This new interface was responsive and was aimed to provide a better user experience to users, on any device or screen size.



- **On April 16, 2014, WordPress 3.9** was released. It focused on improving the WordPress visual post editor. Images can now be dragged and dropped directly into the post editor. Users are now able to edit images right inside the editor and see their gallery previews inside the editor. WordPress 3.9 also introduced live widget previews, audio playlists, and several other enhancements.
- **2014** was also the first year when non-English downloads for WordPress surpassed English downloads.
- In **2015, WordPress 4.2, 4.3, and 4.4** were released. These releases focused on improved localization, emoji support, theme customizer, and laying down infrastructure for the WordPress REST API.
In the same year, **WooCommerce**, the most popular **WordPress eCommerce plugin** was acquired by Automattic (the company founded by WordPress co-founder Matt Mullenweg).

- **In 2016, WordPress 4.5, 4.6, and 4.7** were released. Each release introduced some new features and improvements. Most notable changes during the year were streamlined updates for plugins and themes, content recovery by using browser storage, and custom css feature for theme customizer. By the end of the year, WordPress.org announced actively supporting HTTPs
- **In 2017, WordPress 4.8 and 4.9** were released. These releases brought several new default widgets to add audio, video, images, gallery, rich text, and HTML. These releases also laid the groundwork for the new WordPress block editor.
- **In 2018, WordPress 5.0** was released with a brand new editing experience. The new WordPress block editor project was codenamed Gutenberg.

Comparison between WordPress VS Drupal VS Joomla VS Blogger (Google Blogger)

	WordPress	Drupal	Joomla	Blogger
Cost of web Hosting	Same ~\$3 per month	Same ~\$3 per month	Same ~\$3 per month	Free

Cost of Domain name	Same ~\$15 per year	Same ~\$15 per year	Same ~\$15 per year	Same ~\$15 per year
Setup	You need to install WordPress on your web hosting	At minimum you need to install a web server, SQL server and PHP.	Joomla don't usually have those custom installation processes, meaning that you'll have to do most things on your own.	Only requires an account. You can have multiple blogs under the same account.
Software updates	Automatic minor WordPress updates. Manual Theme and plugins required.			Automatic Blogger updates
Cost of plugins	\$0-\$200	\$0-\$100	\$0-\$70	~
Cost of themes	\$0-\$250	\$0-\$80	\$0-\$200	~
Ease of use	Very Easy to use and is of beginner level.	It is more developer centric and requires the	It is more developer centric and requires the	Very Easy to use and is of

		knowledge of HTML and PHP	knowledge of HTML and PHP	beginner level.
Popularity	35.8%	1.6%	2.4%	0.9%
Security	As it is the main target of attack, high vulnerability.	Less vulnerability as compared to WordPress.	Less vulnerability as compared to WordPress.	Less vulnerability as compared to WordPress.
Customization	Highly customizable. Have thousands of themes and plugins to choose from.	Less customizable than WordPress. Add-ons are called extension.	Less customizable than WordPress. Add-ons are called modules	Less customizable than WordPress.
Choice of design	Highly modern and optimized design	It is a bit anarchic	It is a bit anarchic	Modern design

Support and Community	WordPress has their support section on the official website. You'll find user guides there, documentation, and community portals.	Drupal has a section for documentation, support, community portal, and various tutorials and user guides.	Joomla has a couple of sections on the official website where you can find various forms of help.	Blogger has a Google support in which there are multiple solution related to the queries chosen
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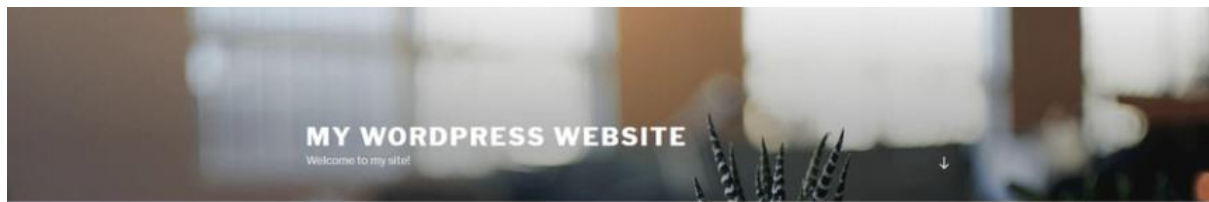
Themes and Plugins of WordPress

WordPress Themes:

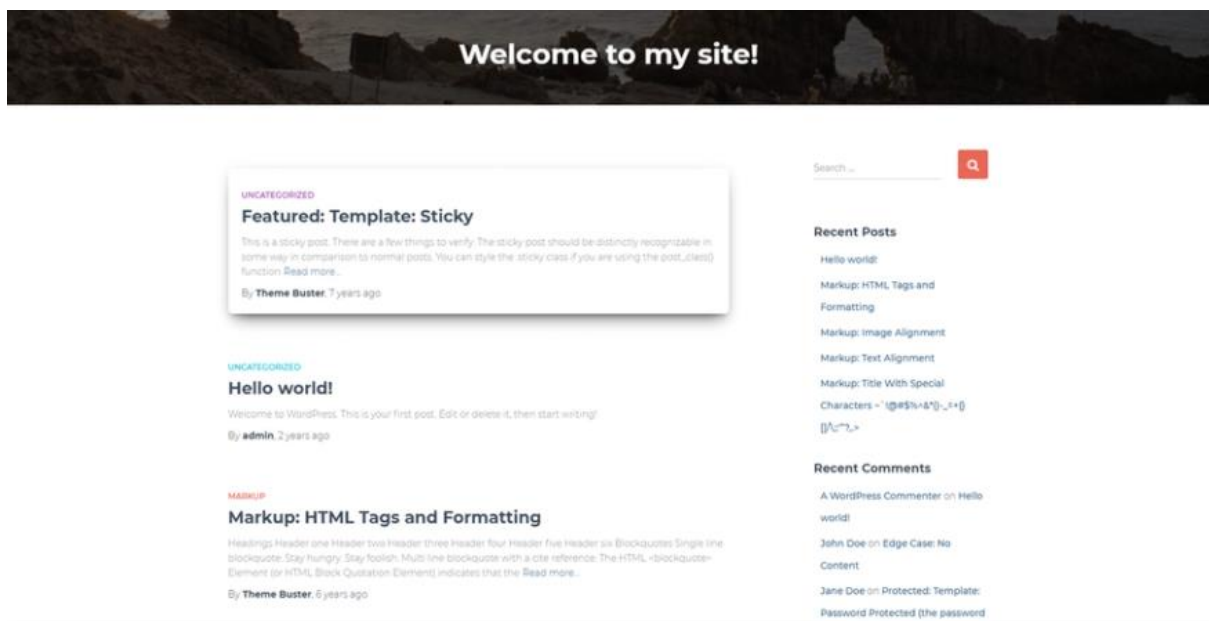
WordPress themes are designed to make large-scale changes to your website's appearance. This includes its design, layout, colors, navigation, and everything else involved in its overall look.

Your WordPress site can only have one theme active at a time, while you can use **as many plugins as you want**.

Most WordPress sites start out with a default theme installed, which is serviceable but looks very basic:



However, by installing another theme, you can radically transform the way your site is laid out. For instance, here's the same site pictured above, using [the Hestia theme](#) instead of the default [Twenty Seventeen theme](#):



Some themes, like Hestia, are ‘multipurpose’ in nature. This means they include customizations and options for a wide range of site types. Others are ‘niche’ themes, designed for a specific purpose (such as **business themes** or **photography themes**). Either way, you can almost always **customize aspects of your chosen theme**, such as its **color scheme** and even **sidebar placements**.

Some Themes are:

- Thesis
- Woo Themes
- Elegant Themes
- Remix
- Theme Forest (considering)

Others mentioned by the group:

- Sandbox
- Builder – iThemes – Developer licenses
- Carrington
- Headway
- Artisteer
- Theme Hybrid

WordPress Plugins:

While themes alter your website’s design, plugins are meant to **add new features and functionalities**. In simpler terms, themes affect what your site looks like, and plugins affect what it can do. This means plugins

can't be as easily summarized, since there are solutions for just about any functionality you can imagine.

Some plugins focus on adding one specific feature to your site. [Contact Form 7](#) is a perfect example, letting you build customizable forms and embed them on your pages.

Other plugins, such as [Jetpack](#) or [Wordfence](#), provide a variety of helpful tools and functionalities. No matter what you'd like your site to do, [there's a plugin](#) to help get the job done.

Plugins

- pageMash
- W3 Total Cache
- WP Security Scan
- Backup WordPress
- DrainHole
- Topsy
- Wishlist Member

Overlap between WordPress plugins vs themes

So far, the distinction between WordPress plugins vs themes seems pretty clear. In theory, they're two different types of add-ons with unique purposes. However, in practice, there *is* some overlap.

The most common example is themes that do more than just alter your site's appearance. Although visual style is still the focus of almost any theme, some will also include the types of features that *could* be added by a plugin instead.

For instance, many themes include '[page builders](#)' – drag-and-drop editors that help you design more complex content.

This is also an issue you'll encounter when looking to build a very specific type of website. For instance, let's say you want to create an online knowledge base. You could use a theme like KnowAll or a plugin such as Knowledge Base for Documents and FAQs, and either would provide you with the features you'll need.

How to decide whether you need a theme or a plugin

In most cases, it's easy to figure out whether you should go looking for a theme or a plugin. If you want to change your site's look and layout, a new theme is what you

want. On the other hand, if you're in need of a specific feature, plugins are typically your best bet.

Fortunately, in most cases this choice is also pretty simple. Themes have a larger overall effect on your site, and changing your site's theme can be a hassle you won't want to go through very often. Therefore, it's best to select your theme primarily based on the look and layout you want, rather than the features it includes. Then, you can add whatever additional functionality you require using plugins.

The exception would be if you need to transform your site into something a little more out of the ordinary. For example, if you want to create a wiki, forum, or knowledge base, your job may be easier if you can find a theme providing both the overall look you want *and* the elements needed to make your site function correctly.

The best way to determine what kind of tools you need is to spend some time exploring what's available. As such, we'll wrap up by pointing you towards the **WordPress Plugin Directory** and the **WordPress Theme Director**.

Both contain thousands of diverse and vetted add-ons for your site. If you're looking for something special, you may also want to take a look at the premium options

on **ThemeForest** and **CodeCanyon**, and those in our own directory.

Conclusion

In most cases, the difference between WordPress plugins vs themes is pretty clear. Themes alter your site's layout and visual style, while plugins add all kinds of features and functionality. While there's some overlap in those definitions, it's best to [choose a theme](#) based on how you want your site to look, and then [add on features via plugins](#) as needed.