



Fundamental notions of programming (NFP)

Class 12

WordPress

As you already know, WordPress is the most popular Content Management System (CMS). Free to install, deploy, and upgrade as it is an open source software, it is used upon approximately 75 million websites. It offers thousands of different plugins and various templates controlled by a user-friendly interface, which reduces production costs.

Many believe WordPress to be limited to a blogging platform, which is wrong. Although it started as a blogging platform, WordPress has evolved into a powerful and easy to use website builder and content management system (CMS).

Why choosing WordPress?

Popularity :

WordPress being the most popular CMS in the world, it is well known and mastered by more people and requires less staff training when starting a new website project.

It is free :

Being an open source software, WordPress is free to download, install, use and modify, build upon, and re-distribute in any way you like without having to pay fees (there might however be costs involved).

Customizable :

Easy to use and fully customizable with many various themes and plugins available, WordPress is used by people having little or no prior knowledge of website design or programming. For front-end developers and web development agencies, designs are made from scratch, building themes according to clients' needs.

Multi-user :

WordPress makes it easy to define different access privileges according to the resources' roles.

- **Super Admin :**
Has total access to website features.
- **Administrator :**
Has access to administration features.
- **Editor :**
Can publish their own posts and approve or remove the posts of others users.
- **Author :**
Can manage and publish their own posts.
- **Contributor :**
Can manage and write their own posts but with administrator's approval.
- **Subscriber :**
Can view and edit their own profile.

Wordpress.org vs Wordpress.com

WordPress.com and WordPress.org are two very different platforms often confused by beginners.

Wordpress.org

- The real WordPress. Open source and 100% free to download and install.
- Self-hosted. All that's needed is a domain name and web hosting.
- You own your website and all its data and are in full control (no internal rules and regulations like in different communities).
- You can customize your website's design any way wanted with custom plugins and themes, backend codes and database access.
- You can operate an e-commerce.
- You can use Google analytics.
- You use your own domain name and use your own branding.
- You are responsible for maintenance, software updates and spam control.

Wordpress.com

- No software to download and install. Entirely free, but some functionality are to be paid for.
- Hosted on wordpress.com servers. You don't need to take care of hosting.
- Requires an account and a login to create a website. Therefore you must comply to the website's regulations.
- No plugins or themes uploads allowed, no backend codes, no database access.
- Impossible to operate an e-commerce
- Built-in limited stats module unless on a business plan (299\$/year).
- Free plan uses a wordpress subdomain (e.g. : myblog.wordpress.com) and you need to pay to remove wordpress branding.
- You are not responsible for any maintenance.

WordPress on local machines for development

Working with WordPress on your computer makes it possible for you to test features and the overall website before putting the site online. Both experts and beginners prefer to work on a local version to avoid having to transfer files online every time a test is necessary and also to avoid jeopardize a live website.

A WordPress installation on your computer is referred to as *local server* or *localhost*, which means in computer networking language «this computer». When, typing a URL to a browser's address bar, you are connecting to a server asking to see a specific page. When typing «localhost», you are telling the browser the specific page you are looking for is located on this very computer. If the computer in use runs a web server software such as Apache, the browser will show an internal page known as the localhost. Just like every computer connected to the Internet, the localhost page has an IP address, typically 127.0.0.1.

Although, the computer you are using must be seen as a web server. In order for this to happen, a virtual web server software must be installed. Different software may be installed such as WAMP, LAMP, or MAMP. Of course, this doesn't turn the computer into a web server and you will still be the only one able to see the pages you are working on.

MAMP local server

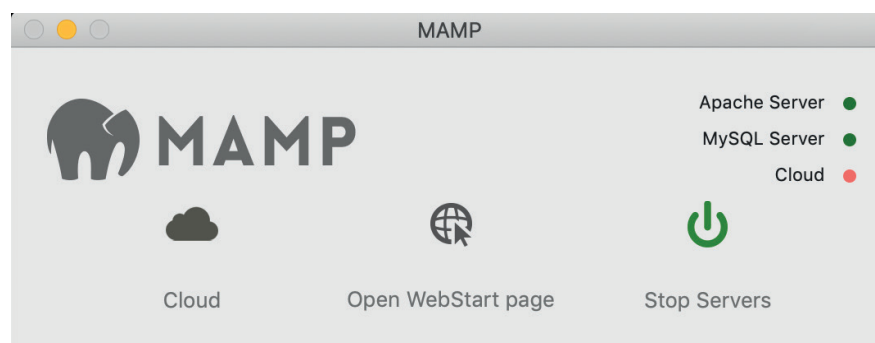
Standing for *Macintosh, Apache, MySQL, and PHP*, MAMP is an application available for MAC and Windows which simulates a local PHP and MySQL server, making it possible to use PHP and MySQL offline, which means everything necessary to run, develop and test WordPress.

To start MAMP local server, launch the application and click «Start Servers» from the main MAMP screen. When ready, it should bring you automatically to the WebStart page where you just need to click on «MY WEBSITE» which will display the list of what is hosted by the virtual server.

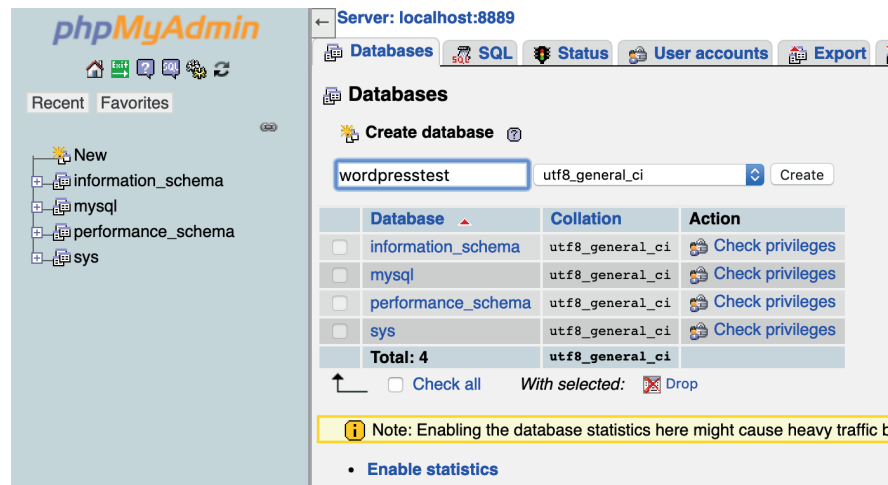
Installing and using Wordpress Locally

You first need to download the most recent version of WordPress from wordpress.org. Unzip the file and transfer all those from the WordPress folder to the MAMP document root (usually a folder named `htdocs` within the MAMP folder).

Run MAMP. The start page should open in your default web browser (If not, click on «Open start page» in the MAMP window) and select «phpMyAdmin» from the webpage.



Under «Create new database», write a database name and press «Create». You don't have to choose an option for «collation» as it will be assigned automatically by MySQL when the database tables are created.



Finally, run WordPress installation, then enter the following information into the database setup form:

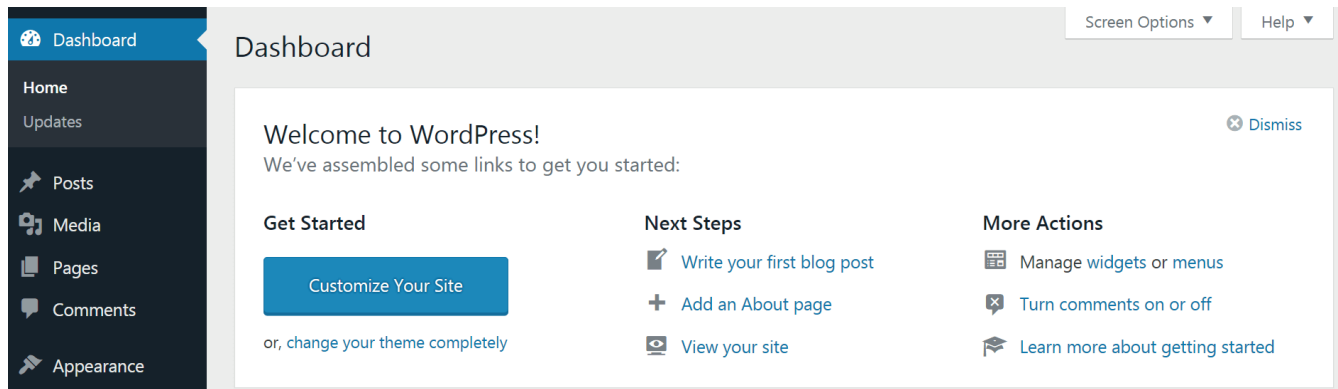
- Database Name : wordpress
- User Name (database) : root
- Password (database) : root
- Database Host/server : localhost
- Table Prefix : wp_

Note

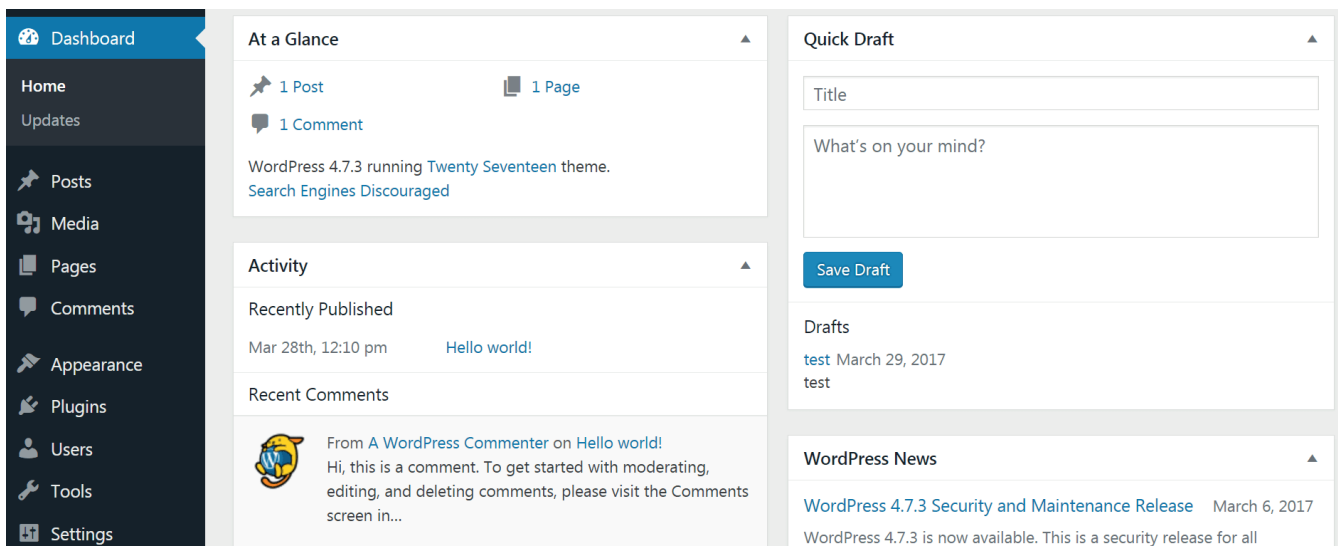
The default Database name is "Wordpress", you need to change the database name to match the name you entered into PHP Admin.

The WordPress dashboard

The WordPress Dashboard is the first screen to show once logging into a site and viewing its back-end. It consists into a hub area with shortcuts and basic information about the site. A box labeled « Welcome to WordPress » will show up upon first visit :



The dashboard makes it possible to access important sections of the back end that let you customize your site's appearance, create posts and pages, etc. (also accessible from the main menu on the left). It can also shows recent activity on your site under (At a glance tab), start a new blog post (Quick Draft box), or read up on the latest developments (WordPress News)



Themes and plugins

Appearance section contains themes and plugins. These are tools modifying the visual aspect of the site as well as its functionalities. Themes affect the visual aspect and layout of the site, and plugins can add various features.

Themes tab offers various design and layouts to choose from. The customize tab makes it possible to make personal adjustments.

The plugins tab makes it possible to install new plugins by choosing «Add New» (you can also manage existing plugins). The *Akismet* anti-spam plugin comes pre-installed with WordPress. Simply activate (some plugins require additional setup steps).

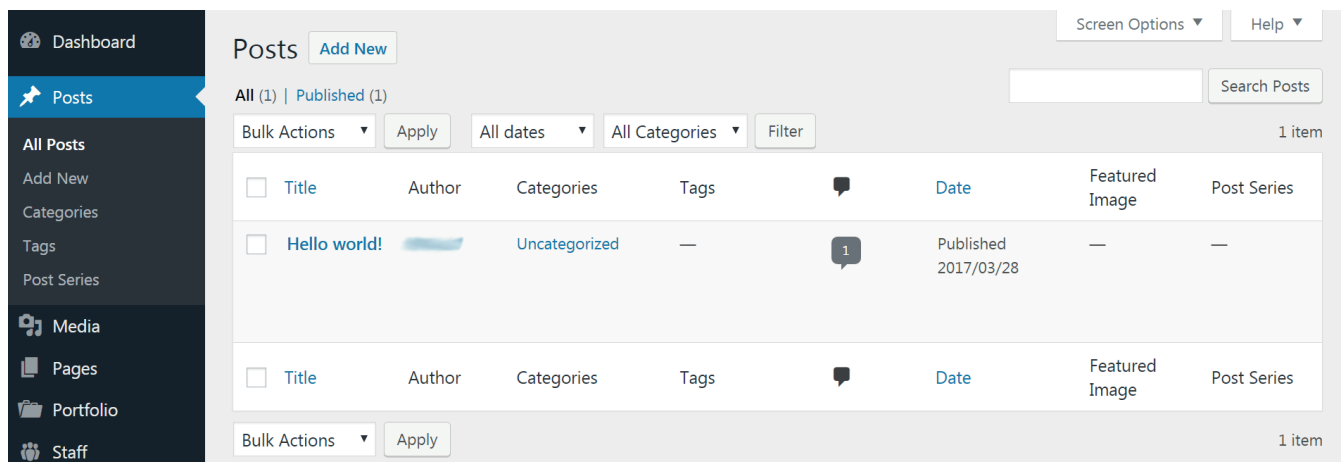
The screenshot shows the WordPress 'Themes' management page. On the left is a sidebar menu with options: Dashboard, Posts, Media, Pages, Portfolio, Staff, Testimonials, Comments, Appearance (selected), Themes, Customize, Widgets, Menus, Install Plugins, Editor, and Plugins. The main content area is titled 'Themes' with a count of 4. It includes an 'Add New' button and a search bar labeled 'Search installed themes...'. The central display shows the 'Total' theme as the active theme, with a 'Customize' button. To the right, there are preview cards for 'Twenty Fifteen' and 'Twenty Sixteen' themes, each showing a sample layout with text and images.

The screenshot shows the WordPress 'Plugins' management page. The sidebar menu is identical to the previous screenshot, with 'Plugins' now selected. The main content area is titled 'Plugins' with an 'Add New' button. It includes a search bar labeled 'Search installed plugins...'. Below the search bar, there are filters for 'All (2)', 'Inactive (2)', and 'Recently Active (1)'. A 'Bulk Actions' dropdown menu is set to 'Apply'. The table of installed plugins shows two items: 'Akismet Anti-Spam' and 'Hello Dolly'. Each entry has a checkbox, a name, a description, and links to 'Activate', 'Edit', and 'Delete'. The 'Akismet Anti-Spam' plugin description mentions it is used by millions and provides a link to 'View details'. The 'Hello Dolly' plugin description mentions it symbolizes hope and enthusiasm and also has a 'View details' link. At the bottom, there is another 'Bulk Actions' dropdown menu set to 'Apply' and a count of '2 items'.

Creating content

Two main types of content can be created in WordPress: **posts** and **pages**. Posts are blog entries which are archived and categorized, while pages are static sections of your site such as a *Home page* or *About page*.

To create blog posts, choose the *Posts* tab where you can start a new post by selecting **Add New**. It's also possible to sort, edit, and delete older posts, and categories and tags can be created making it possible to navigate to given sub-sections.



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