

# **TRANSACTIONAL WEB APPLICATIONS DEVELOPMENT**

**E.G. WORDPRESS DEVELOPMENT**

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# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

## **MODULE I**

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

What is a Content Management System (CMS)?

A Content Management System is a site with a back end where you can add, update and delete the content

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

## **Why Content Management System (CMS)?**

- Easy to manage the website
- No programming skills (always) required
- Increase your Organic reach (SEO)
- Focus on your Core Business
- Flexibility in terms of Marketing Strategies

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

**EXAMPLES OF  
CONTENT  
MANAGEMENT  
SYSTEMS (CMS)**

2020-02-03



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# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

## History of CMSs

- 1982 - Ted Smith founded FileNet with Basic 4 – FileNet is the first CMS
- 1995 - Ross Garber and Neil Webber founded Vignette Corporation
- From 1995 – 1999. Many CMS began to appear - Interwoven (1995), Documentum (1996), FatWire (1996), Future Tense (1996), Inso (1996), and EPiServer (1997).
- At the beginning of 2000 – Open Source CMS and Frameworks began to appear. Open CMS, PHP-Nuke, Mambo, WordPress, Drupal, Plone, and Joomla all offered free alternatives for content management.
- 2003 - Matt Mullenweg and Mike Little created WordPress from the b2 codebase

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

Wordpress is the most popular CMS for Website development. In this course, we will focus more on WordPress



# SOME STATISTICS ON WORDPRESS

## **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**



35% of all the active websites uses WordPress



62% of the market for websites based on CMS



Top rated companies trust WordPress

Sources : <https://www.codeinwp.com/blog/wordpress-statistics/>

# OPEN-SOURCE SOFTWARE AND COMMUNITY OF DEVELOPERS

## Bloomberg

facebook  
newsroom



## Top Companies using WordPress

## BBC AMERICA

**WordPress is available in two versions: [wordpress.org](https://wordpress.org) and [wordpress.com](https://wordpress.com). both uses the same features but have different purposes. let look at the differences between both.**


# CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS

## WORDPRESS.ORG

- Need a Web Hosting and Domain Name
- More Customization freedom
- Pay for a start (Hosting, domain Name)
- More flexible in terms of features
- Free to monetize your site

## WORDPRESS.COM

- No need for hosting – Website hosted by WordPress
- 100% Free Blog or WordPress for the basic plan
- Limited in terms of Customization
- Less flexibility and Freedom
- No monetization option

A thick, wavy yellow line runs vertically along the left side of the slide, starting from the top and extending to the bottom. It has an irregular, hand-drawn appearance with a white outline.

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

**WHAT IS AN OPEN-  
SOURCE SOFTWARE?**

**OPEN-SOURCE SOFTWARE IS  
SOFTWARE WHERE YOU HAVE  
ACCESS TO ALL THE SOURCE CODE  
FOR EDIT. MOST OF THE OPEN-  
SOURCE SOFTWARE ONLINE IS  
FREE.**

**CMS GENERALITIES AND A BRIEF  
PRESENTATION OF WORDPRESS**

# CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS

Examples of open-sources software

- CMS: WordPress, Joomla, Drupal, Moodle, Prestashop, Magento
- Framework: Laravel, Symfony, CodeIgniter



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# CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS

popular online discussion groups for developers

- Stack Overflow - <https://stackoverflow.com/> - Known for all types of discussions on programming.
- Reddit - <https://www.reddit.com/r/programming/>
- Code Project - <https://www.codeproject.com/>
- Specific tools Forum – Each Open Source tool has its forum. For example – WordPress official forum is <https://wordpress.org/support/forums/>
- GitHub - <https://github.com/>. It is an online repository. On GitHub, you will find a public pool and discussions on specific programming topics.



# CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS

Differences between WordPress, Joomla, Drupal

- WordPress is open-source and free software
- It is easy to use even for non-developers or web beginners.
- WordPress is the best in terms of flexibility.
- Most of the reputable companies such as BBC, Bloomberg, BBC America, Facebook Newsroom uses WordPress
- The software is always in development and has the support of a large community of expert developers.

# **OFFICIAL WORDPRESS SITES AND RESOURCES FOR DEVELOPERS**

## **OFFICIAL WORDPRESS SITE**

- **WORDPRESS OFFICIAL FORUM -**  
**[HTTPS://WORDPRESS.ORG/SUPPORT/FORUMS/](https://wordpress.org/support/forums/)**
- **WORDPRESS DOCUMENTATION -**  
**[HTTPS://WORDPRESS.ORG/SUPPORT/](https://wordpress.org/support/)**
- **DEVELOPERS RESOURCES -**  
**[HTTPS://DEVELOPER.WORDPRESS.ORG/](https://developer.wordpress.org/)**
- **WORDPRESS CODEX - [HTTPS://CODEX.WORDPRESS.ORG/](https://codex.wordpress.org/)**

# **OFFICIAL WORDPRESS SITES AND RESOURCES FOR DEVELOPERS**

## **OTHER RESOURCES**

- **STACK EXCHANGE WORDPRESS FORUM**  
**([HTTPS://WORDPRESS.STACKEXCHANGE.COM/](https://wordpress.stackexchange.com/))**
- **WPBEGINNER**  
**([HTTPS://WWW.WPBEGINNER.COM/](https://www.wpbeginner.com/))**

# **OFFICIAL WORDPRESS SITES AND RESOURCES FOR DEVELOPERS**

## **RECOMMENDED BOOKS**

**WORDPRESS 5 COMPLETE: BUILD  
BEAUTIFUL AND FEATURE-RICH  
WEBSITES FROM SCRATCH, 7TH EDITION,  
EDITION 7**

# CORE FEATURES OF WORDPRESS

**WordPress, by default, has some features that can enable you to build a basic and functional website. However, to have a complete website, with much more functionalities, you need to use third-party resources.**

# CORE FEATURES OF WORDPRESS

The screenshot displays the WordPress Dashboard for a user named 'Prositeweb Inc'. The interface includes a sidebar with navigation links: Dashboard, Home, Updates, Posts, Media, Pages, Comments, Appearance, Plugins, Users, Tools, Settings, and a Collapse menu button. The main content area is titled 'Dashboard' and features a 'Welcome to WordPress!' message with a 'Dismiss' button. Below this, there are three sections: 'Get Started' with a 'Customize Your Site' button and a link to 'change your theme completely'; 'Next Steps' with links to 'Edit your front page', 'Add additional pages', and 'View your site'; and 'More Actions' with links to 'Manage widgets', 'Manage menus', 'Turn comments on or off', and 'Learn more about getting started'. At the bottom, there are two widgets: 'WordPress Events and News' with a link to 'Attend an upcoming event near you' and a list of events, and 'At a Glance' showing '1 Post', '1 Comment', and '2 Pages'. The footer of the dashboard indicates 'WordPress 5.3.2 running Twenty Twenty theme'.

2020-02-03

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Prositeweb Inc 0 + New

Dashboard

Welcome to WordPress!  
We have assembled some links to get you started:

Get Started

Customize Your Site

Next Steps

- Edit your front page
- Add additional pages
- View your site

More Actions

- Manage
- Manage
- Turn on
- Learn

or, [change your theme completely](#).

WordPress Events and News

Attend an upcoming event near you.

There aren't any events scheduled near you at the moment. Would you like to [organize one?](#)

WordCamp Coming to Halifax, Nova Scotia!

WPTavern: Join the Future of WordPress Themes Conversation: Theme Review Team to Hold Biweekly Discussions

WPTavern: Native Lazy Loading Support Coming to WordPress

WPTavern: XML Sitemaps Feature Plugin Open for Testing and Feedback

[Meetups](#) | [WordCamps](#) | [News](#)

At a Glance

- 1 Post
- 1 Comment

WordPress 5.3.2 running [Twenty Twenty](#) theme

Activity

Recently Published

2020-02-03 10 h 43 min Bonjour tout le monde !

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# CORE FEATURES OF WORDPRESS

## Dashboard

The WordPress Dashboard provides a navigation menu that contains some menu options such as posts, media library, pages, comments, appearance options, plugins, users, tools and settings on the left side.

Dashboard
Posts
All Posts
Add New
Categories
Tags
Media
Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu

Posts
Add New

All (1) | Published (1)

Search Posts

Bulk Actions
Apply
All dates
All Categories
Filter
1 item

<input type="checkbox"/>	Title	Author	Categories	Tags		Date
<input type="checkbox"/>	Bonjour tout le monde !	NGUNTE Possi Gilblas	Non classé	—	1	Published 2019/04/04
<input type="checkbox"/>	Title	Author	Categories	Tags		Date

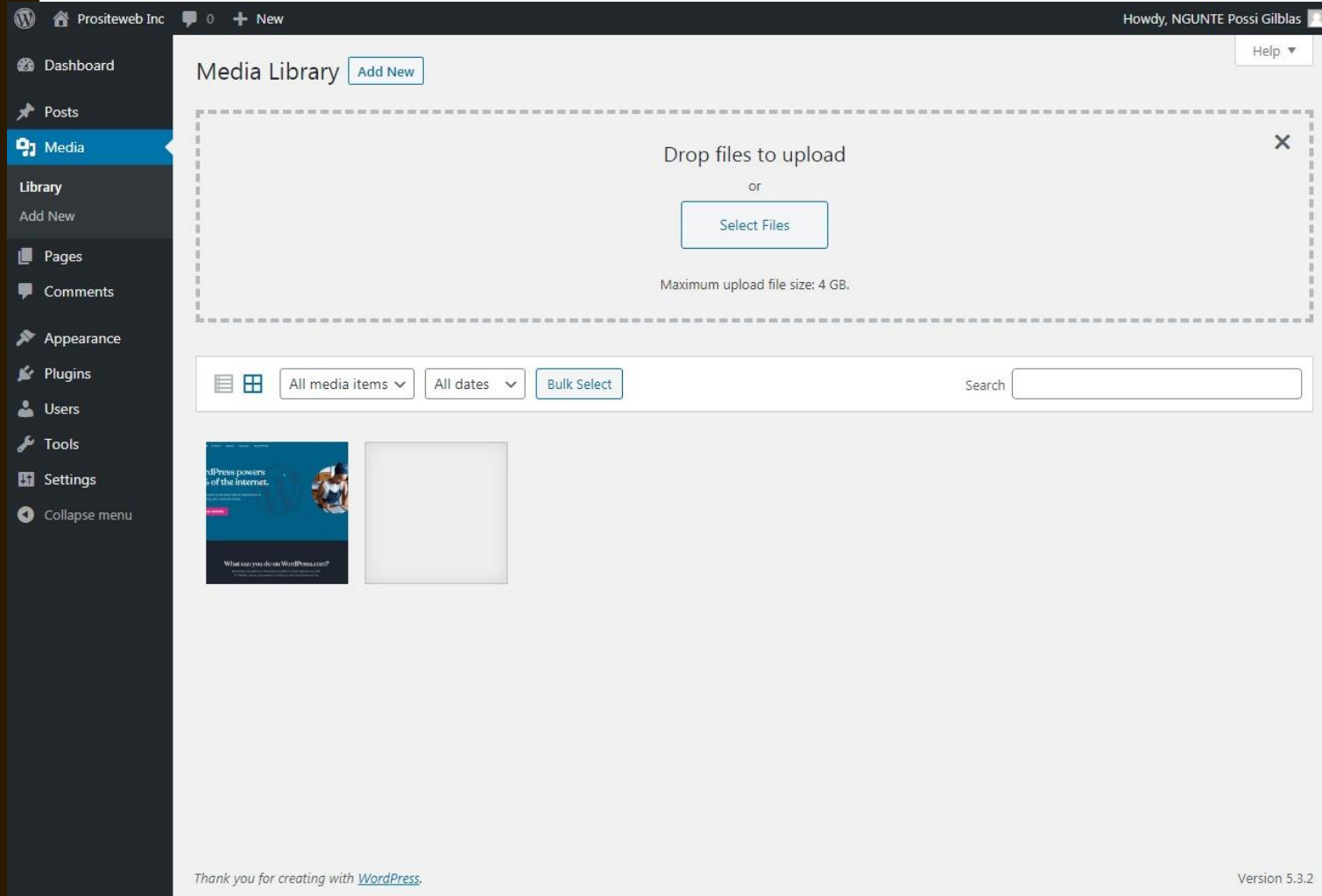
Bulk Actions
Apply
1 item

# CORE FEATURES OF WORDPRESS

## Posts

Posts are the basis for blogging. They are used for adding news (articles). The most recent posts appear on top.





# CORE FEATURES OF WORDPRESS

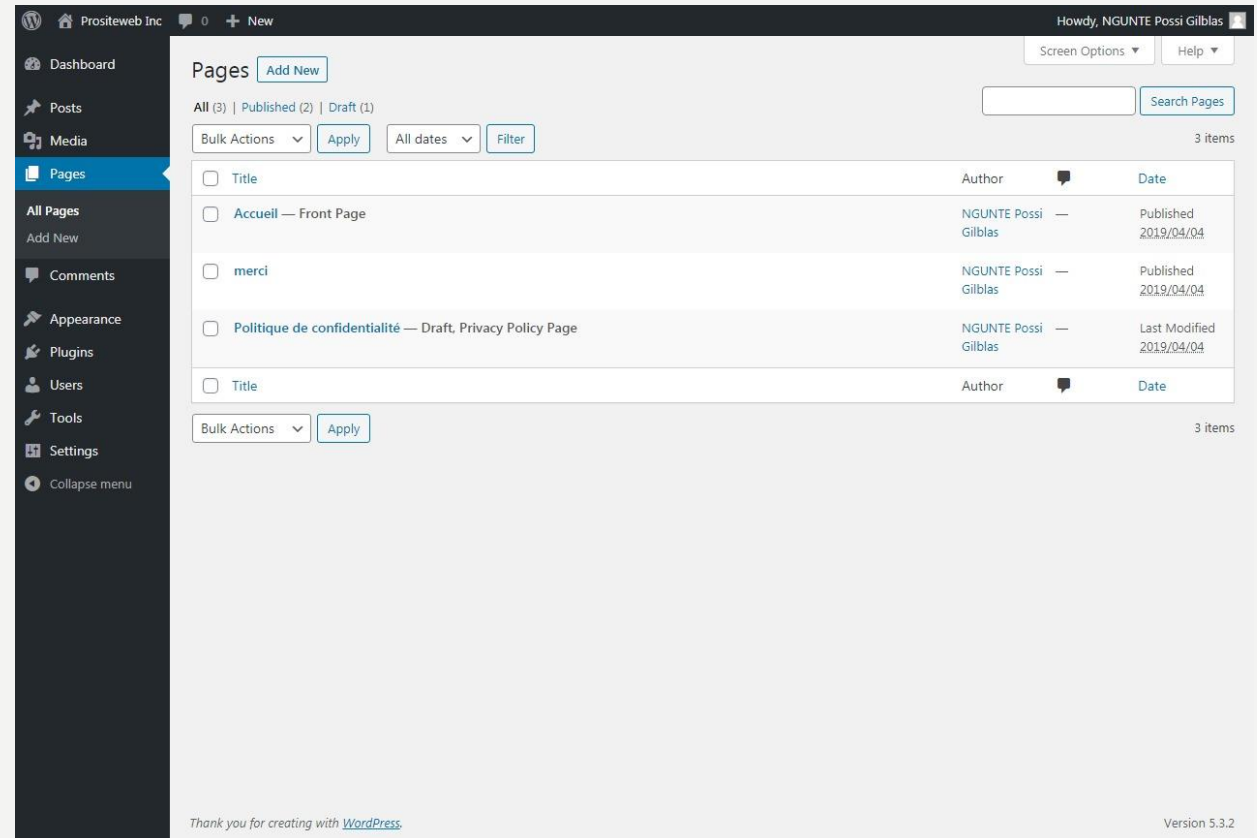
## Media

You can use the tab media to import files, images or documents to your website.

# CORE FEATURES OF WORDPRESS

## Pages

Pages are perfect for information that doesn't change a lot. You can use the page tab to create pages on your website





WordPress dashboard interface showing the Comments section. The sidebar includes links to Dashboard, Posts, Media, Pages, Comments (active), Appearance, Plugins, Users, Tools, Settings, and Collapse menu. The top bar shows the site name "Prositeweb Inc", a notification count of 0, and a "New" button. The user is logged in as "Howdy, NGUNTE Possi Gilblas".

### Comments

Filters: All (1) | Mine (0) | Pending (0) | Approved (1) | Spam (0) | Trash (0)

Buttons: Bulk Actions, Apply, All comment types, Filter

<input type="checkbox"/>	Author	Comment	In Response To	Submitted On
<input type="checkbox"/>	 Un commentateur WordPress wordpress.org wapuu@wordpress.example	Bonjour, ceci est un commentaire. Pour débiter avec la modération, la modification et la suppression de commentaires, veuillez visiter l'écran des Commentaires dans le Tableau de bord. Les avatars des personnes qui commentent arrivent depuis Gravatar.	Bonjour tout le monde ! <a href="#">View Post</a> 	2019/04/04 at 10:43 am
<input type="checkbox"/>	Author	Comment	In Response To	Submitted On

Buttons: Bulk Actions, Apply

Thank you for creating with [WordPress](#). Version 5.3.2

# CORE FEATURES OF WORDPRESS

## Comments

Manage comments on your website (approve, delete or reply)

# CORE FEATURES OF WORDPRESS



# OTHER TABS



**Appearance** - From the appearance tab, you can import your theme, search from themes on WordPress themes market or manage your themes.



**Plugins** - With plugins, you can extend the functionalities of your WordPress blog or site



**Users** - The tab users enable you to manage users on your website.



**Tools** – Extra tools to improve your website. E.g. the site health, import or export



**Setting** – Tabs for your website setting.

# **CMS GENERALITIES AND A BRIEF PRESENTATION OF WORDPRESS**

## **MODULE 2**



Different approaches to install WordPress and plugins



Database and initial configuration data



WordPress installation steps on a web server



Theme installation – Files  
upload method vs themes from  
the market on the dashboard

Plugins set up - Good practices  
and recommended plugins



Initial settings (URL structures, configurations and Security)

# WORDPRESS INSTALLATION AND INITIAL CONFIGURATION

# **DIFFERENT APPROACHES TO INSTALL WORDPRESS AND PLUGINS**

## System Requirements for WordPress

- Database: MySQL 5.0+
- Web Server
- Local Host - WAMP (Windows), LAMP (Linux), XAMPP(Multi-platform), MAMP (Macintosh)
- Operating System: Cross-platform
- Browser Support: IE (Internet Explorer 8+), Firefox, Google Chrome, Safari, Opera
- PHP Compatibility: PHP 5.4+



cPanel quick start



The Command Line



Manual Installation with ftp

## **DIFFERENT APPROACHES TO INSTALL WORDPRESS AND PLUGINS**

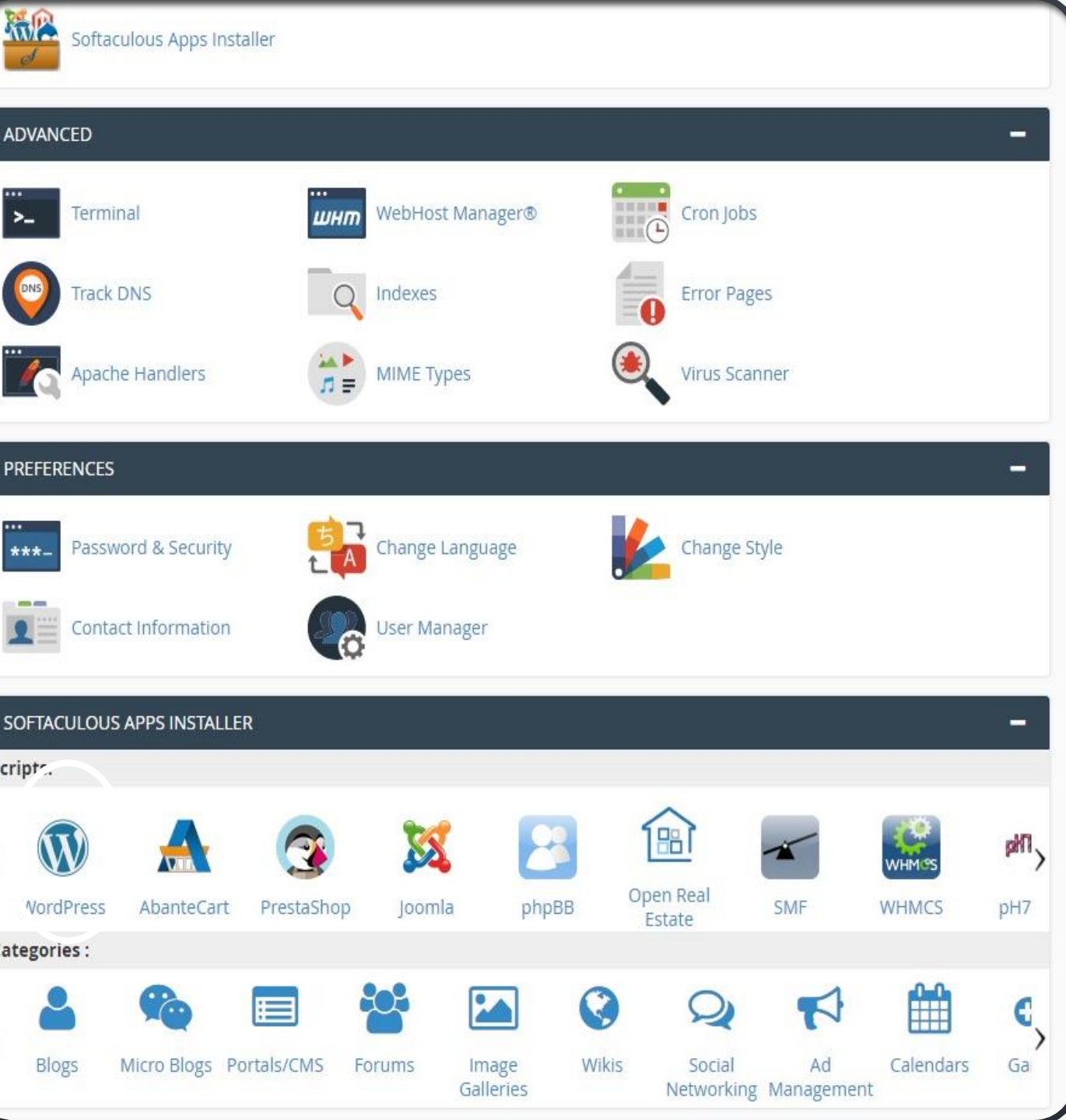
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Different  
approaches




# **CPANEL QUICK START**

**most of the new cpanels come with scripts or software that can enable users to install wordpress in a few steps. E.g. softaculous Apps Installer**



# CPANEL QUICK START - SOFTACULOUS APPS INSTALLER

# CPANEL QUICK START - SOFTACULOUS APPS INSTALLER



PHP JavaScript PERL

Search

SitePad Website Builder

Blogs

Micro Blogs

Portals/CMS

Forums

Image Galleries

Wikis

Social Networking

Ad Management

Calendars

Gaming

Mails

Polls and Analytics

Project Management

E-Commerce

ERP

Guest Books

Customer Support

Frameworks


Educational

DB Tools

Music

Video

Welcome gtrreeeytoutqw



WordPress

★★★★★ Version : 5.3.2, 5.2.5, 5.1.4, 5.0.8, 4.9.13 Release Date : 18-12-2019

Install

Overview

Features

Screenshots

Demo

Ratings

Reviews

Import

My Blog

My Wordpress Blog

WordPress

Search

UPDATE REQUIRED

Hello world!

By admin · November 18, 2019 · 1 Comment

Welcome to WordPress. This is your first post. Edit or delete it, then start blogging!

Search

Archives

Recent Posts

Categories

WordPress is web software you can use to create a beautiful website or blog. We like to say that WordPress is both free and priceless at the same time.


The core software is built by hundreds of community volunteers, and when you're ready for more there are thousands of plugins and themes available to transform your site into almost anything you can imagine.

Over 60 million people have chosen WordPress to power the place on the web they call "home" we'd love you to join the family.

WordPress is an [Open Source](#) project, which means there are hundreds of people all over the world working on it. (More than most commercial platforms.) It also means you are free to use it for anything from your recipe site to a Fortune 500 web site without paying anyone a license fee.

Install Now


My Apps



Space Required

Available Space : Unlimited MB

Required Space : 42.70 MB



Software Support

[Visit Support Site](#)

Note: Softaculous does not provide support for any software.

Manage Plugin / Theme Sets

Current Installations

# THE COMMAND LINE

- Install wp-cli - <https://wp-cli.org/#installing>
- Create a directory for wordpress - `cd c:\xampp\htdocs\wordpress`
- download Wordpress through the command line
- Create a database
- Set up the config.php file
- Finalise the installation

# THE COMMAND LINE (REFERENCE)

- <https://lmlosis.wordpress.com/2017/11/26/19/>
- <https://themeisle.com/blog/install-xampp-and-wordpress-locally/>
- <https://wp-cli.org/#installing>

# FTP - MANUAL INSTALLATION

- Download WordPress – [wordpress.org](https://wordpress.org)
- create a folder in your server. E.g. wordpress
- Create a database for wordpress – phpmyadmin
- Launch the installation wizard and follow the steps
- For the set up – host= LOCALHOST, USERNAME=ROOT, NO PASSWORD, DATABASE = DATABASE CREATED.



# THEME INSTALLATION

**FILES UPLOAD METHOD VS THEMES  
FROM THE MARKET ON THE  
DASHBOARD**

# HOW WORDPRESS THEMES WORK

In WordPress, the content is not really related to the design. You can switch from theme without touching the content. So, if you want a new design and you want to keep your content, you just need to install a new theme! Themes can be installed From:

- ❖ Dashboard -> Appearance -> Add New or,
- ❖ Dashboard -> Appearance -> Search installed Themes..., or through
- ❖ The FTP or Manual import. In this case, import your theme manually in the folder wp-content/themes.

Adding your theme using any of those 3 methods, the next step will be to activate through the dashboard.



# DIFFERENT TYPES OF THEMES

There are many types of themes in WordPress:

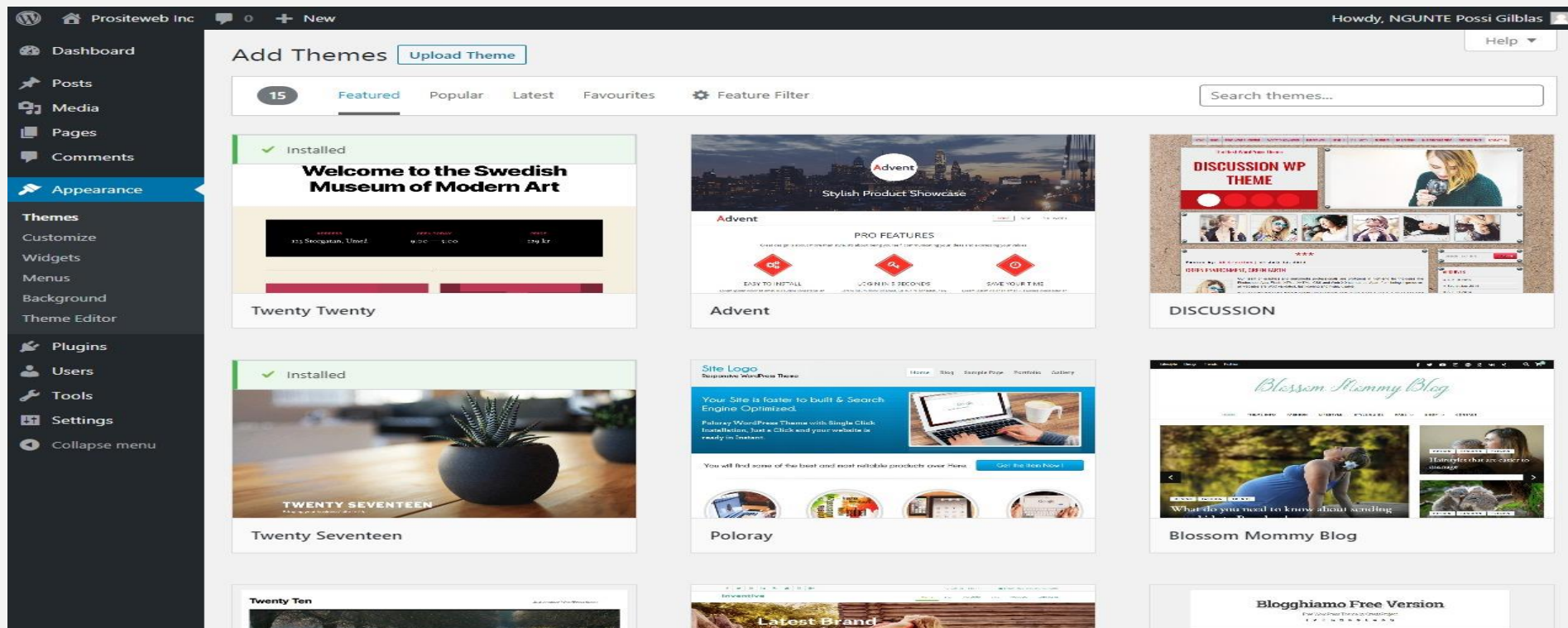
- ❖ Free Themes – You can get them from your admin dashboard or on WordPress.org
- ❖ Commercial Themes – Buy on themes and plugins Market. E.g. Themeforest, Template Monster,
- ❖ Build your themes – With a little PHP skills you can build a WordPress theme for your website.

# HOW TO INSTALL A WORDPRESS THEME

To install a WordPress theme, you need to get the theme from any source of your choice.

- ❖ If it is from your WordPress Dashboard, then, search and click on install.
- ❖ From wordpress.org, you will need to download and import your theme using the “import theme” button on Appearance -> Add New -> Upload Theme
- ❖ If you bought your theme online, you can either use the Appearance -> Add New -> Upload Theme feature or use FTP (or manual import) to move and extract the files in the folder wp-content/themes

# HOW TO INSTALL A WORDPRESS THEME



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# PLUGIN INSTALLATION

**CMS GENERALITIES AND A BRIEF  
PRESENTATION OF WORDPRESS**

# HOW TO INSTALL A WORDPRESS PLUGIN

To install a WordPress plugin, you need to get it from any source of your choice.

- ❖ If it is from your WordPress Dashboard, then, search and click on install.
- ❖ From wordpress.org, you will need to download and import your theme using the “import theme” button on Plugin -> Add New -> Upload Plugin
- ❖ If you bought your theme online, you can either use the Plugins -> Add New -> Upload Plugin feature or use FTP (or manual import) to move and extract the files in the folder wp-content/plugins

# HOW TO INSTALL A WORDPRESS PLUGIN

The screenshot displays the WordPress dashboard for a user named 'Prositeweb Inc'. The left sidebar contains navigation links: Dashboard, Posts, Media, Pages, Comments, Appearance, and Plugins (which is currently selected). Below these are links for 'Installed Plugins', 'Add New', and 'Plugin Editor'. The main content area is titled 'Add Plugins' and features tabs for 'Featured', 'Popular', 'Recommended', and 'Favourites'. A search bar is located at the top right of this section. Below the tabs, a descriptive text states: 'Plugins extend and expand the functionality of WordPress. You may automatically install plugins from the [WordPress Plugin Directory](#) or upload a plugin in .zip format by clicking the button at the top of this page.'

The 'Featured' tab is active, displaying a grid of six plugins:

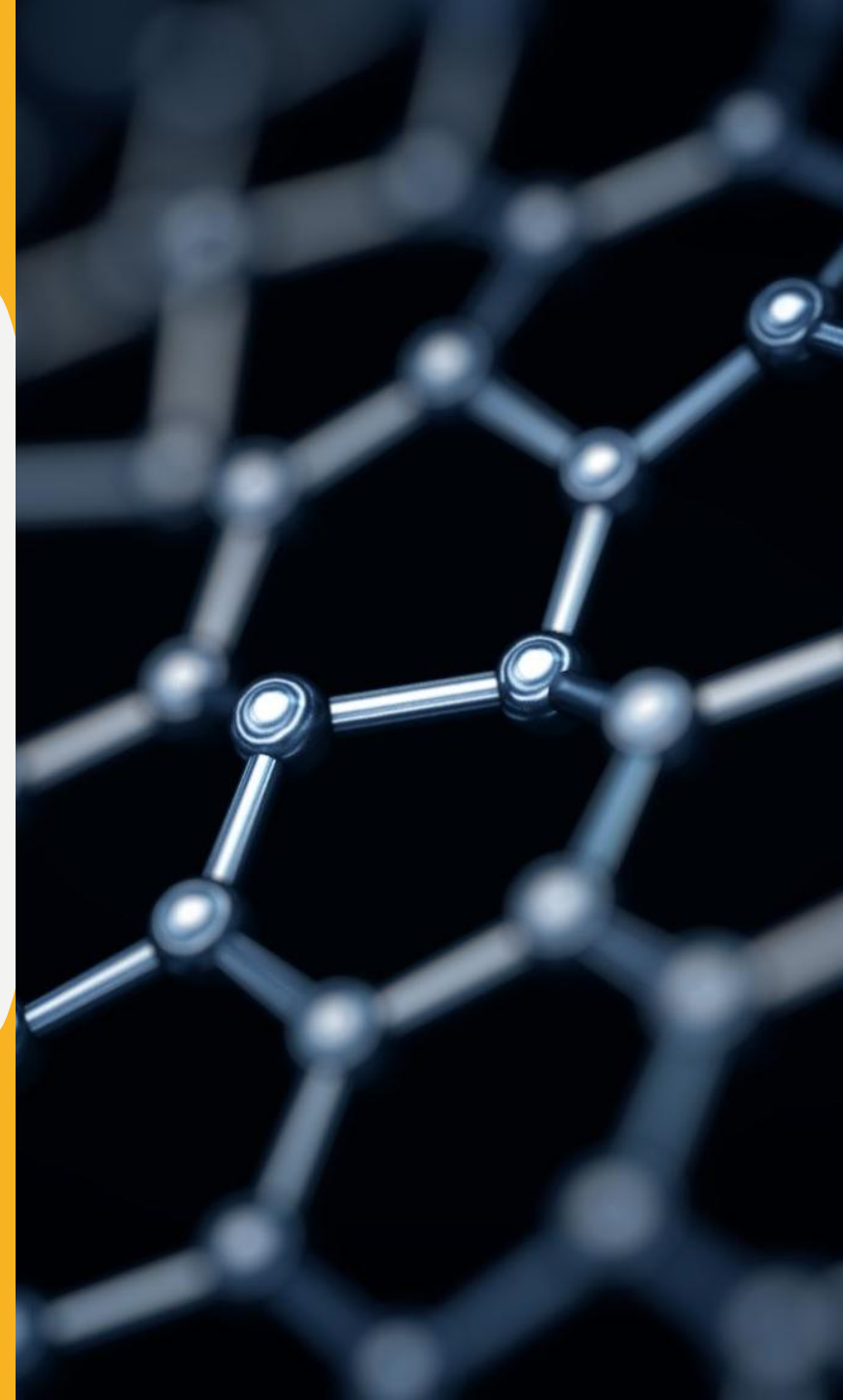
- Akismet Anti-Spam**: A green square logo with a white 'A'. Description: 'Akismet checks your comments and contact form submissions against our global database of spam to protect you and your site from malicious content.' By Automattic. Rating: 5 stars (851). 5+ Million Active Installations. Last Updated: 3 months ago. Compatible with your version of WordPress. Button: 'Activate'.
- Classic Editor**: A blue icon representing a document with lines. Description: 'Enables the previous "classic" editor and the old-style Edit Post screen with TinyMCE, Meta Boxes, etc. Supports all plugins that extend this screen.' By WordPress Contributors. Rating: 5 stars (765). 5+ Million Active Installations. Last Updated: 3 months ago. Compatible with your version of WordPress. Button: 'Install Now'.
- Jetpack by WordPress.com**: A green circular logo with a white lightning bolt. Description: 'The ideal plugin for stats, related posts, search engine optimization, social sharing, protection, backups, security, and more.' By Automattic. Rating: 5 stars (1,451). 5+ Million Active Installations. Last Updated: 2 weeks ago. Compatible with your version of WordPress. Button: 'Install Now'.
- bbPress**: A black and white circular logo with 'bb' inside. Description: 'bbPress is forum software for WordPress.' By The bbPress Contributors. Rating: 5 stars (301). 300,000+ Active Installations. Last Updated: 4 days ago. Compatible with your version of WordPress. Button: 'Install Now'.
- Gutenberg**: A black and white logo featuring a stylized 'G' with a grid pattern. Description: (None visible). Rating: (None visible). Active Installations: (None visible). Last Updated: (None visible). Compatible with your version of WordPress. Button: 'Install Now'.
- BuddyPress**: An orange logo featuring a stylized 'B' with a grid pattern. Description: (None visible). Rating: (None visible). Active Installations: (None visible). Last Updated: (None visible). Compatible with your version of WordPress. Button: 'Install Now'.

# **MANAGING A WORDPRESS WEBSITE**

## **MODULE 3**

# **MANAGING A WORDPRESS WEBSITE**

**TRANSACTIONAL WEB  
APPLICATIONS DEVELOPMENT**





# TABLE OF CONTENT



The basics of WordPress



Creating an article, Page or a category



Uploading files, documents or pictures



Manage comments



SEO and files size consideration

# THE BASICS OF WORDPRESS



The WYSIWYG  
editor



permalink



Media



Pictures gallery



Comments



Pages



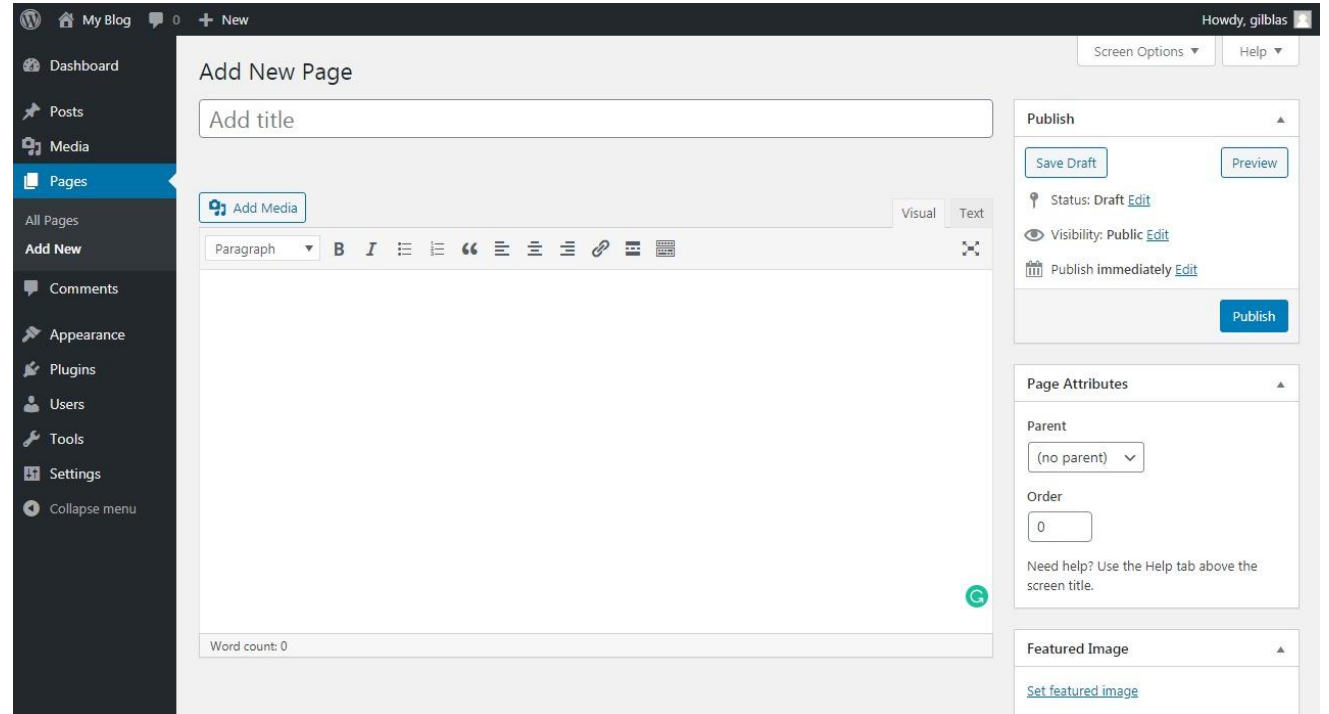
Blog



Categories

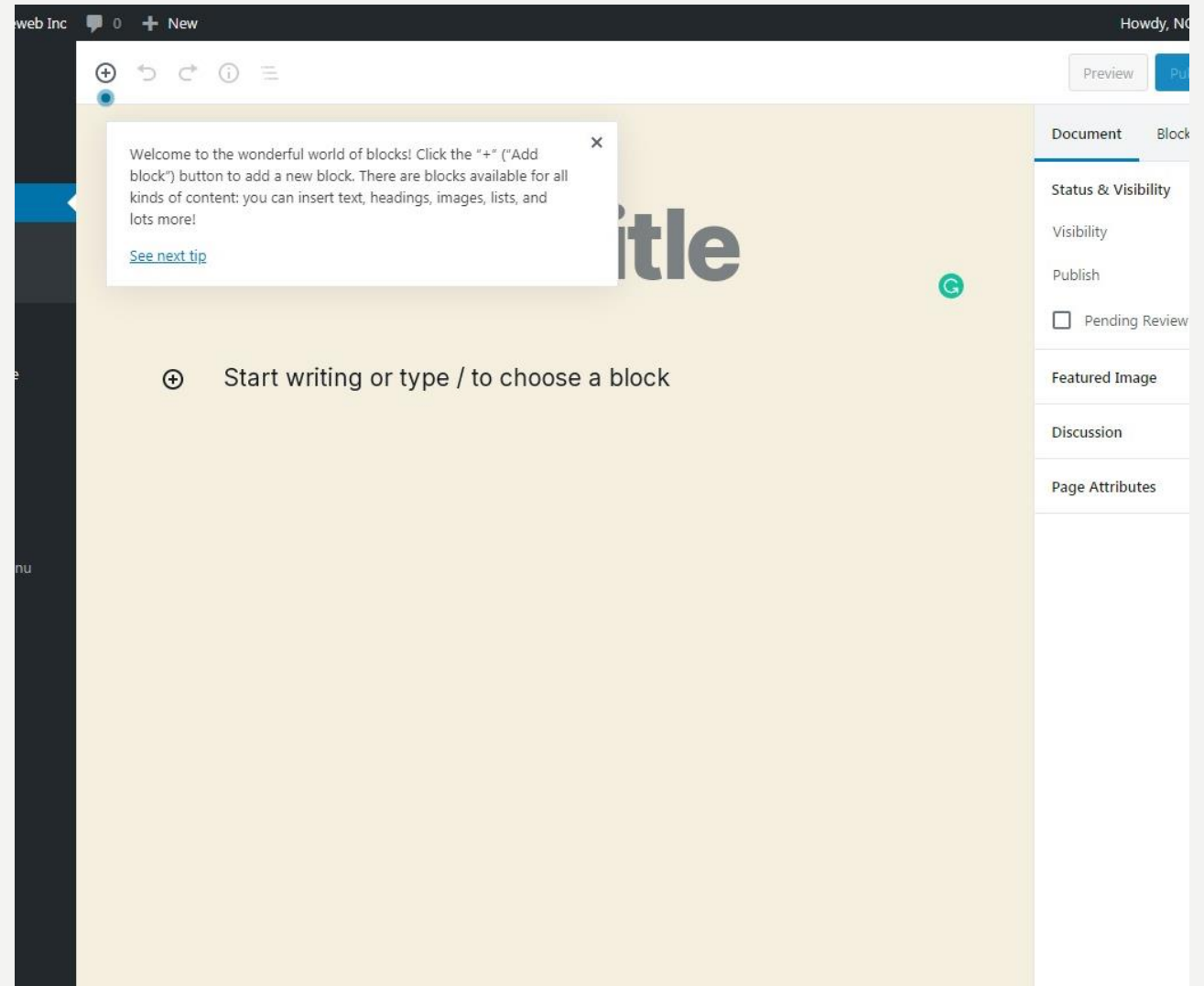
# WYSIWYG EDITOR

CLASSIC EDITOR

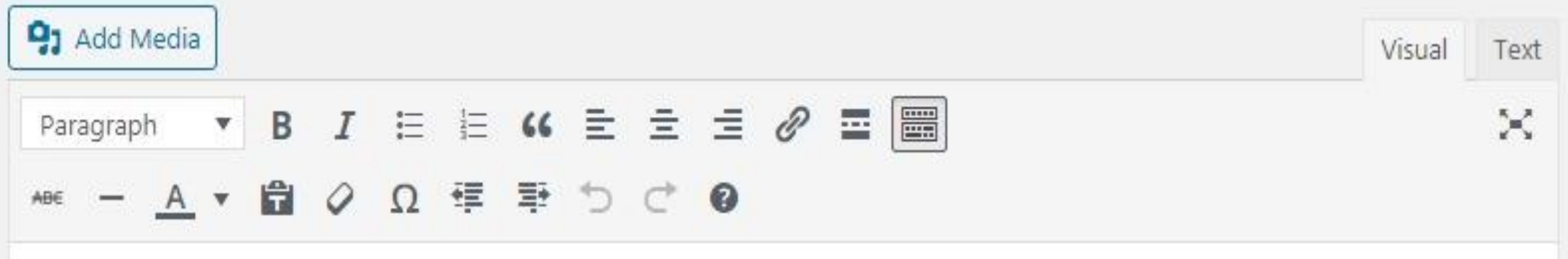


# WYSIWYG BLOCK EDITOR

New editor



# EDITOR OPTIONS



See

[http://moodlen.isimtl.local/pluginfile.php/27347/mod\\_resource/content/0/wysiwyg%20code%20editor%20options.pdf](http://moodlen.isimtl.local/pluginfile.php/27347/mod_resource/content/0/wysiwyg%20code%20editor%20options.pdf) for more details

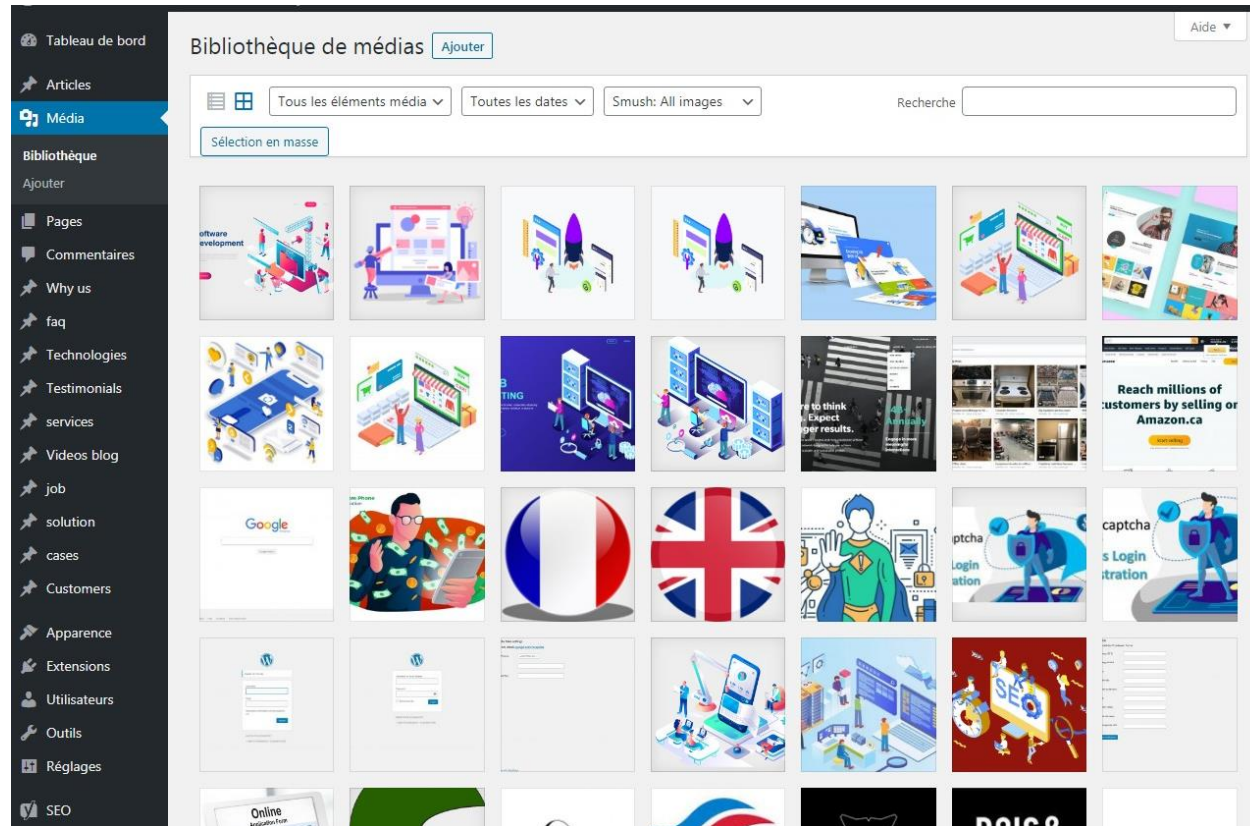
## MANAGE MEDIA(PICTURE, DOCUMENTS, GALLERY)

Inserting an image/doc

Editing an image

Deleting an image/doc

Bulk delete



# HOW TO ADD AN IMAGE?

Just above the WYSIWYG editor, you'll find a button to insert an image: If you click this button, the following window appears: There are three ways to add an image:

- Upload Files: upload an image from your computer, this is the default choice
- Insert from URL: use an image on the internet
- Media Library: insert a picture you already uploaded to your media library

Next to that, there is also the option to create a gallery, which I'll discuss later in this guide. It's better not to use the option "From URL." With this option, you use an image from elsewhere on the internet. Imagine you select

# INSERTING AN IMAGE FROM YOUR COMPUTER: UPLOAD FILES

From the  
Dashboard  
-> Media  
tab

Click on Add New

Select Files

Locate the files your want to import and select them

From  
Pages/Posts

Click on Add Media

Then Upload Files

Select Files

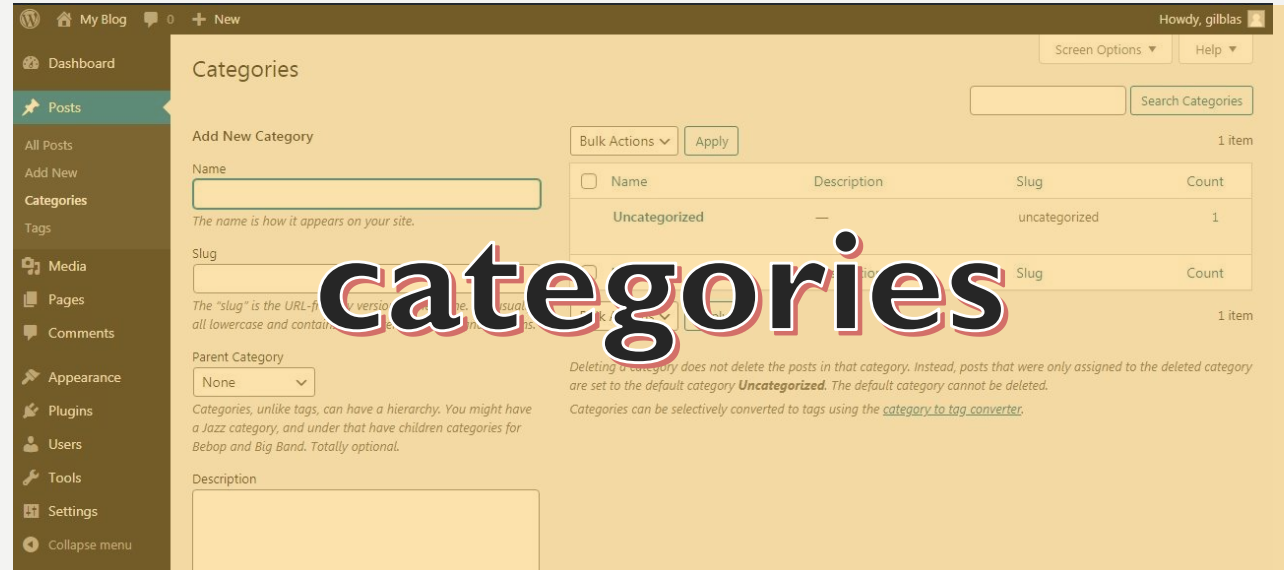
Locate the files your want to import and select them



# CATEGORIES/TAGS

features that enable you to group your blog posts

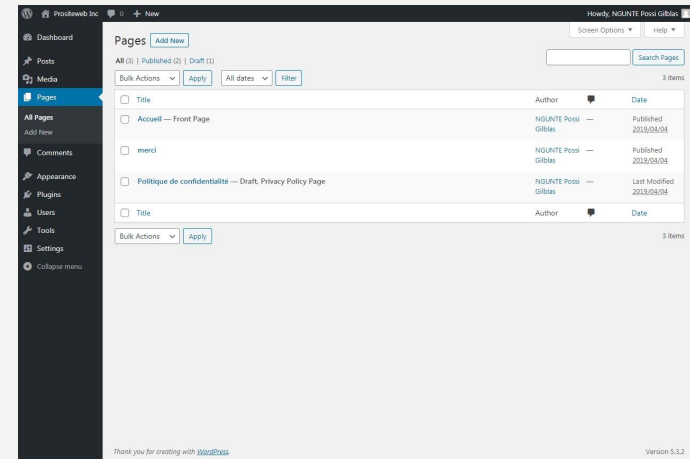
- Posts -> Categories
- Posts -> Tags



# PAGES

used for static content / general information

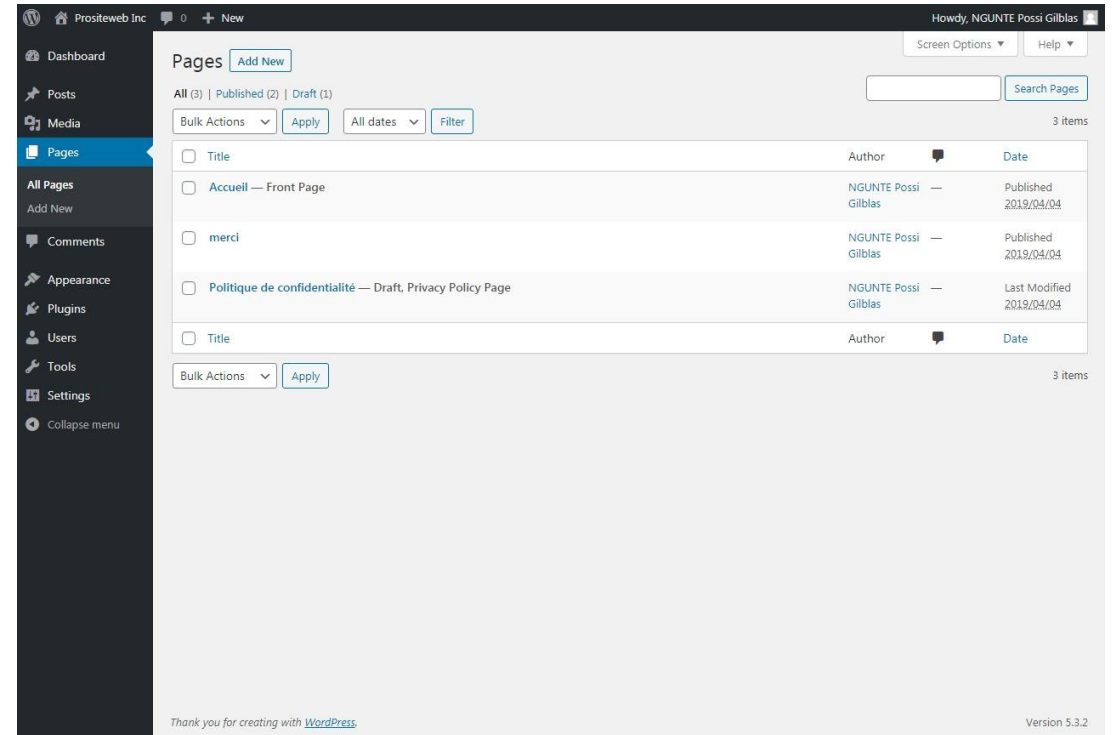
- ❖ Add New Page
- ❖ Edit Pages
- ❖ Delete Pages
- ❖ Publish a page

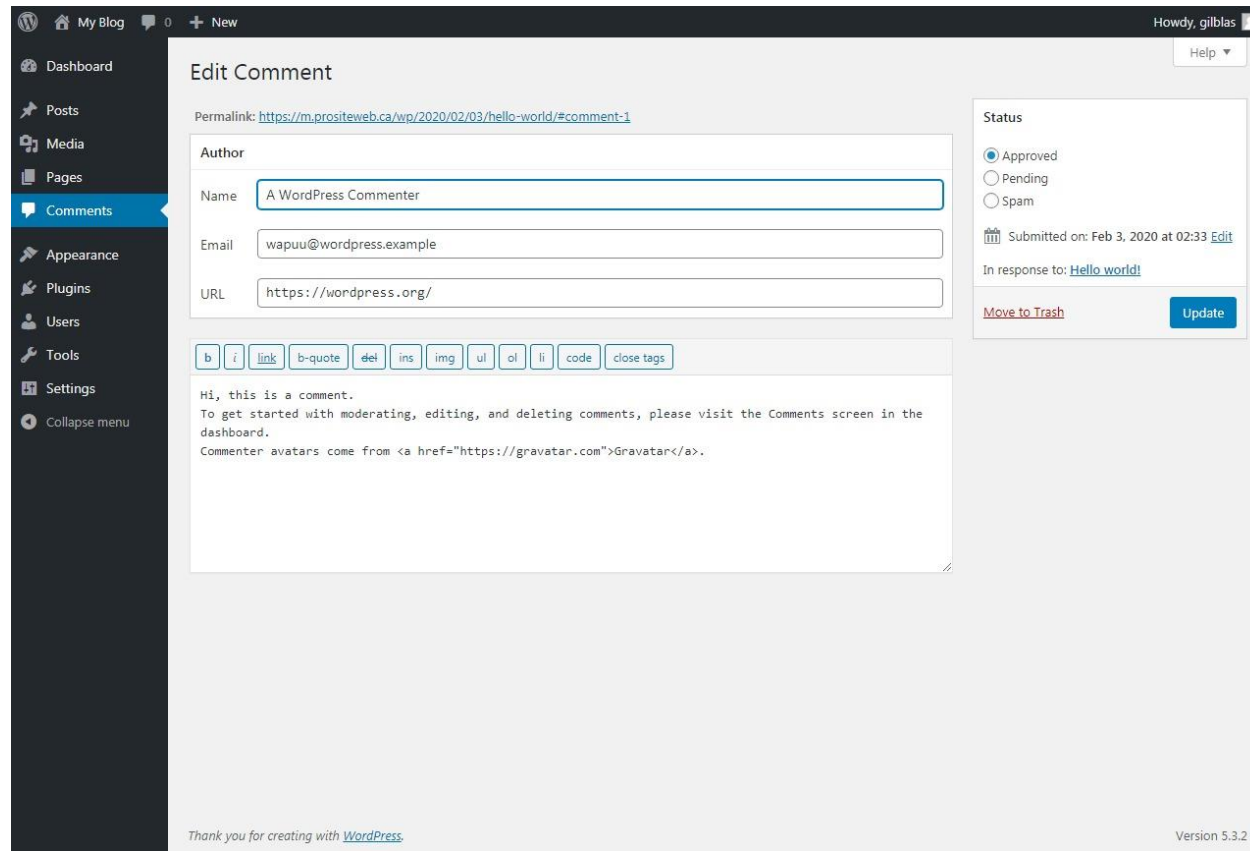


# POSTS

Posts are used for blog page

- ❖ Add New post
- ❖ Edit Posts
- ❖ Delete Posts
- ❖ Manage Posts
- ❖ Publish a Post





## COMMENTS

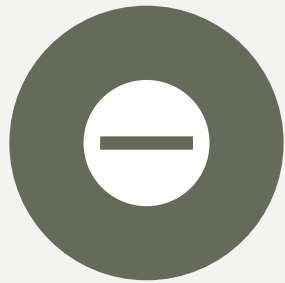
Manage comment on your site or blog

Approve

Delete

Reply to a comment

# MANAGE COMMENTS



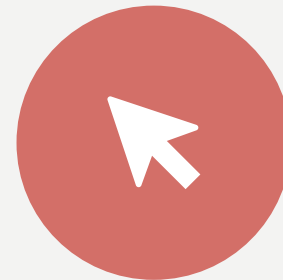
To disable comments:



Go to "Settings" >  
"Discussion" in the left  
menu

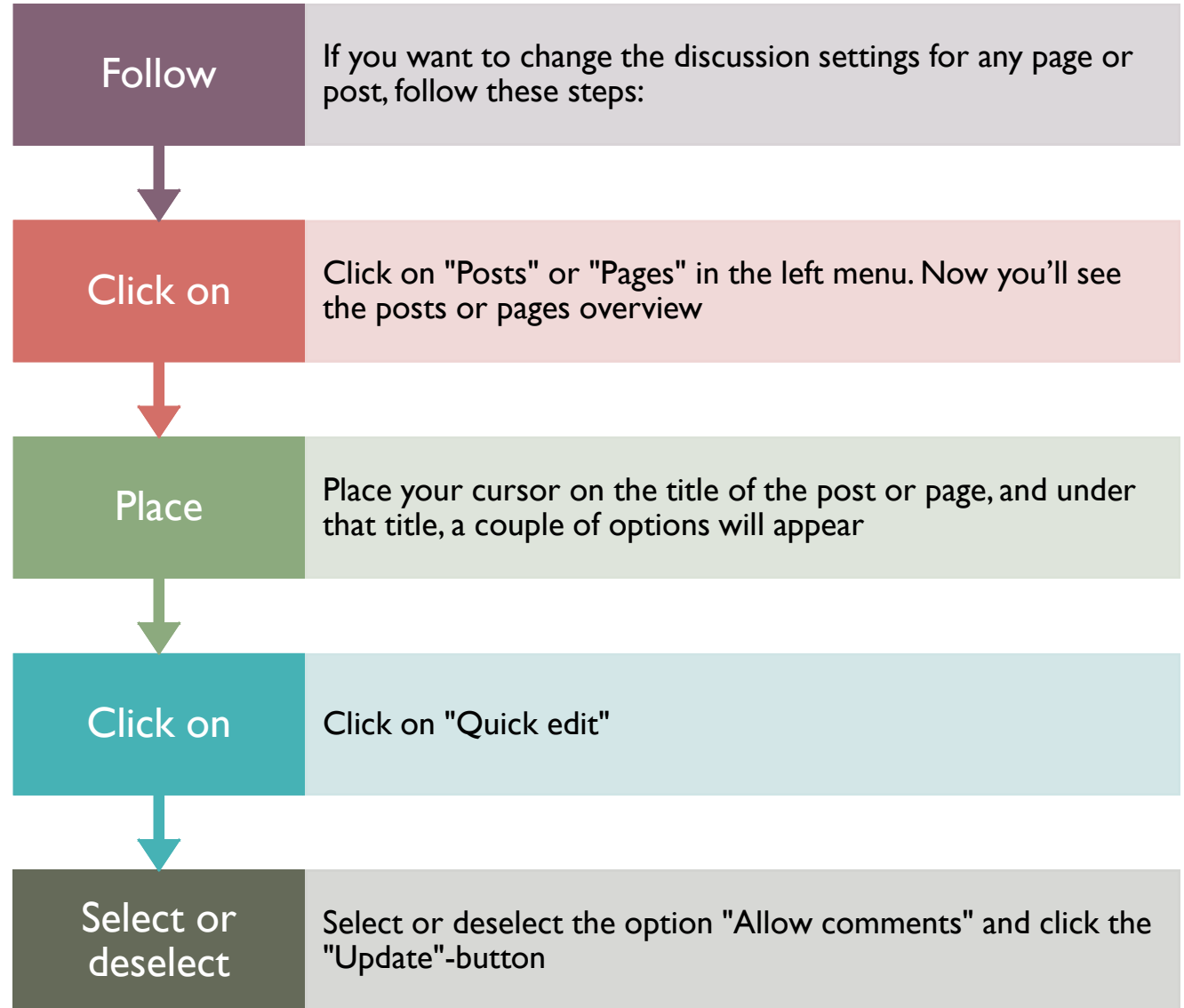


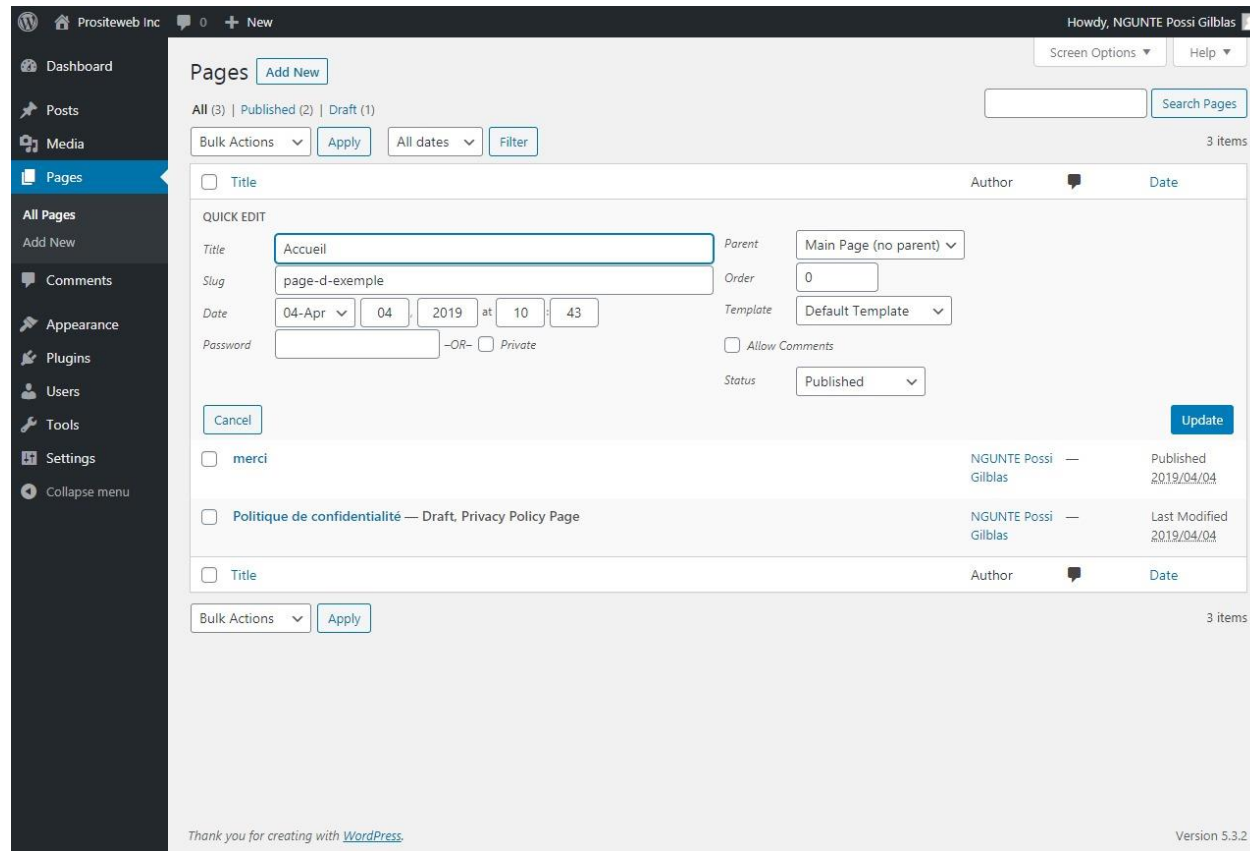
Deselect "Allow people  
to post comments on  
new articles":



Click the "Save changes"  
button on the bottom of  
this page.

# MANAGE COMMENTS





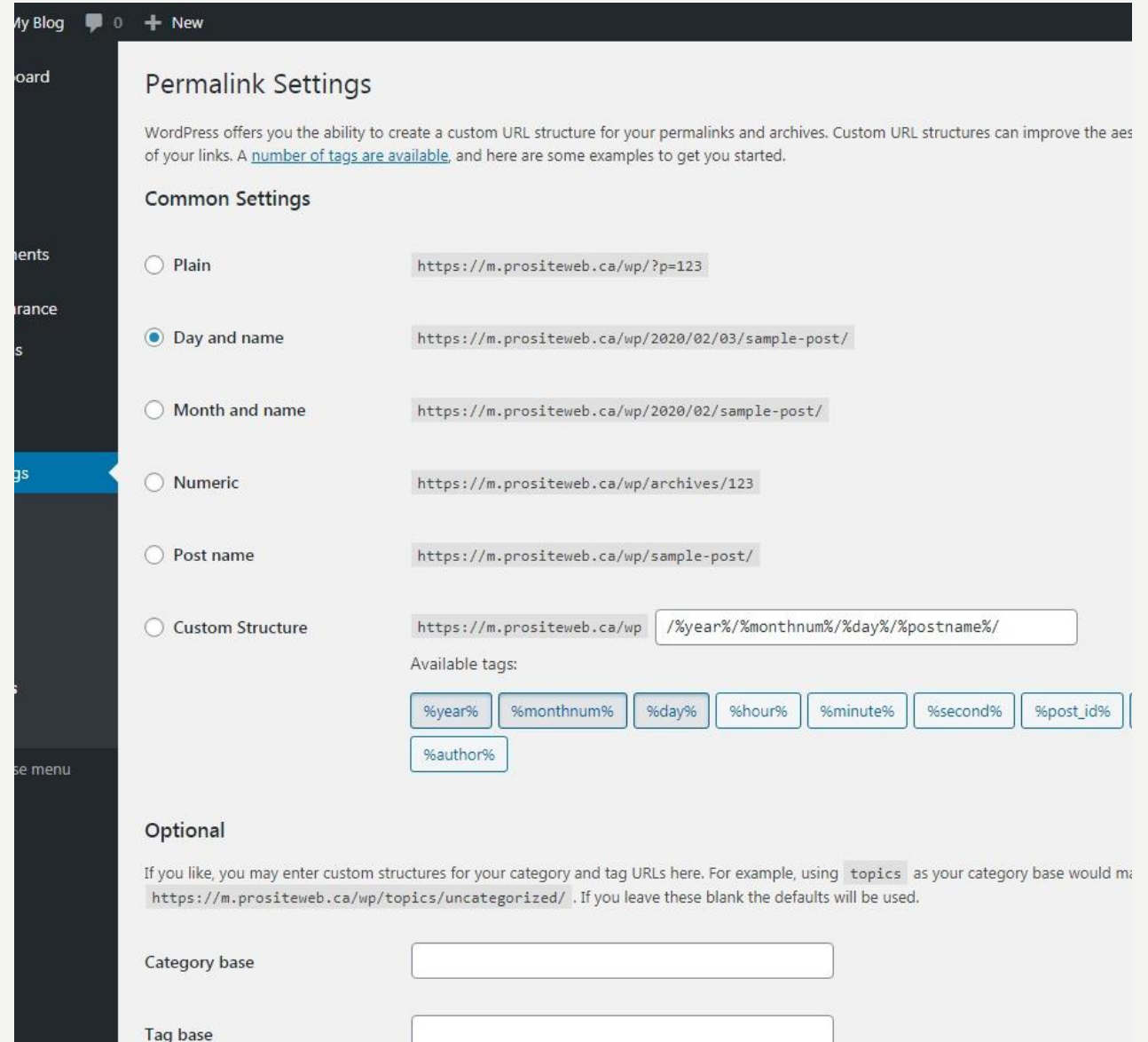
## MANAGE COMMENTS

Allow  
comments  
for a  
post/page

# PERMALINKS

Allow you to choose how you want your website links to display.

- **Plain (With Id) – e.g. ?p=123**
- **Day and name**
- **Month and name**
- **Numeric**
- **Post name**
- **Custom Structure**



The screenshot shows the WordPress 'Permalink Settings' page. The left sidebar contains a menu with options like 'Board', 'ents', 'rance', 's', 'gs', and 'se menu'. The main content area is titled 'Permalink Settings' and includes an introductory paragraph: 'WordPress offers you the ability to create a custom URL structure for your permalinks and archives. Custom URL structures can improve the aes of your links. A [number of tags are available](#), and here are some examples to get you started.'

The 'Common Settings' section lists five options with radio buttons and corresponding URL examples:

- ☐ Plain: `https://m.prositeweb.ca/wp/?p=123`
- ☒ Day and name: `https://m.prositeweb.ca/wp/2020/02/03/sample-post/`
- ☐ Month and name: `https://m.prositeweb.ca/wp/2020/02/sample-post/`
- ☐ Numeric: `https://m.prositeweb.ca/wp/archives/123`
- ☐ Post name: `https://m.prositeweb.ca/wp/sample-post/`
- ☐ Custom Structure: `https://m.prositeweb.ca/wp/` followed by a text input field containing `/%year%/%monthnum%/%day%/%postname%/`.

Below the 'Custom Structure' option, there is a section titled 'Available tags:' with a grid of buttons for various tags: `%year%`, `%monthnum%`, `%day%`, `%hour%`, `%minute%`, `%second%`, `%post_id%`, and `%author%`.

The 'Optional' section contains the following text: 'If you like, you may enter custom structures for your category and tag URLs here. For example, using `topics` as your category base would m: `https://m.prositeweb.ca/wp/topics/uncategorized/`. If you leave these blank the defaults will be used.'

At the bottom, there are two input fields: 'Category base' and 'Tag base', both of which are currently empty.



# ADD GENERIC CONTENT (POST/PAGE/TAG/CATEGORIES)

## Pages

- Select “pages -> Add New”
- Add title, Content, feature image, excerpt

## Posts

- Select “posts -> Add New”
- Add title, Content, feature image, excerpt

## Categories

- Select “posts->Categories-> Enter the name, slug, description”
- Click on “Add New Category”

## tags

- Select “posts->tags-> Enter the name, slug, description”
- Click on “Add New Tag”

# **WORDPRESS CUSTOMIZATION**

## **MODULE 4**



Out of the box, WordPress contains  
only 5 different roles.

## **CUSTOMIZATION OF WORDPRESS**

# THE 5 DIFFERENT ROLES IN WORDPRESS

Administrator: The administrator role has the full right to do everything.

Editor: An editor has the right to create and edit posts and pages and can also edit posts from other users. An editor doesn't have administrative rights.

Author: An author can write posts and publish them.

Contributor: A contributor can write posts but can't publish them.

Subscriber: A basic member of a WordPress blog. Has the same rights as a guest, but doesn't need to log in again to react on posts?

# HOW TO ADD A NEW USER

Choose "Users" > "Add new" in the left menu. You'll see the following screen: In this screen, you must fill in the following fields:

Username (required): the username of the new user

E-mail (required): the e-mail address of the new user

First Name: fill in the user's first name

Last Name: fill in the user's last name

Website: here you can fill in the URL of the user's website

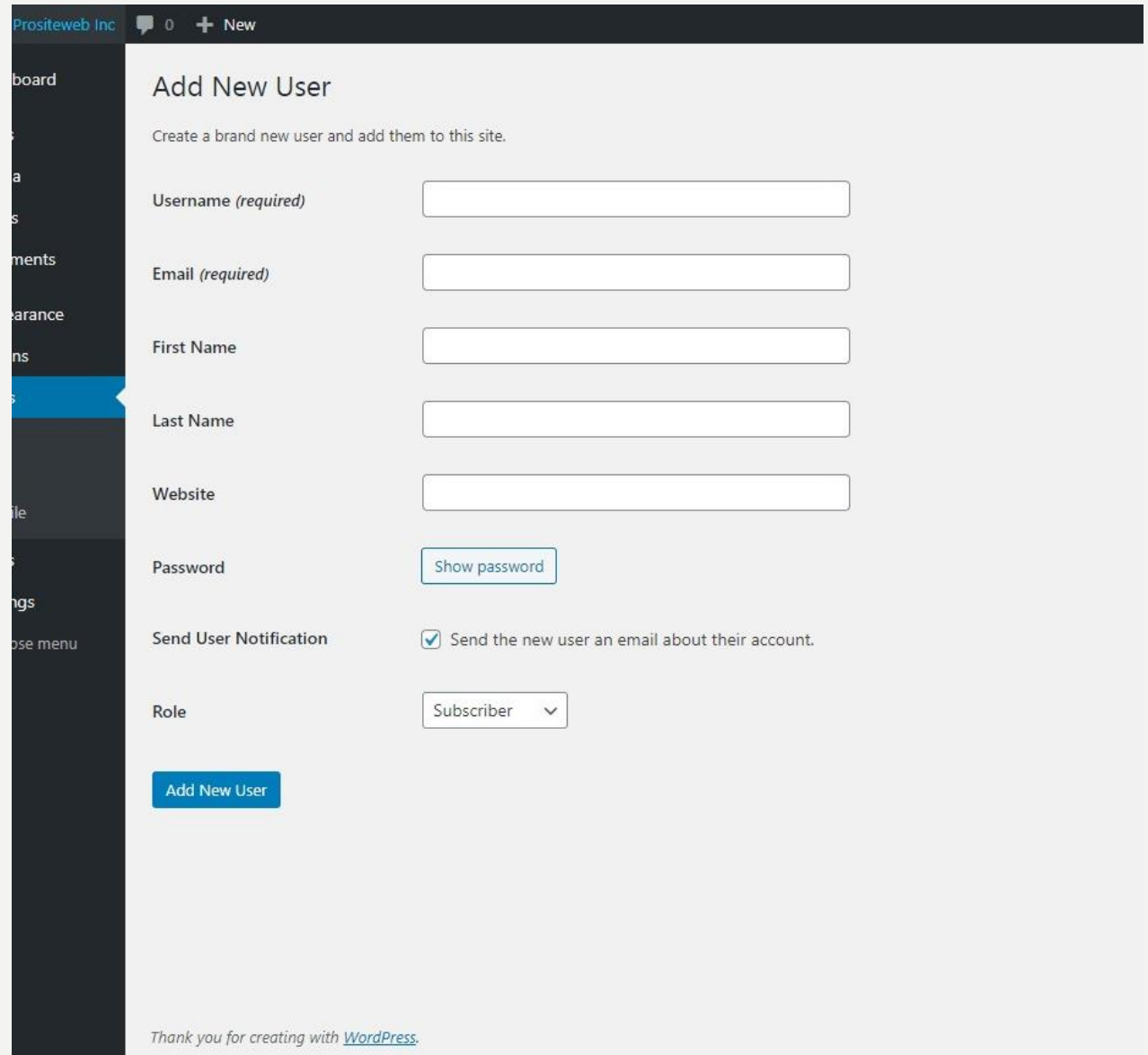
Password (twice, required): choose a strong password for your new user

Send Password: Do you want to send the password to your user?

Role: select a role for your new user

# HOW TO ADD A NEW USER

For security reasons never use "admin" or "administrator" as an account name. If created by default, create a new administrator user and delete the original one. The reason for this is that hackers who want to hack your blog will first try to break in with "admin" or "administrator".



The screenshot shows the 'Add New User' interface in a WordPress dashboard. The top navigation bar includes 'Prositeweb Inc', a notification bell with '0', and a '+ New' button. A dark sidebar on the left contains a menu with items like 'board', 'ments', 'arance', 'ns', 'le', 'ngs', and 'ose menu'. The main content area is titled 'Add New User' and includes the instruction 'Create a brand new user and add them to this site.' The form contains the following fields: 'Username (required)' (text input), 'Email (required)' (text input), 'First Name' (text input), 'Last Name' (text input), 'Website' (text input), 'Password' (password input with a 'Show password' button), 'Send User Notification' (checkbox, checked, with label 'Send the new user an email about their account.'), and 'Role' (dropdown menu showing 'Subscriber'). A blue 'Add New User' button is at the bottom. A footer note says 'Thank you for creating with [WordPress](#)'.

## **HOW TO EXTEND THE BASIC USER MANAGEMENT?**

The basic user management offered by WordPress is enough for many companies. However, if you need to extend the existing roles, or if you want to create new roles, then you could install the User Access Manager plugin.

# **MANAGE EXTENSIONS**

## **MODULE 5**





How to install an extension



How to activate an extension



Useful extensions



Update an extension



Security of extension and debugging

# MANAGE EXTENSIONS

## **WHAT'S A PLUGIN?**

Plugins are small "programs" that give you the possibility to extend the functionalities of a basic WordPress installation.



Through your WordPress  
Dashboard - Free plugins



Online on WordPress.org

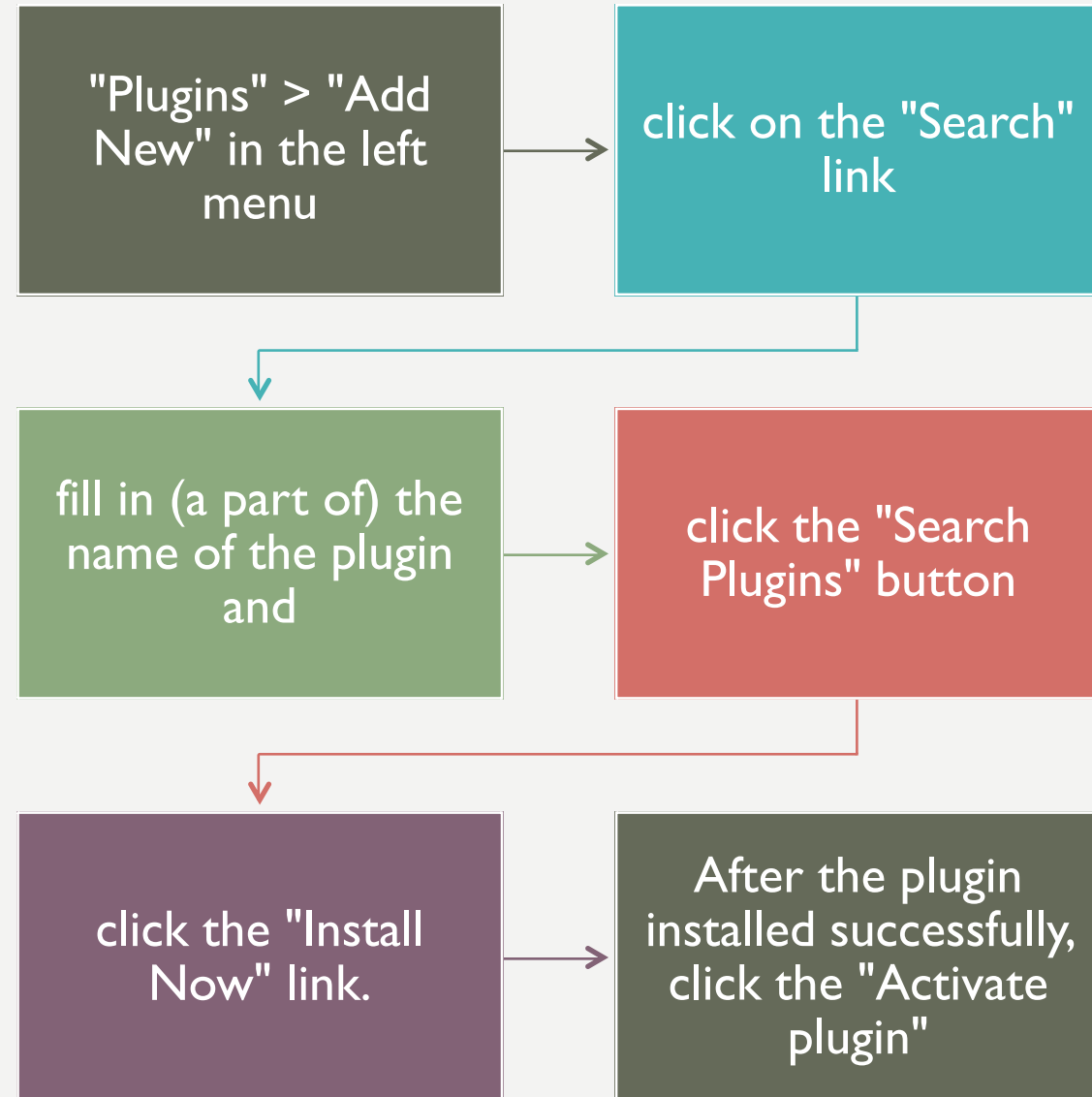


Online on Script and plugins  
Market. E.g. Codecanyon.

# WHERE TO FIND A PLUGIN?

# HOW TO INSTALL A PLUGIN?

You can install most of the plugins through the WordPress Dashboard:



## UPLOAD AND INSTALL A PLUGIN THROUGH THE BACK END

Some plugins can only be downloaded to your computer from the author's website. In most cases, these are commercial plugins. Luckily WordPress has a built-in function to upload and install downloaded plugins.



# HOW TO CONFIGURE A PLUGIN?

---

Some plugins don't need extra configuration whereas, for some others you need to follow the developers guide to do the configuration. In order to complete the configuration, check for the documentation for more details. To find the documentation, follow these steps:

---

If you got  
the plugin  
from the  
developer  
website

Visit his/her website for instructions.

---

If you got  
the plugins  
from  
WordPress  
Dashboard

Click on the plugin the you installed

Locate view details at the bottom of the plugin

You can read all the information about the code.

---

# HOW TO CONFIGURE A PLUGIN?

## EXAMPLE OF DESCRIPTION, INSTALLATION STEPS OF AKISMET ANTI-SPAM

The screenshot shows the WordPress.org plugin page for Akismet Anti-Spam. At the top, a green banner features an illustration of a visitor submitting a comment, a server unit labeled 'Akismet', and a moderator reviewing comments. The banner includes three numbered steps: 1. Visitors submit comments on your blog. 2. Your blog runs each comment through Akismet. 3. Akismet tells your blog whether it's ham or spam. Below the banner, the 'Description' tab is selected, showing a detailed description of the plugin's functionality and a list of major features. To the right, a sidebar displays metadata such as version, author, last updated date, and average rating. A 'Latest Version Installed' button is located at the bottom right of the page.

**1** Visitors submit comments on your blog.

**2** Your blog runs each comment through Akismet.

**3** Akismet tells your blog whether it's ham or spam.

### Akismet Anti-Spam

Your blog runs each comment through Akismet.

Description Installation Changelog Reviews

Akismet checks your comments and contact form submissions against our global database of spam to prevent your site from publishing malicious content. You can review the comment spam it catches on your blog's "Comments" admin screen.

Major features in Akismet include:

- Automatically checks all comments and filters out the ones that look like spam.
- Each comment has a status history, so you can easily see which comments were caught or cleared by Akismet and which were spammed or unspammed by a moderator.
- URLs are shown in the comment body to reveal hidden or misleading links.
- Moderators can see the number of approved comments for each user.
- A discard feature that outright blocks the worst spam, saving you disk space and speeding up your site.

Version: 4.1.3  
Author: [Automattic](#)  
Last Updated: 3 months ago  
Requires WordPress Version: 4.0 or higher  
Compatible up to: 5.3.2  
Active Installations: 5+ Million  
[WordPress.org Plugin Page »](#)  
[Plugin Homepage »](#)

AVERAGE RATING  
★★★★☆  
(based on 851 ratings)

REVIEWS  
Read all reviews on WordPress.org or write your own!

[5 stars](#) 753

[Latest Version Installed](#)

WordPress

# IMPORTANT NOTE ABOUT THE USE OF PLUGINS

All the plugins are not necessarily good for your site;

- Some plugins may affect the performance of your website
- Others will affect your website security
- There are plugins that will even affect the responsiveness of your site





# HOW TO VALIDATE THE QUALITY OF A PLUGIN?



Read online reviews



If possible, check if it is approved by the community



Temporarily Enable the debug in the dev environment



Avoid plugins from untrusted sites



contact form 7 – add form on your site easily



Yoast SEO– helps you to increase your organic reach



fast velocity minify – compress, minify and merge your CSS and JS files



Smush – optimize your images for a better website performance



better wp security - helps you to secure your website



Akismet – helps to secure your site against spams

## SOME RECOMMENDED PLUGINS

# **CUSTOMIZATION OF WORDPRESS TEMPLATE**

## **MODULE 6**



CUSTOMIZE  
WORDPRESS TEMPLATE



ACCESS WORDPRESS  
THEMES FILES



EDIT WORDPRESS  
TEMPLATE FILE

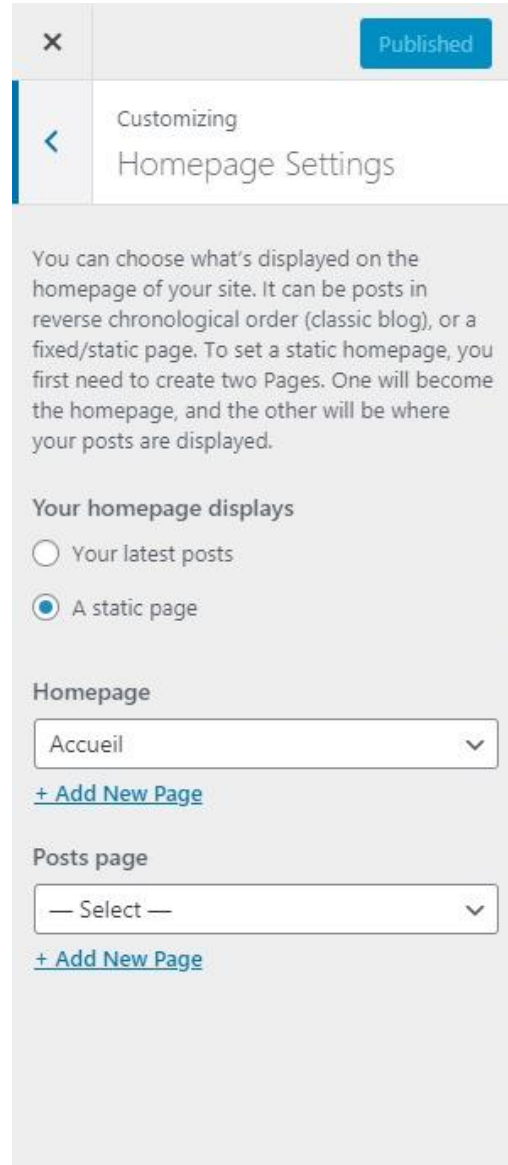


CREATE A CUSTOM  
WORDPRESS TEMPLATE  
FILE



A SHORT  
INTRODUCTION TO  
WORDPRESS SHORT  
CODE

# CUSTOMIZATION OF WORDPRESS TEMPLATE



# YOU CAN EITHER USE WORDPRESS AS A BLOG OR STATIC PAGE

## CUSTOMIZATION OF WORDPRESS TEMPLATE

# SETTING UP A PAGE AS THE FRONT PAGE

First, create a page you want to use as your front page

Open the "Reading Settings" screen (select "Settings" > "Reading" in the left menu)

Under "Front page displays" you choose "A static page", and then you select a page as the front page and another page as posts page:

Click the "Save Changes"

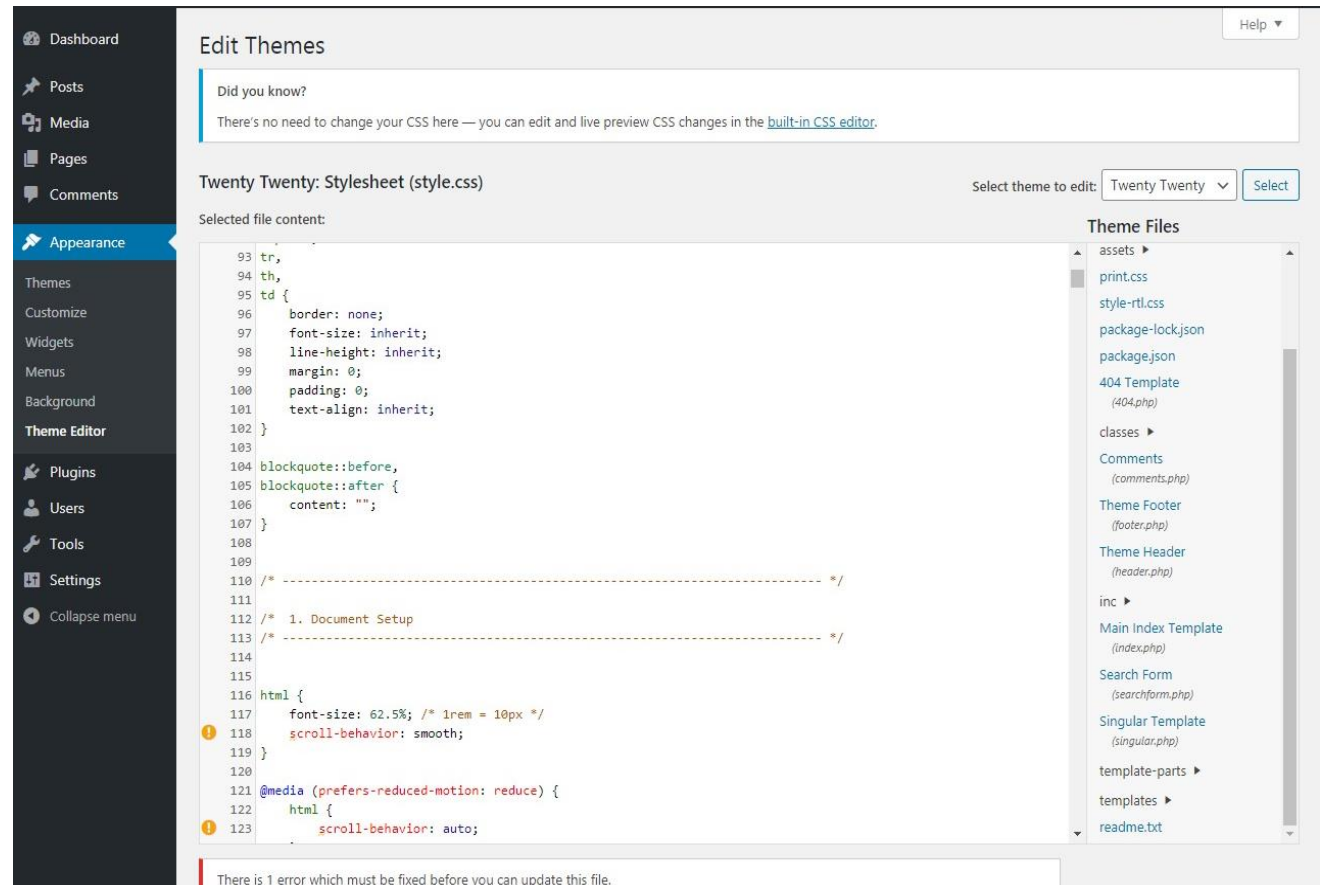
Alternatively

- Go on Appearance -> Customize -> Home Settings
- And click on the the radios "A static Page"

# ACCESS WORDPRESS THEMES FILES

## CUSTOMIZATION OF WORDPRESS TEMPLATE

2020-02-03



Transactional web applications development

87

# **ACCESS WORDPRESS THEMES FILES**

With The Administrator  
Privileges, You Can Access  
The Theme Files From  
Appearance-> Theme Editor



2/3/2020

you can as well edit  
and save any file of  
your theme.

appearance-> theme  
editor  
search for the file you  
wish to edit -> do  
your changes -> click  
on "update file"

## **ACCESS WORDPRESS THEMES FILES**

Transactional web applications development



# CREATE A CUSTOM WORDPRESS TEMPLATE FILE

It might happen that you want to create a custom design for a specific page of your site. In order to avoid overwriting your existing design or create unwanted error, creating a custom wordpress template file might be an option. Below are the steps to achieve that.

- Locate your main WordPress installation folder(on the server or localhost)
- Navigate to wp-content/themes/YourThemes (or the child theme)
- Create a php file.You can give any name. e.g. myportfolio.php
- Open the page.php file and code all the code from that file.
- Paste the content to your new file (e.g. myportfolio.php)
- Finally give a name to your template by writing Template Name : Name to your template at the third line.

## CODE EXAMPLE FOR MYPORTFOLIO.PHP

```
<?php
/**
 * Template Name : My portfolio Example.
 *
 * @package WordPress * @subpackage Twenty_Twenty * @since 1.0.0
 */
get_header();
?>

Your content here

<?php
get_footer();
?>
```

## **A SHORT INTRODUCTION TO WORDPRESS SHORT CODE**

A Short code in WordPress is an easy way to abstract backend development and enable front-end developers or community managers to easily use some features. You will find short code with many plugins. WordPress Short code is written in this format :

- [short code parameters] – Where the short code parameters represents information provided by the plugins developers.
- You can add the short code in any page/post in the format [short code parameters] to display the content on the site or
- Use the Wordpress function `do_shortcode([short code parameters])` in your template file to display plugins information.

# **ADVANCED WORDPRESS FEATURES**

## **MODULE 7**



Widget



WordPress Updates



Import/Export content



Debugging

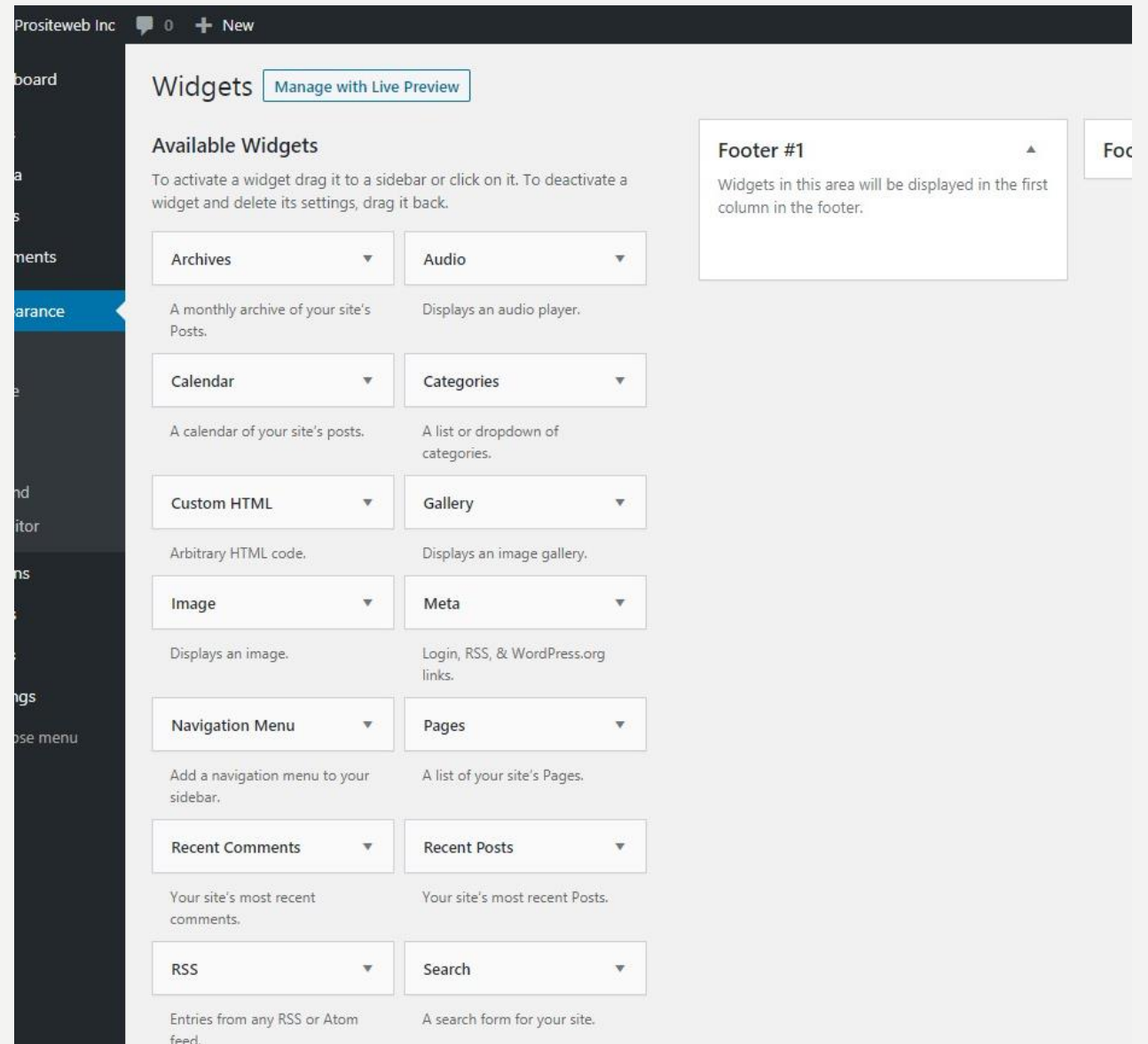


Handling WordPress security: in-built features

# ADVANCED WORDPRESS FEATURES

# WORDPRESS WIDGETS

Widgets are small applications/extensions you can place in a space provided on your blog or website. This is usually a column left or right on the page (where also the menu is located) or a space at the bottom of the blog or website. The number of spaces to place widgets is limited and depends on the used theme.



# EXAMPLES ON HOW TO USE WIDGETS

There are widgets to:

- Show categories or tags on all the pages or posts
- Add custom text in a specific location
- Display your latest tweets from Twitter
- Show adverts on a page. And so on.

How to activate a widget?

- Select "Appearance" > "Widgets" in the left menu
- Drag a widget from the central screen to a widget space right:



# WORDPRESS UPDATES

To update a WordPress core website,

- Go to Dashboard -> Updates
- Check if there is a new version of WordPress
- Click on Update. And after few minutes your WordPress will be updated to a new version

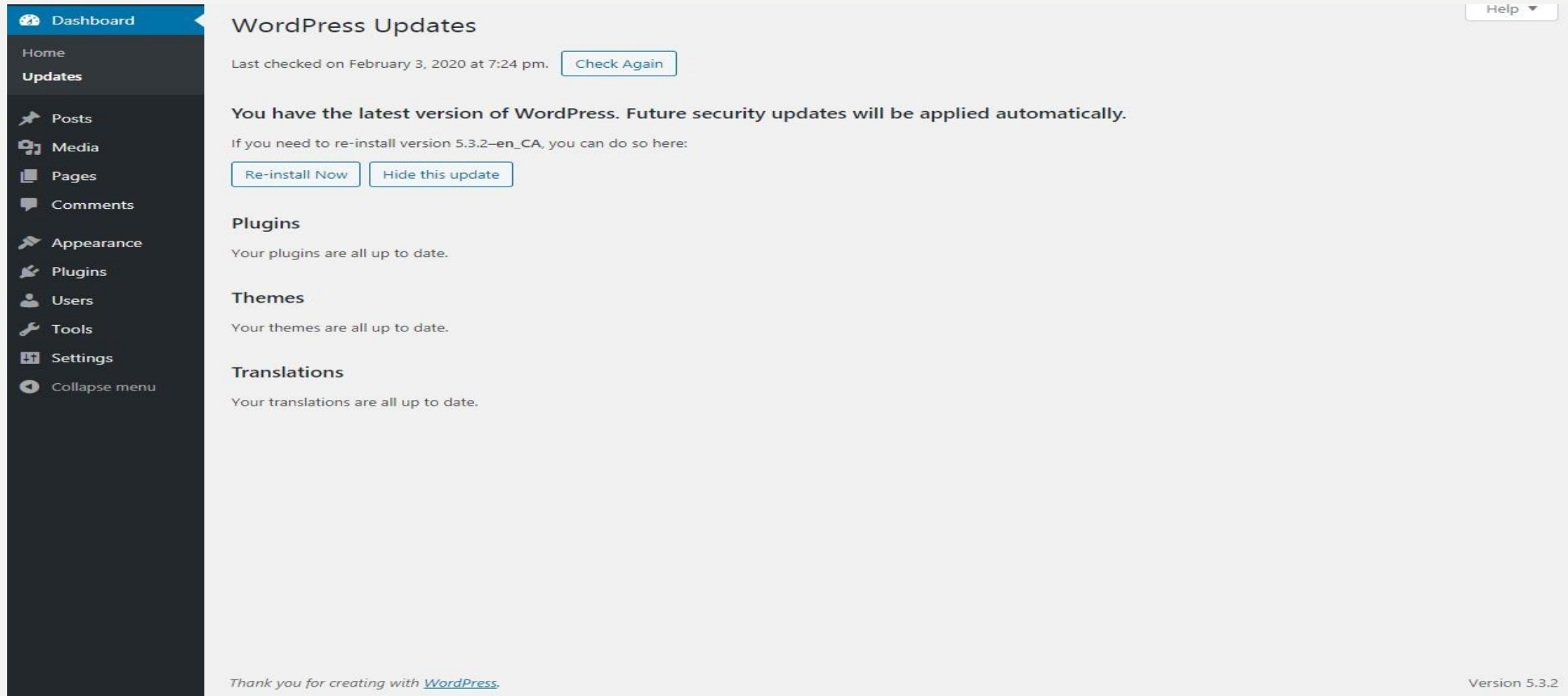
To Update WordPress Theme

- Go to Appearance -> Theme (if your theme is from the search, you can click on the update button to update – at the bottom of your theme)
- If you bought the theme from scripts market, you will need to overwrite the main template.

To update plugin:

- Go on Plugins -> Installed Plugins,
- Select the plugin you will like to update
- Click on Update

# WORDPRESS UPDATES



The screenshot displays the WordPress dashboard interface. On the left is a dark sidebar menu with options: Dashboard, Home, Updates, Posts, Media, Pages, Comments, Appearance, Plugins, Users, Tools, Settings, and Collapse menu. The main content area is titled 'WordPress Updates' and shows a status message: 'You have the latest version of WordPress. Future security updates will be applied automatically.' It also includes a 'Check Again' button and a note about re-installing version 5.3.2-en\_CA. Below this are sections for Plugins, Themes, and Translations, all indicating they are up to date. The footer of the dashboard area contains a thank you message and the version number 5.3.2.

**Dashboard**

Home

**Updates**

WordPress Updates

Last checked on February 3, 2020 at 7:24 pm. [Check Again](#)

**You have the latest version of WordPress.** Future security updates will be applied automatically.

If you need to re-install version 5.3.2-en\_CA, you can do so here:

[Re-install Now](#) [Hide this update](#)

**Plugins**

Your plugins are all up to date.

**Themes**

Your themes are all up to date.

**Translations**

Your translations are all up to date.

Thank you for creating with [WordPress](#).

Version 5.3.2

## IMPORTANT NOTE ABOUT THEME UPDATES

If you are constantly changes your themes code, it is recommended to create the child theme. So that whenever you update your theme, you will not lose your changes. Moreover, in case you face an issue on your site, it will be easier to revert back to the initial setting.



# IMPORT/EXPORT CONTENT

WordPress offers a basic tool that can enable you to import or export your content. For more advanced feature, you can install a plugin. To use the WordPress Import or Export feature,

To export

- Go to Tools -> Export
- Select an option (All content, Posts, pages ... )
- And then Download Export File

To import

- Click Tools -> Import and
- Select a plugin (Blogger, Categories and Tags ...)
- Install and do the import

WordPress

Prositeweb Inc

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New

Howdy, NGUNTE Possi Gilblas

Help

Dashboard

Posts

Media

Pages

Comments

Appearance

Plugins

Users

Tools

Available Tools

Import

Export

Site Health

Export Personal Data

Erase Personal Data

Settings

Collapse menu

## Import

If you have posts or comments in another system, can import those into this. To get started, choose a importer from below:

<b>Blogger</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts, comments, and users from a Blogger blog.
<b>Categories and Tags Converter</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Convert existing categories to tags or tags to categories, selectively.
<b>LiveJournal</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts from LiveJournal using their API.
<b>Movable Type and TypePad</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts and comments from a Movable Type or TypePad blog.
<b>RSS</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts from an RSS feed.
<b>Tumblr</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts & media from Tumblr using their API.
<b>WordPress</b> <a href="#">Install Now</a>   <a href="#">Details</a>	Import posts, pages, comments, custom fields, categories, and tags from a WordPress export file.

If the importer you need is not listed here, [search the plugin directory](#) to see if another is available.

Thank you for creating with [WordPress](#).

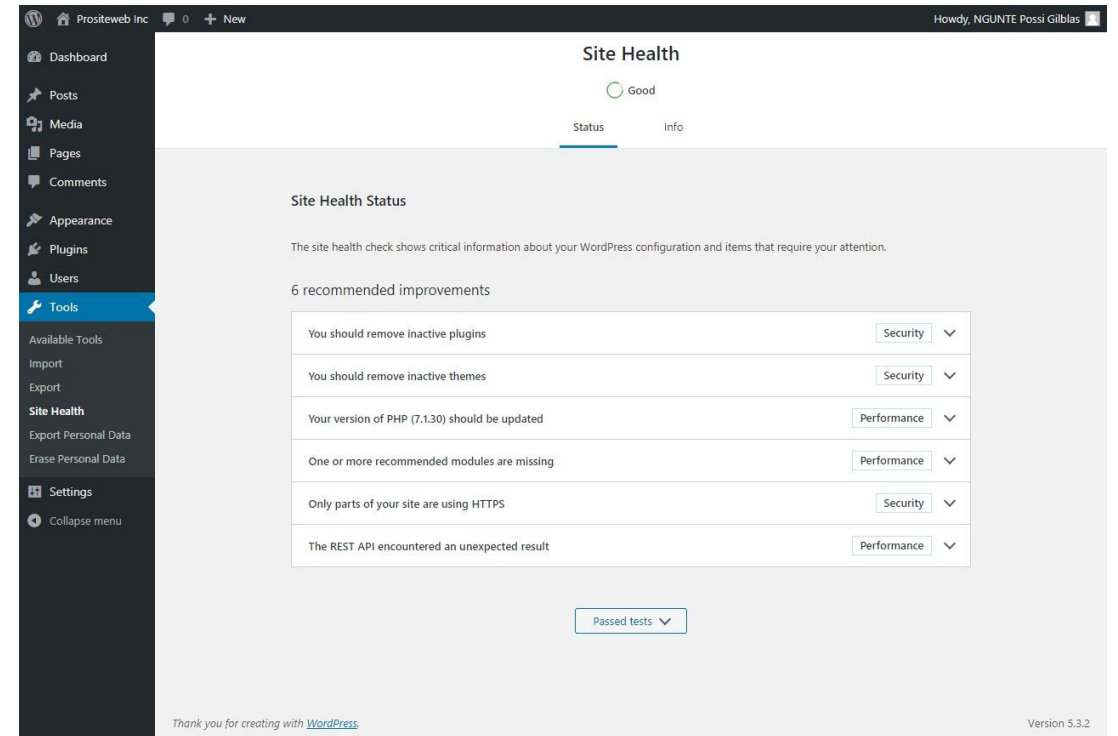
Version 5.3.2

# WORDPRESS DEBUGGING

To fix buggies on your WordPress site, you have some built-in tool such as :

- Site Health (Tools -> Site Health) and
- WP\_DEBUG constant in the file (wp-config.php) – Use only in dev environment

For more advanced features, a plugin can help.



# HANDLING WORDPRESS SECURITY: IN-BUILT FEATURES

To handle security, WordPress now offers to :

- Send automatic emails to inform administrator on critical issues on the site
- Use the site Health to fix some common vulnerabilities
- Generate a more complex password during registration or password reset
- Check if the emails in the account are still valid.



# WORDPRESS SECURITY RECOMMENDATIONS



CHOOSING A STRONG  
PASSWORD



CHANGING THE TABLE  
PREFIX. BY DEFAULT IT  
IS WP\_



PICKING THE RIGHT  
ADMINISTRATOR  
USERNAME



USE CAPTCHA TO  
PROTECT YOUR SITE  
AGAINST SPAMS



ADVANCED PLUGINS  
FEATURES CAN HELP  
TO FURTHER  
REINFORCE SECURITY



# REFERENCES

- WordPress documentation;  
<https://wordpress.org/support/>
- WordPress for beginner Online Blog;  
<https://www.wpbeginner.com/>
- Hostinger -  
<https://www.hostinger.com/tutorials/wordpress/>