OPEN SOURCE PROGRAMMING – ITE1008

DIGITAL ASSIGNMENT-1

Slot: B1+TB1

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Github Link: https://github.com/dipeshvb/wordpressDA

a) **Why WP** –

- **Open Source with room for expansion-**
  WordPress can be self-hosted, so there are no costs associated with downloading, installing, and upgrading. There are more than 50,000 WordPress plugins (often free), such as slideshows, contact forms, SEO optimization, etc.
  Fresh Consulting licenses the premium plugins we deploy on websites, such as WordPress video manuals and easy website backup and restore functions, at no additional cost to you.

- **Highly customizable for great flexibility-**
  WordPress is popular because it meets the demands of many users with its flexible framework, which allows designers and developers to create and modify layouts and applications. Coupled with user-generated extensions, websites are no longer limited by enterprise extensions.

  Our team has experience extending WordPress functionality, as well as incorporating a wide range of plugins, to meet our clients' unique demands.

- **Designed for anyone, not just developers-**

Before WordPress became a popular CMS for website development, it was developed for non-tech savvy bloggers. So, most of the user-interface components are easy to use, and there are written and recorded manuals available for easily learning how to use WordPress functions. Our team handles all the complexities of setting up and customizing your website; all you have to do is to update the content on pages, posts, widgets, etc.

One of the premium plugins we provide to our clients offers both written and video user manuals for WordPress to facilitate on-boarding with the CMS.

- **Lower setup and maintenance costs-**
  WordPress incurs fewer setup, customization, and maintenance costs in comparison to other Open Source CMS like Drupal and Joomla. Additionally, it is relatively easier to find WordPress designers and developers if more customization or development is necessary in the future. You don't get locked down by a static website or proprietary CMS that is costly to tweak after initial development.

  WordPress can be a quick win for improving your customer experience. Contact us today to learn more.

- **Multimedia Support-**
  The websites that get the lowest bounce rates are the ones with plenty of multimedia. WordPress lets you easily integrate video either by uploading your own, or by adding embeddable code through the HTML areas. You can also add audio files, imagery, and other forms of media to keep people interested and browsing your site.

- **Schedule Posts-**

WordPress makes it easy for you schedule the things you publish. This way, you can write all your content at once, and have it published at specific times of the day, throughout many days. This is most convenient if a majority of your traffic tends to visit during a particular block of time.

b) **Pros and Cons of Word Press-**

Pros-

1. User Friendly CMS:
WordPress is a strong content management system because of its origin in blogging. It is very easy for an admin to navigate through the backend of their WordPress site, edit pages and upload new content. WordPress makes it simple to organize content without a lot of website management knowledge.

2. 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.

3. SEO:

The importance of SEO best practices are at an all time high. WordPress does a good job of promoting these best practices. There are many SEO plugins available to help optimize content, meta tags, keyword focus etc.

Having access to free plugins, like Yoast, means each WordPress site is SEO ready. There isn't a better platform than WordPress when it comes to SEO optimization.

4. Responsive:

WordPress has thousands of themes available. Generally, these themes are very reliable when it comes to being responsive. With an increasing amount of internet surfing done on mobile devices, having a mobile-friendly site with consistency across all devices is very important to the UX; WordPress does a good job with this. Get some guidance in selecting your theme with "How to choose the best WordPress theme for your needs."

5. Open source:

WordPress is an open source software and any one can use, study, change and redistribute its source code. Many of the themes and plugins are free under the GPLv2 license and being an open-source software, WordPress programmers are able to openly share code online. The sharing of code can result in the ability to save a lot of developing time and costs by using an existing code.

Using an open source platform is also valuable when you're working with a 3rd party partner or agency to develop your WordPress website. You won't be stuck working with a proprietary software that only a small group of developers can work on. There are a number of different WordPress developers out there that have the ability to support your website if you ever need to change partners.

Cons-

1. 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.

2. 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.

3. 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.
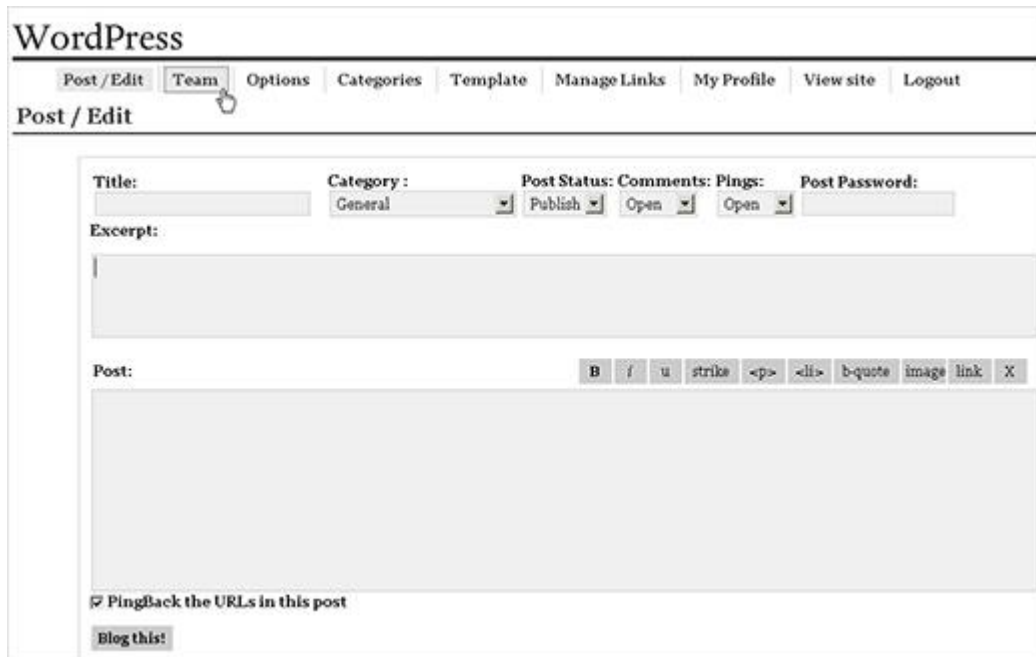
4. Customization:

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.

c)<u>**HISTORY OF WORD PRESS**</u> –

WordPress started out because the development of an existing blogging software was discontinued by their main developers. In 2003, two users of that software, Matt Mullenweg and Mike Little, decided to build a new platform on top of that software.

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 Cafelog with significant improvements. The first version of WordPress included a new admin interface, new templates, and

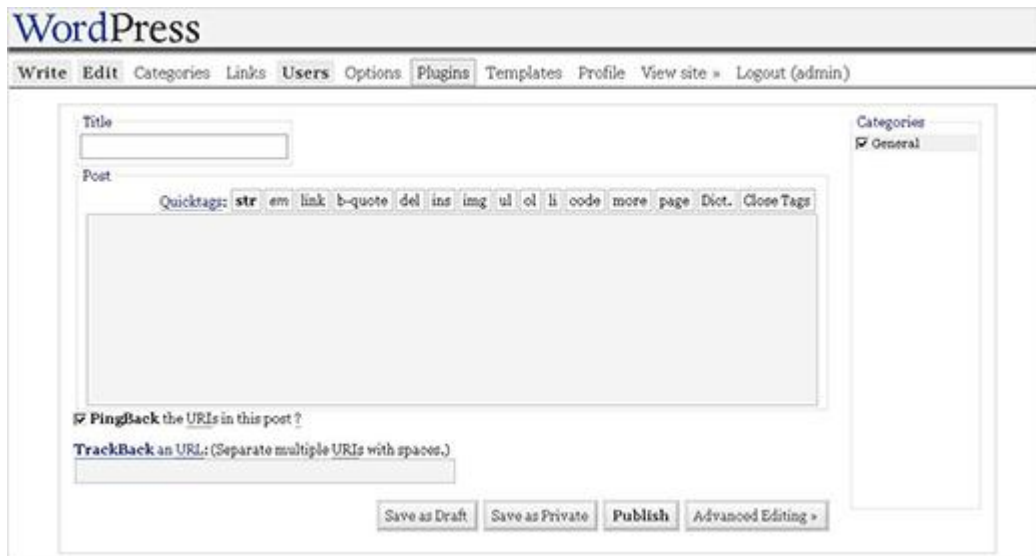generated XHTML 1.1 compliant templates. The post editor looked like this:

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.

As WordPress was opening itself to the community, something totally opposite was happening in the blogging industry at that time.
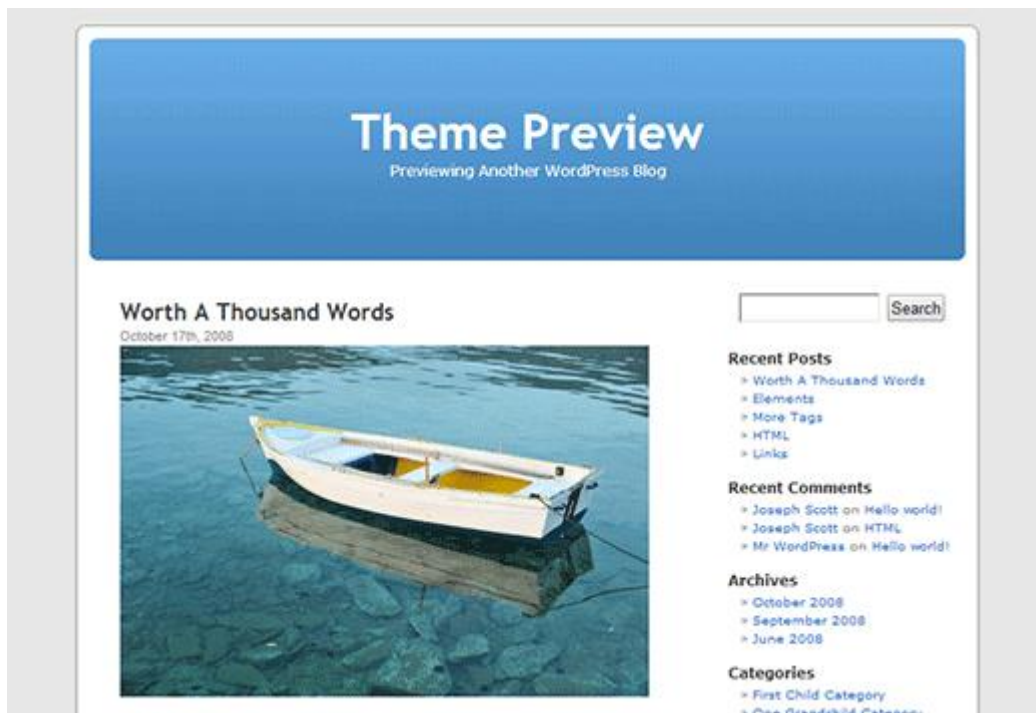
The market leader in blogging tools industry at that time was Moveable Type. They announced new licensing terms which were not liked by many of their users. This forced many of their users to look for a new blogging platform.

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

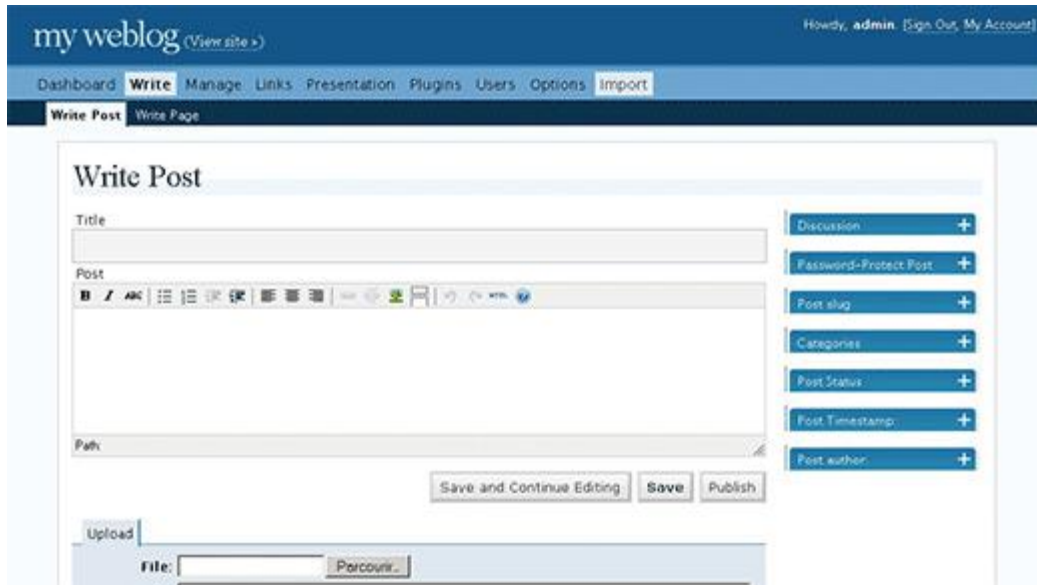With the increase in the number of users, WordPress started getting better with the help and interest of the community.

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.
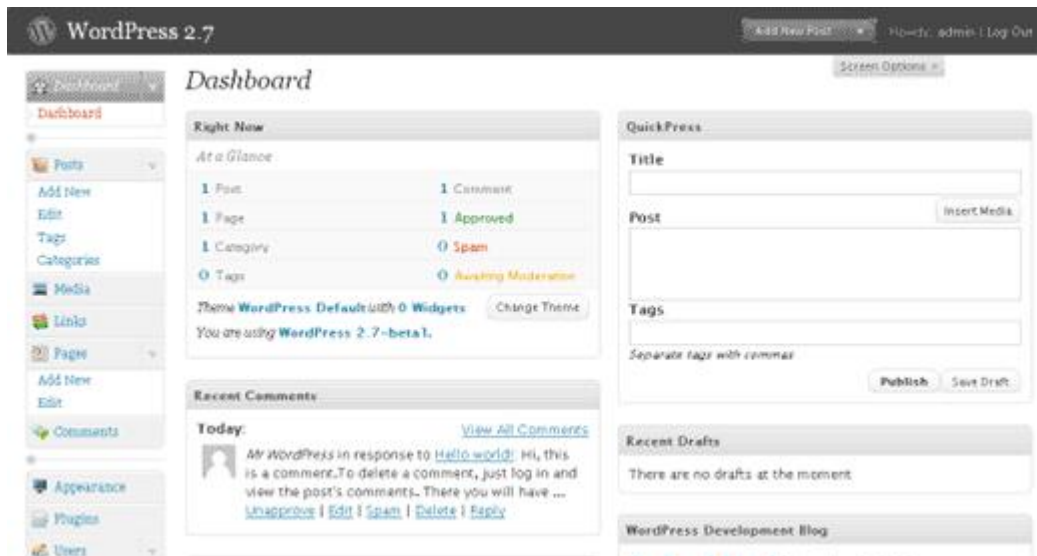

The shiny new admin UI was not the only significant improvement in this release.

It was the first release that came with Akismet anti-spam plugin pre-installed. It also came with a WordPress database backup plugin, wp-db-backup, which was then dropped in 2007. Another first for this release was the introduction of a functions.php file in the Theme System.

On March 1, 2006, Automatic, 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.

Throughout the year new features such as shortcodes, one-click updates, and built-in plugin installation were added to WordPress with different releases.

In June of 2010, Automatic, the company founded by WordPress co-founder Matt Mullenweg, transferred the ownership of WordPress trademark and logo to the WordPress Foundation. This was a significant moment in WordPress history, because it ensured that WordPress will continue to grow, and is not dependent on a company or a group of developers to continue the project.

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.

It also came with Twenty Ten, which started the tradition of a new default theme for each year.

d) **COMPARISON BETWEEN WORD PRESS, JOOMMLA, DRUPAL AND GOOGLE BLOGGGER –**

Comparison between Joomla and Drupal-

1.Word Press-

WordPress is an online, open source website creation tool written in PHP. When it comes to CMS comparison, it's probably the easiest and most powerful blogging and website content management system (or CMS) in existence today. It can also be successfully used for designing simple websites. WordPress is powerful enough for web developers or designers to efficiently build sites for clients; WordPress is ideal for fairly simple websites, such as everyday

blogging and news sites; and for anyone looking for an easy-to-manage site. The development on WordPress is easy and one can see real-time changes as they apply changes on their website.

Benefits of WordPress-

- It comes with preinstalled plugin and template function.

- It's ease-of-use.

- User-friendly and best for beginners and amateurs.

- It has over 45,000 Plugins for almost all the functionality.

- WordPress offers lots of customization options of a theme.

2. Joomla-

Joomla is a free and open-source content management system (CMS) for publishing web content. It's great for e-commerce or social networking websites, but when it's about CMS comparison it requires

a basic understanding of technical skills. Joomla is designed to perform as a community platform, with strong social networking features. When it comes to complexity as per CMS comparison, Joomla comes somewhere between simple WordPress and comprehensive and advanced Drupal. Joomla helps you keep track of your web content. As per CMS comparison, Joomla allows you to build a site with more content and structure flexibility than WordPress offers.

When CMS Comparison comes, Joomla has brilliantly combined the power and flexibility which Drupal has to offer, while also retaining the intuitive, user-friendliness that WordPress excels at, making it a perfect middle ground in a crowded marketplace.

Benefits of Joomla-

- Joomla is an open source so its license is available free of cost.

- Joomla can be used for Multipurpose like government applications and organizational websites.

- It's Easy to Use.

- Not too Technical.

- There are thousands of templates and themes available for Joomla CMS development.

- Joomla CMS development can be easily migrated to any server.

As per CMS comparison, Joomla requires certain Plugins for certain scripts. Its Customization is limited. It is heavy for the simple and small website.

3.Drupal-

Drupal is the most difficult, but also the most powerful. It requires a familiar understanding of HTML, CSS, and PHP. Drupal an exceptionally SEO Friendly CMS it comes with the Clean code and effective modules. If CMS Comparison appears then Drupal is known for its powerful taxonomy and ability to tag, categorize, and organize complex content.

Benefits of Drupal-

- Drupal doesn't require any specialized capacity for coding (like HTML coding), it comes with thousands of free Modules.

- Drupal has Basic and Advanced Features.

- Drupal comes with Readymade Professional Themes.

- It has the neat code and exceptionally potent modules that are liked by major search engines.

4.Google Blogger-

Blogger is an online content management system (CMS) that facilitates the creation of informal online discussion sites, also called blogs. It was developed by Pyra Labs and purchased by Google in 2003. The blogs are generally accessed from the subdomain of "blogspot.com." As per CMS comparison, Blogger has limited content management and categorization tools, templates and customization capabilities.

Benefits of Google Blogger-

- It is entirely free (no costs for website hosting or domain name)
- Easy to set up and create posts and pages
- Requires very little to low site maintenance
- Built-in analytics and easy syncing with Google Analytics
- SEO-friendly since it is owned by Google
- Google AdSense can automatically display relevant, targeted ads on your blog
- API and developer forum

So, from the comparisons, we can conclude that Word Press is the best CMS.

e) <u>**THEMES AND PLUGINS OF WORD PRESS**</u> –

Themes-

WordPress themes are designed to make large-scale changes to your website's appearance. This includes its design, layout, colours, 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.

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.