

Joomla, A Viable CMS Platform in Developing a Library Website: A Case Study of Bharatesh's Global Business School Library

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Abstract

The present paper describes the development of the Bharatesh Education Trust's Global Business School Library website. The aim of the website is to serve as a guide to the library resources, services and links to other libraries and sources. Joomla, Content Management System (CMS) software was used to develop the library website. It is found from the study that Joomla is a dynamic CMS platform in terms of extensions or templates, updateness. Without the knowledge of coding languages (like HTML, SGML, XML, etc.) anybody can create and develop library website.

Keywords: Joomla; Content Management System (CMS); Open Source Software (OSS); Content Management.

Introduction

Recent years have seen dramatic changes in library and Information science profession, especially introduction of open access, open source software, Content Management System (CMS), web 2.0, Knowledge management, Institutional Repositories, etc. The use of Open Source Software (OSS) in libraries is an increasing trend, and need of the hour too. The tools and implementation of OSS provide libraries with access to a dynamic and cost effective solution for serving user community (Payne and Singh, 2000). In the present context there is an information jam over Internet. Hence it is essential, challenging as it is, for library professionals to provide selective elimination of information rather than selective dissemination of information. The end user is bothered not about less or no information on a particular subject, but too much information poses a problem of how to handle it.

Managing the exponentially growing quantities of online contents on the World Wide Web (WWW) has posed considerable challenges in terms of creation, content management, repository, security, authenticity, retrieval and delivery (Wu and Liu, 2001). The present study is a reflective case study of the experiences observed at one of the business school libraries in identifying and implementing a Content Management System, here after referred to as CMS.

Content management system (CMS)

Content management system plays a vital role in providing tools to support the creation and repository of contents, their management, design and delivery (Wu and Liu, 2001). As the supply of information grows exponentially, the complexity in handling it also grows enormously. In this regard, the need for reliable, standard, and extensible CMS becomes more and more obvious. An online contents on the WWW using CMS locates, identifies and tracks information that is placed on a website so that it can be easily located, modified and reused (Morgan, 2000). A CMS allows a content to be created, edited, updated, and controlled in a variety of ways (Kalaimmal and Themaraiselvi, 2004).

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Content management helps the end user to get access to all the resources placed on a website at one single point (Wu and Liu, 2001). CMS is capable of substantially transforming the management of a web site. The key advantages of a good CMS is that, properly managed, it will make the site more readily accessible to all types of users and make it more compliant with web standards (Kane and Hegarty, 2007).

Objectives of the study

- To publish the information related to library services.
- To provide extension services like user education, reference service, tutorials etc.
- To give single window access for all library facilities and services like OPAC, Database services, e-journals access, Repository access etc.
- To use the library website as a communication media to contact through e-mail, telephone and message.

Overview of Joomla

Joomla is a free and open source CMS software. It is designed for publishing content online over World Wide Web. The software is written in PHP (Hypertext Preprocessor which is a scripting language), stores data in My SQL, includes features such as page catching, Reilly Simple Syndication feeds, Printable versions of pages, news flash, blogs, polls, search and support different languages. Joomla enables us to manage content. Joomla was erstwhile called Mambo. In the year 2005 it was renamed Joomla (Berge, S. 2012).

Features of Joomla

- Free Open Source Software: Joomla is 100% free open software with GNU general public license. It is complied with Open Source Software model.
- With little training, anybody can create and develop website by using Joomla.

- Easily customizable: Joomla provides many ready built in features. It allows to add extra features easily without coding knowledge.
- User Friendly: Joomla is compatible with both UNIX and Windows Operating System and includes more features.
- Since, most of the professionals are involved in creation and development of websites by using CMS, they can get their doubts clarified through forums or platforms.

Bharatesh education trust's global business school

Bharatesh Education Trust's Global Business School is a very young Business school which was started in 2009, offering MBA programme under the umbrella of Bharatesh Education Trust which was set up in 1962. The Trust runs 19 educational Institutions in different fields like Medicine, Technology, Nursing, Management along with numerous schools and undergraduate colleges. The BETGBS library is at the heart of the Institute which is known for its varied services and comprehensive collection of text books, Journals, Magazines and Audio Visual materials. The library is fully automated and barcode. There is a separate Digital Resource Centre, and the library has its own website. The library offers reference, Selective Dissemination of Information (SDI), Current Awareness Service (CAS), Inter Library Loan (ILL) along with some traditional services.

Installation process

Pre-requisites for Installing Joomla

- Operating System: LINUX/UNIX, or WINDOWS
- LAMP/WAMP server
- LAMP means, Linux, Apache, MySQL and PHP/Perl/Python
- WAMP means: Windows, Apache, Mysql and PHP/Perl/Python

Joomla is not like many other softwares. It can't just run on any computer. It requires server to run successfully. Normally, the Joomla can be installed at two places;

- Local server installed on end user or client computer.
- Web server.

Joomla can be installed manually from source code on system running server which supports PHP application. Manual installation requires more time and experience. Hence, it is better to select WAMP/LAMP server. The following steps should be followed at the time of installation by using windows platform. Once installed in local computer we can start the process after the customization with particular host name.

Step I

Download the WAMP server from <http://www.wampserver.com/en/download.php> and Install it.

Step II

Once WAMP server is installed in local computer, we need to create database in My

SQL. The following steps will help us to create database. Start the WAMP server there in desktop. It means whenever we are working with Joomla, the WAMP server must be active. Then follow the steps: go to browser, type localhost <http://localhost> (now we are accessing localhost) and click on PHP my admin

Create a database in PHP Myadmin

- Give the Database name
- Click on create button
- Go to privileges button and set the new user
- Set all privileges to new user

Step III: Installation of Joomla

Download the Joomla package from <http://www.joomla.org> and extract zip in WAMP server. Now the WAMP server is in C:\wamp\www\ and rename it with the site name or any other name. Assume that we have renamed Joomla folder as library. Then the Joomla folder is located in C:\\wamp\\www\\library

Figure 1: Installation of WAMP Server in Local Computer

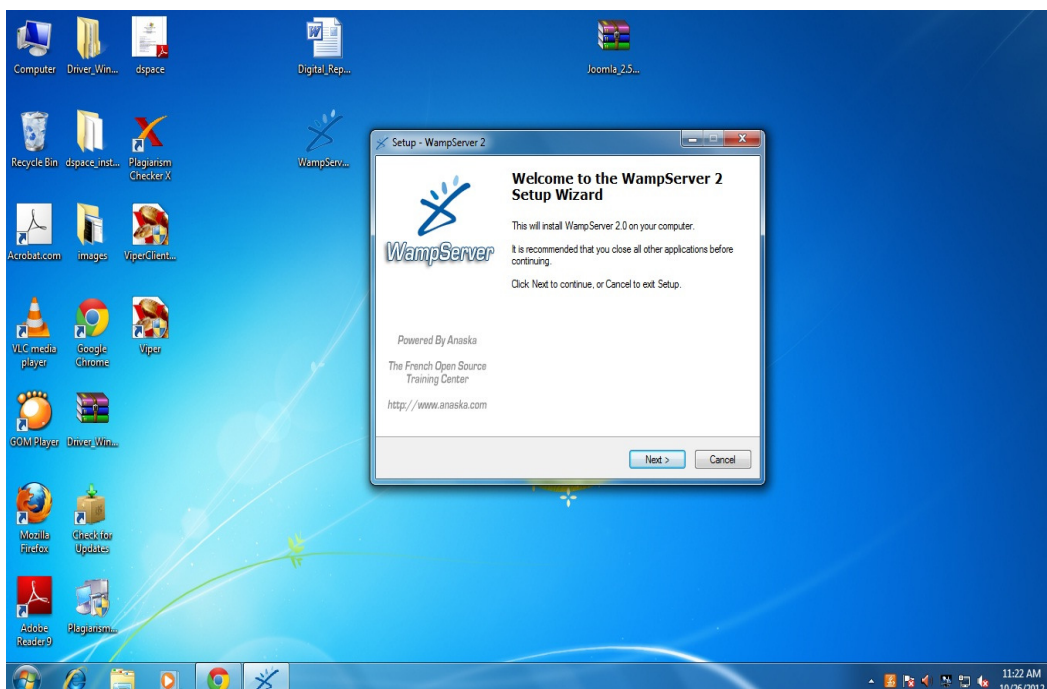


Figure 2: Localhost Access

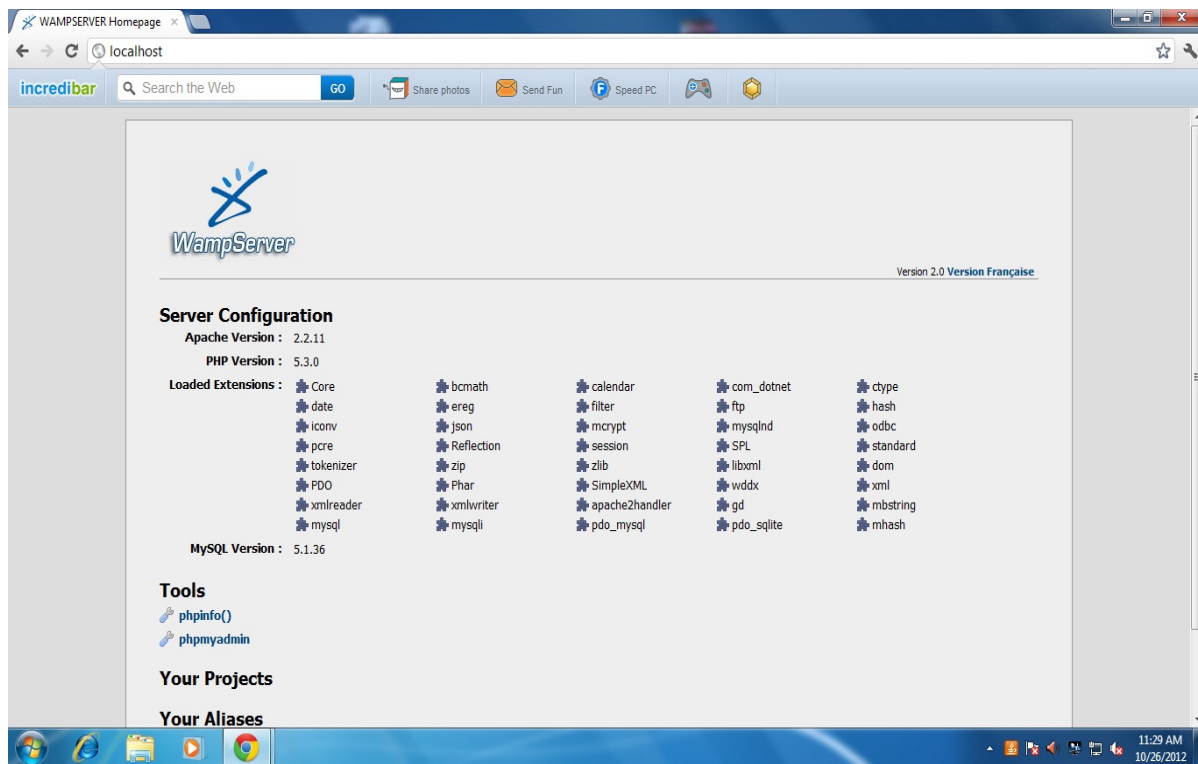


Figure 3: Database Creation

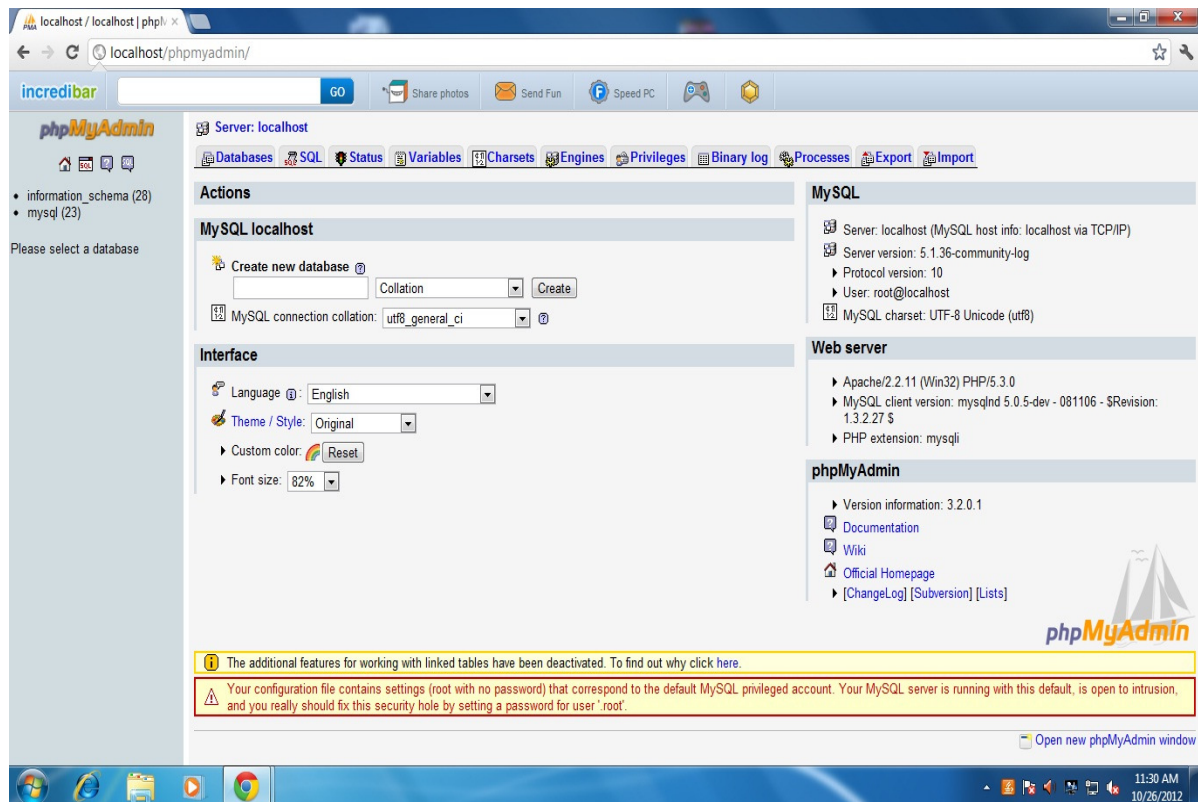
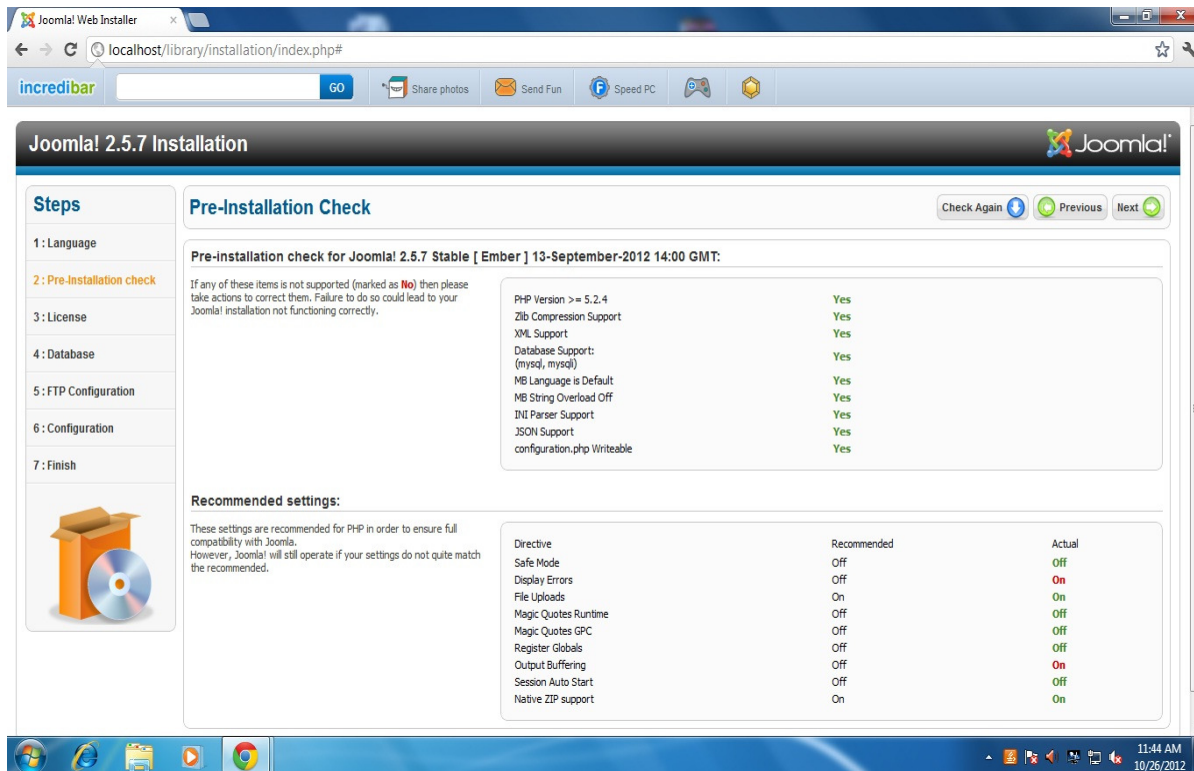


Figure 4: Pre-Installation Check



Step IV: Pre – Installation Check

Ensure that WAMP server has started processing. Open the browser and type the following web address <http://localhost/library>. The following installation page will open and will ask for the language choice. English is the default language. Select the language for installation. Many extensions are available for different language packages.

Step V: License

Read, understand and agree to the terms and conditions of Joomla.

Step VI: Database Configuration

In order to communicate with database this step establishes Joomla information. This is the most important step in the whole process.

Select the database from drop down menu. Select My SQL because the database is My SQL.

- Enter the host name as localhost because we are installing in local computer.

- Enter the user name
- Enter the database name which you have given in the first step.
- The additional settings fields ask you for further definition of the database.

Step VII: FTP Configuration

Due to file system permission and safe mode restriction on server hosts, a facility has been introduced in Joomla, that will allow all authorized users to utilize the various options to install and upload the process available within the control panel. It is not generally necessary to worry about the FTP configuration page for localhost installation of Joomla.

Step VIII: Main Configuration

The main configuration screen allows setting up of three critical elements for the installation of Joomla. Site name which we want to name, second section relates to key information of super administrator. The third and final

Figure 5: Database Configuration

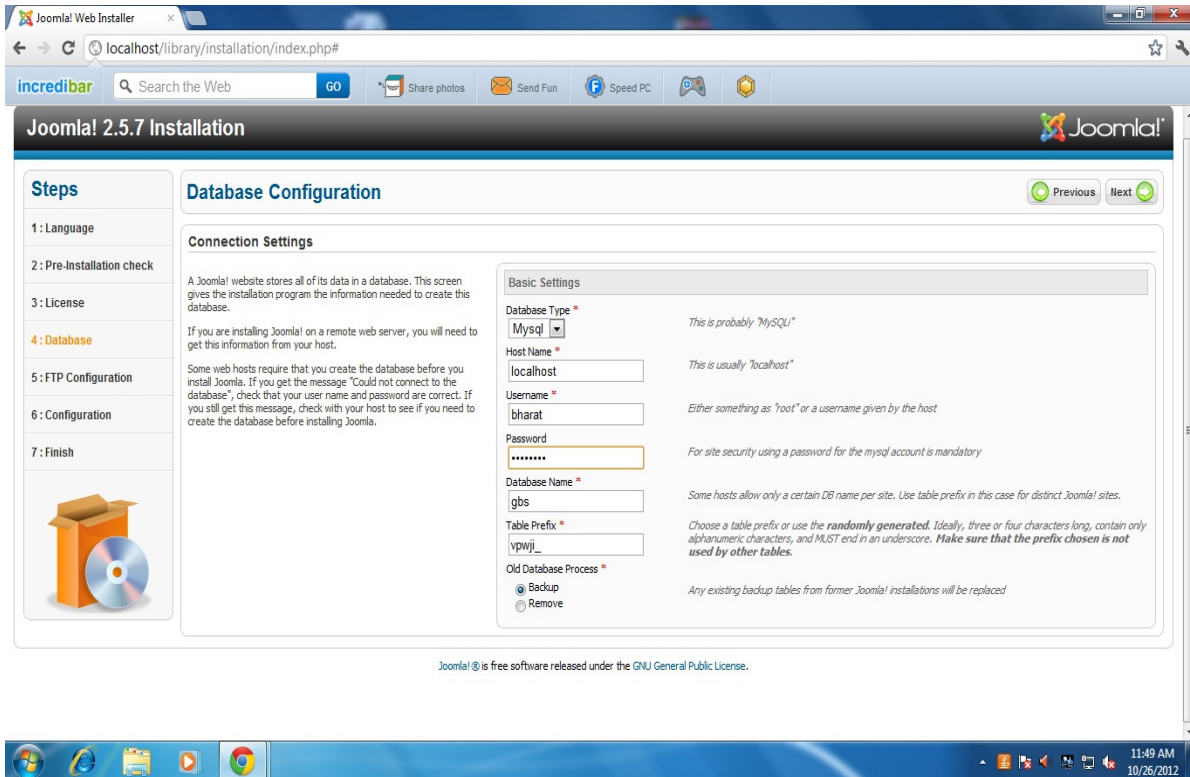


Figure 6: Final Stage

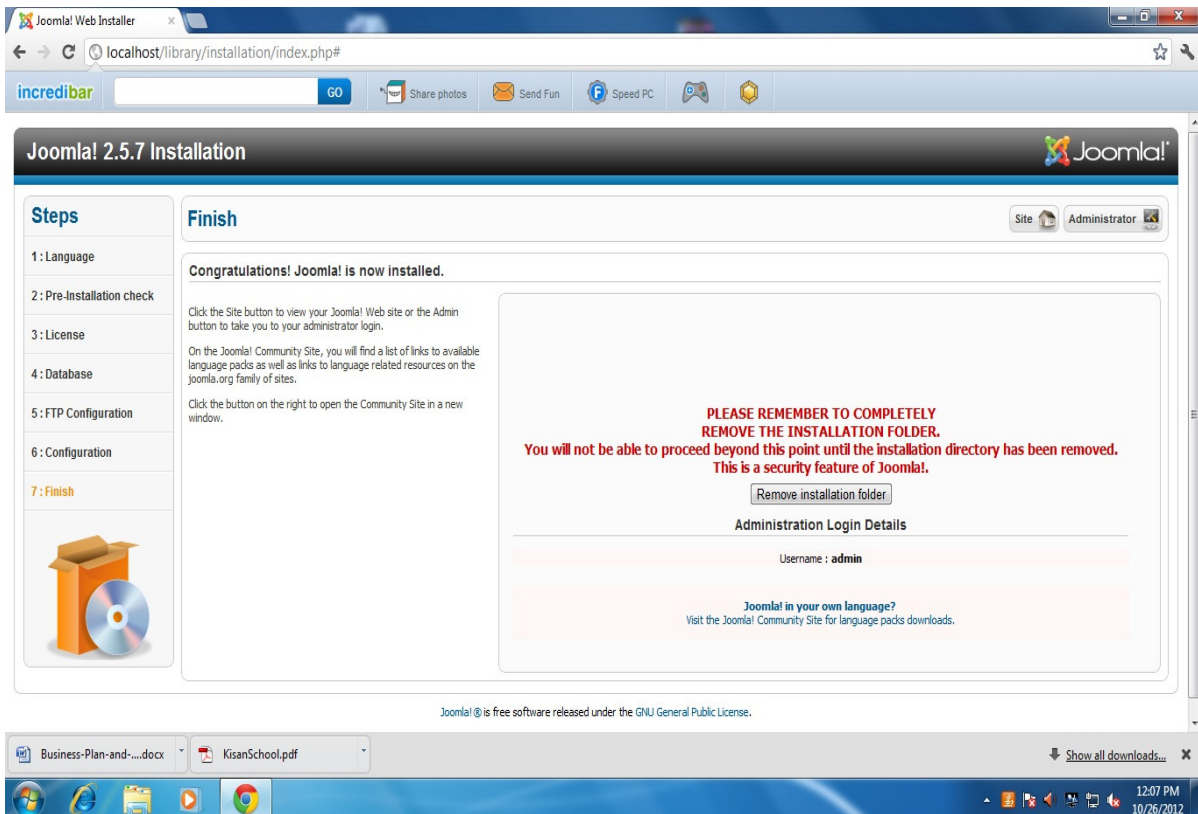


Figure 7: Installed Website

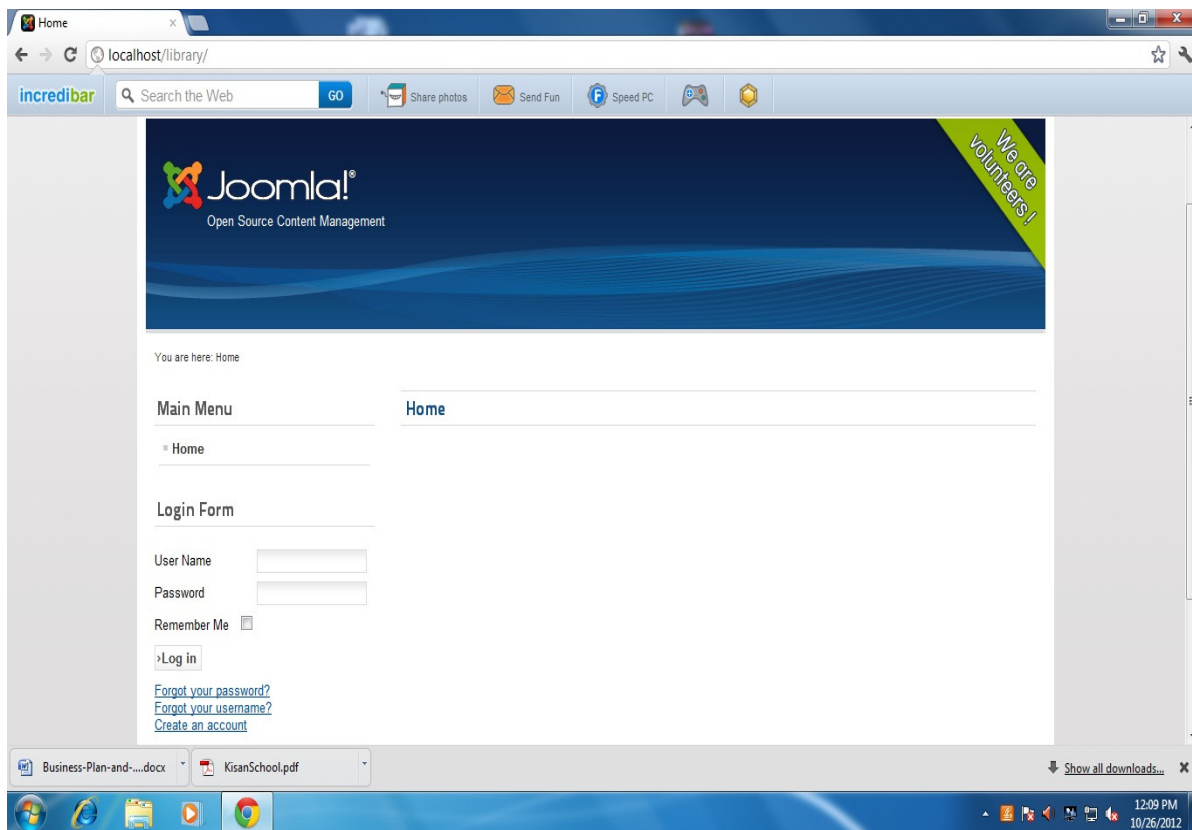


Figure 8: Administrator Account of Joomla

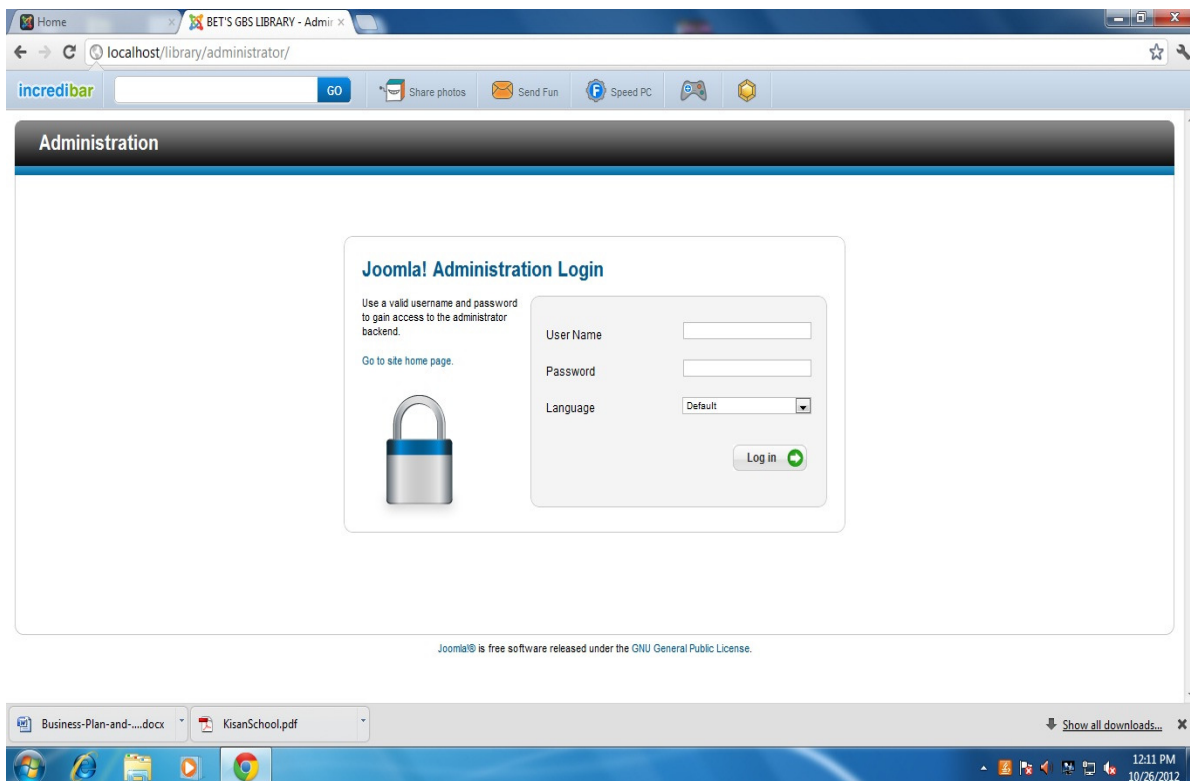
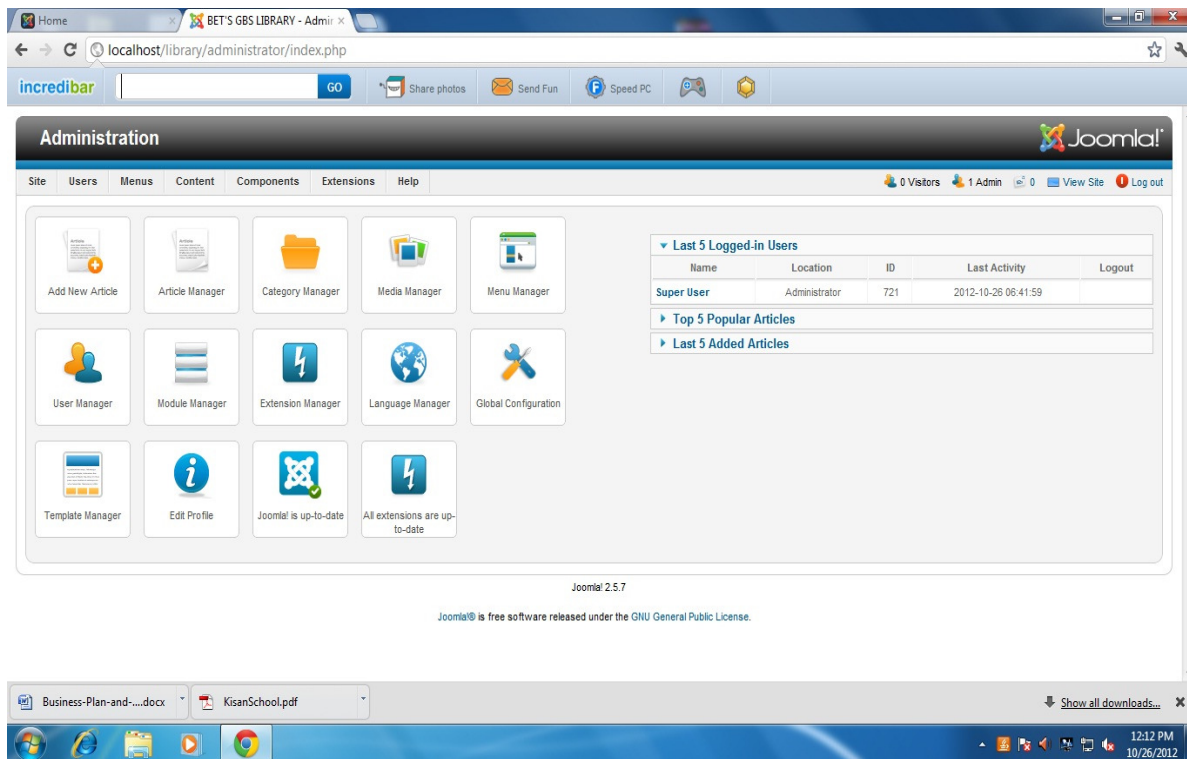


Figure 9: Control Panel of the Website



section relates to the sample data, whether to include or not. It is recommended to the beginners that they first install the sample data and then carry the process.

Step IX

Joomla has been installed successfully in the local computer (see figure 6).

Step X: Installed Website

Now open the installed Joomla website in local server with following URL

<http://www.localhost/library>

Without sample data the installed website looks like plain template or webpage. Based on the requirements of the organization, modification can be made through administrator account. Administrator Account means, super user's account which he/she can add and edit contents with organization's requirements.

Customization of Joomla

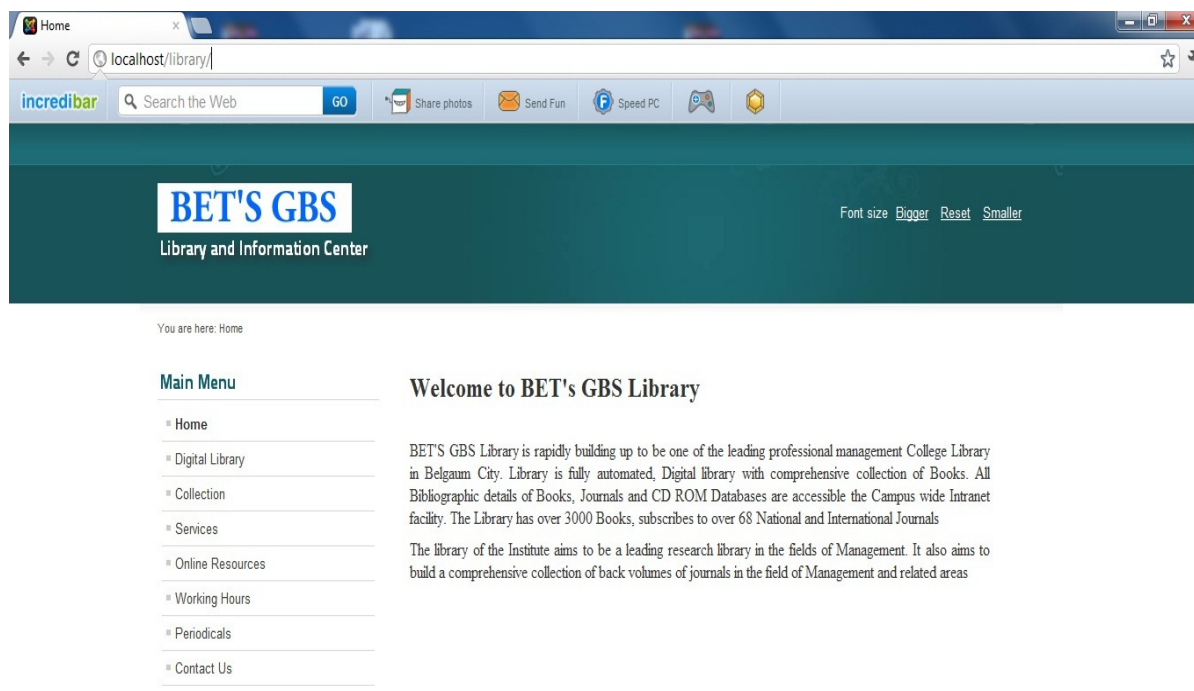
In order to make changes in website using Joomla Content Management System, we need to access administrator portion of the website. Through administrative section all website maintenance and development takes place. In order to access this, the following web address should be used, <http://localhost/library/administrator>.

User name is 'admin,' because the super user means the site administrator and password is your IX step password which you have given in the main configuration. After entering the necessary information you will be able to log in successfully. Then, the following screen shows (figure 9) how the customization can be done on Joomla website. Technically, it is called control panel.

BET's GBS Library Website

The Joomla software has been successfully installed in local computer, and named BET's

Figure 10: BET's GBS Library Website



GBS Library. Based on requirements customization can be done systematically. The following screen shows the customized page based on BET's GBS requirement.

Conclusion

Wu and Liu (2001) describe that today's libraries are bottomless pit, reasons being shrinking budget, escalation of journal prices, proliferation of e-resources, miss-match between theory and practice, etc. In order to bridge this gap, open source software comes to our rescue. Content Management System is one of the Open Source Software (OSS), which has attracted the professionals very much.

Any CMS accomplish makes complex tasks as simple as possible (Bramscher and Butler, 2006). An effective CMS allows the website creator to manage site architecture, choose different extensions or templates and publishing processes that fit the library's best model.

In the present study, authors have chosen Joomla as one of the CMS software for creation and development of the library website. Though the LIS professionals have used many other CMS softwares for library website still very few or no professionals have made any attempt to come out in the form of papers. Hence, the present study emphasizes how Joomla can be used effectively as one of the best CMSs to create and develop a library website.

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