241-302 Computer Engineering Lab II Semester 2/2012

Lab 3SB02: Web Content Management System (CMS) with Joomla

by Asst. Prof. Suntorn Witosurapot, wsuntorn@coe.psu.ac.th

Introduction

This lab aims to introduce the students with the Technology of Content Management System (CMS) through the use of Web and the Internet. Since it does not require any knowledge in web page creation or even maintenance, the CMS-based software has been gradually gain in popularity, especially in the enterprise web sites. Once the installation process is finished, the web site can be accessed either for viewing as same as typical web sites, or for performing administration (see Fig. 1). While there are a number of CMS software available, only Joomla! [1] – an open-source CMS software – will be focused in this lab.



Fig. 1 Two forms of CMS Web Access: as typical users or as administrator

Prerequisites

To complete this lab, you need to have the following software installed:

Software Components	Version used in this lab instruction
XAMPP – An software suite, which completely contains for Apache Web server, PHP, and MySQL (www.apachefriends.org),	2.5
Joomla!	2.5.x
(download directly from its main site at	
<pre>http://www.joomla.org/download.html</pre>	
or from the local server	

References

- 1. Joomla Web site, http://www.joomla.org, [Access: April 30, 2012]
- 2. Joomla Document, Use Joomla! on your own computer, http://docs.joomla.org/Use Joomla! on your own computer [Access: April 30, 2012]
- 3. Joomla! Video Tutorials, www.BuildaJoomlaWebsite.com [Access: May 8, 2012]

Section 1: Startup Apache Web server and MySQL database manager

1.1 Overview

In this section, you will examine whether your machine is ready or not for serving as a local web server.

1.2 Procedures (2 options are available)

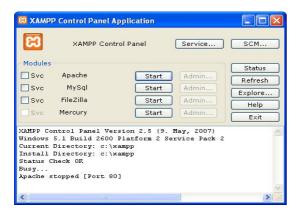
12.1 Launch Apache and MySQL services

Option1: using the XAMPP control panel

- Search for the "XAMPP control panel" icon on the Desktop area and click to pop-up a menu below (on the left side)
- Click at the **Start** button of Apache and MySQL to start them accordingly.
- Notice the status changed to "Running" with the **Stop** button becomes active as shown in the right side of picture above, allowing you to stop applications whenever you want. (see the figures below)
- Minimize this window or press the **Exit** button to close it.

Option 2: using the XAMPP Program Menu

Goto "All programs" -> XAMPP and select "start Apache" and "start MySQL" to activate them by yourself.
 (Note: Do not close the DOS windows resulting from the above operations. If these windows bother you, just minimize them)





12.2 Checking the readiness of web server

Open the Web browser, navigate to http://localhost/ and click at the phpinfo () link on the left-side menu. If everything is fine, the browser should see as same as in the following figure.



Section 2: Joomla! Web Installation

2.1 Overview

This section will introduce you how to install this joomla! software via Web installer.

2.2 Procedures

- 2.2.1 Locate the web root directory at c:\xampp\htdocs
 - Create a new folder (directory) and name it (e.g. joomla)



- Unzip the Joomla! Installation file (Joomla_2.5.x-Stable-Full_Package.zip) to the newly created folder.
- 2.2.2 Beginning Joomla! Installation from web browser
 - Open the web server and type URL as http://localhost/joomla (Note: Here assumes the word joomla is the name of your Joomla! folder)
 - Select your <u>preferred language</u> and follows the instructions showing on each web page, which represents each step of installation:
 - ตรวจสอบการติดตั้ง
 การตั้งค่าระบบ FTP
 ลิขสิทธิ์
 การตั้งค่าระบบหลัก
 เสร็จสิ้น

<u>หมายเหตุ</u> รูปแสดงวิธีติดตั้ง Joomla 2.5 ต่อไปนี้นำมาจาก http://www.siamebook.com/lbro/website-dev-cms-software/joomla25-guide/3279-install-joomla-in-local.html

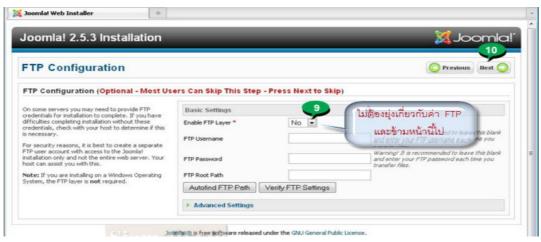


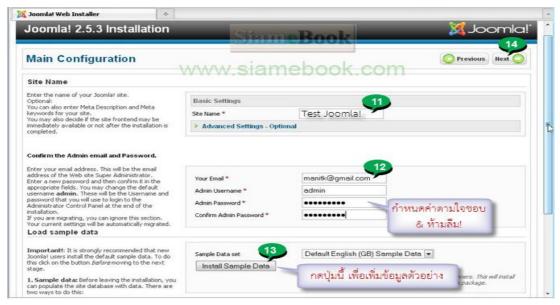




<u>หมายเหต</u>

- ชนิดฐานข้อมูล ให้เลือก เป็น Mysqli ชื่อโฮสต์ ให้ระบุเป็น localhost
- ชื่อผู้ใช้ฐานข้อมูล ให้ระบุเป็น root โดยรหัสผ่าน ให้เว้นว่างไว้
- ชื่อฐานข้อมูล ให้กำหนดได้ตามชอบ เช่น test





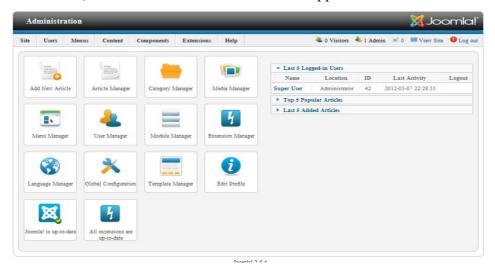
<u>หมายเหตุ</u> ให้คลิ้กที่ปุ่ม "ติดตั้งเพื่อดูตัวอย่าง" เพื่อติดตั้งข้อมูลตัวอย่างสำหรับการศึกษาเบื้องต้น



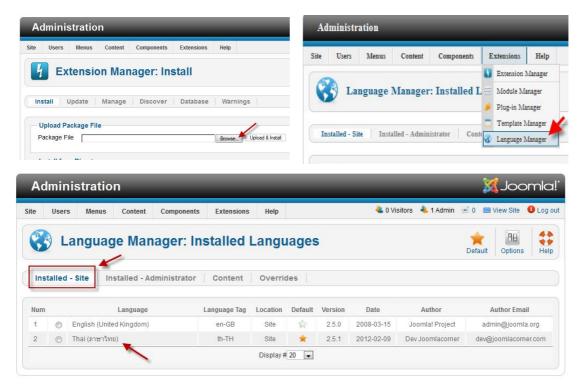
- 2.2.3 Verifying the success of your Joomla! Installation
 - Open the web server and type URL as http://localhost/joomla/administrator (Note: Here assumes the word joomla is the name of your Joomla! folder)



• If success, the main control screen should be appeared as follows.



- 2.2.3 However, it is likely that you may want your web site is friendly to "Thai" users. If it is the case, the Thai language add-on needs to be installed and enabled for the frontend (or even backend for the admin) of your web site.
 - Download the Translation Packs 2.5 for Thai language pack at http://community.joomla.org/translations/joomla-16-translations.html
 or http://www.joomlacorner.com
 - Installed and activate it via the Language Manager.



• Observe Thai scripts displaying on the web, rather than that of English scripts, which is by default at initial.



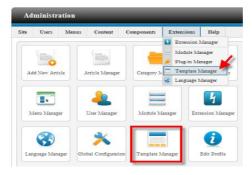
Section 3: Installing and Configuring Joomla! Template

3.1 Overview

This section aims you on how to install and manage Joomla! template, which allows you to control "Look and Feel" of your web site. However, to accelerate the learning process, an easy-to-understand video (the Lesson 11 of [3]) can be useful.

3.2 Procedures

3.2.1 Watch the video mentioned in the above section to understand the concept of Joomla! template and management by administrator menu.



3.2.2 Try to change the default "site" template (i.e. Beez2-Default) to some other template *built-in* (e.g. Beez5-Default) by clicking at the box in front of the template name, and the "make default" icon at the top right. Then, look at the web front end for the result.



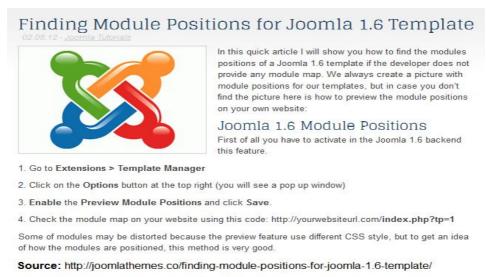
3.2.3 Now, search for free Joomla 2.5 templates in Internet to add more templates into our web site. (e.g. from http://joomlathemes.co/), download the zip file, and install it via the Extension Manager.

Note:

- 1. Please be noticed the <u>layout</u> of module positions also given in this web site. This is not always available in the general templates.
- 2. Example of Joomla Free template is at site, such as http://www.siteground.com/joomla-templates.htm



3.2.4 Learn from the following picture on how to find module positions for Joomla! 1.6 template (which is also applicable for Joomla! 2.5). Try it on some selected template.



Section 4: Adding and managing contents in Joomla! web site

4.1 Overview

This section wants you to learn how to add and manage web contents, which can be anything such as files, pictures, movies, etc. However, they are generally in a form of document called "Article" and its collection is called "Categories" (see Fig. 1 below for their relationships).

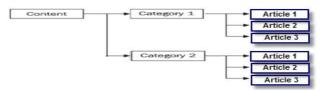


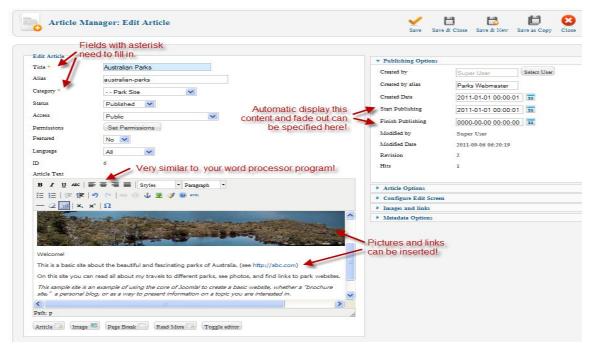
Fig. 1 Relationships of categories and articles in Joomla! web sites

These contents can be easily created and managed by using commands or click at icons from the control panel of administration.

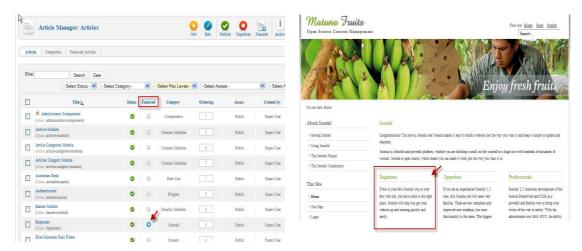


4.2 Procedures

4.2.1 Learn how to create articles and edit the content inside from given tutorial articles or web sites (i.e. "<u>Tutorial - Lesson 7b - Articles.mp4</u>" given in [3]).



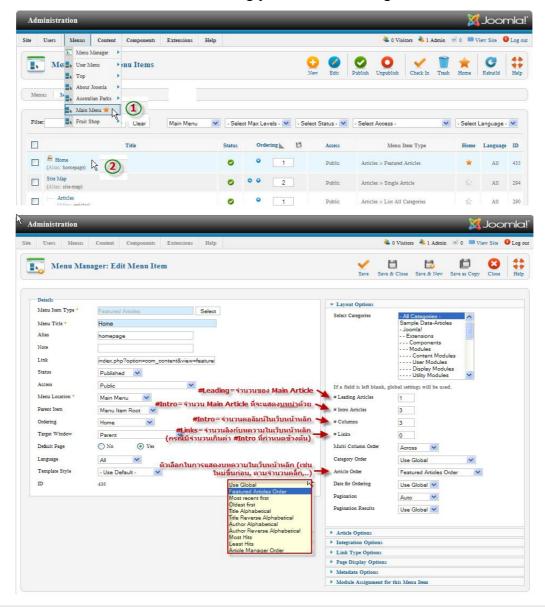
Q: What is the function of "Featured" field in the Edit Article shown in above picture? (**Hint**: it is related somehow to the display on the main front page.)



4.2.2 Learn how to edit the <u>existing</u> "Menu" (or create the <u>new</u> one) to link to our contents so that it can be displayed to users. This tutorial video can accelerate your learning: "<u>Tutorial - Lesson 8 - Menus.mp4</u>" in [3].



4.2.3 Study the menu on how to control the format of front page (e.g. the number of articles, the number of column, ...). This needs to access the Main Menu, and then select Home Menu accordingly as shown in the figure below.



Section 5: Checking your understanding

5.1 Overview

In this last section, your understanding on how to manage Joomla! web sites will be examined. However, this will not only involve in what the issues you have learned so far, but also the potential that you can accomplish the given task by using information found in the Joomla! Community web.

5.2 Instructions

- 5.2.1 Add a new category and a few articles inside about your bibliography, such as 1) your name, photo and some personal information, 2) your friends, 3) your favorite movie stars or sports, etc.
- 5.2.2 Create a new menu that contains link to access your articles just created above.
- 5.2.3 Access Joomla! Extensions page (http://extensions.joomla.org/), select a desired category, select and install a new module of your choice that will feature your web sites to attract users. For instance,
 - Photo & Images Galleries (e.g Phoca Gallery module),
 - Photo & Images Rotators (e.g Simple Picture Slideshow module),
 - Calendar & Event Category (e.g. GCalendar module),
 - Directory & Document (Remository module for download), etc.

5.3 Checkpoint

- Show result of your total works on the local web site.
- Show the process on how to change the web template.
- Describe how an article can be set to appear on the front page.
- Explain how the menu can be created and set on a certain position in the web page.
- Describe about your preferred extension and your decision to choose it among other candidates that are found in the same category.

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