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WEB-BASE ORIENTATION TO LIVING AND STUDYING IN KOKKOLA, FINLAND.

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#### **Abstract**

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# Supervisor

## ARTUR HLOBAZ

The aim of this thesis was to create a website that gives general knowledge prospective foreign applicants (full time students and exchange students) applying to Centria University of Applied Sciences, Kokkola to study. The website entails up-to-date information in the area of description of the university, requirements for applying, entrance examination abroad, visa application requirements for non-EU Students.

Joomla! 1.5 and XAMMP were the two software employed for designing the website. The rudiments and functionalities that came with Joomla and XAMMP made it possible to build a complete website. However, a number of challenges were encountered while creating a suitable template and employing the right modules for the intended purposes of the website. These problems were resolved with the help of the Joomla forum and supports that Joomla user can get from free from the Joomla website (www.forum .joomla.org).

Moreso, for the creation of a full website, Joomla may be required as a good option for designing a website because every year the developers of Joomla add new features that make website designing more comprehensible. Therefore, for the purpose of this thesis, a website designed with Joomla that gives rise to the creation of many web pages and the results of the website is presented in the framework. Finally, because of the personal experience gained using Joomla, it was concluded that Joomla is effective, innovative and user-friendly to use.

# **Key Words**

Joomla!1.5, XAMMP, Content Management System (CMS)

# **Table of Contents**

1 INTRODUCTION	1
2 CONTENT MANAGEMENT SYSTEM DEFINATION	3
2.1 Static web page	4
2.2 Web pages with Cascading Style Sheets (CSS)	5
2.3 Dynamic web pages	7
3 CONTENT MANAGEMENT SYSTEM TYPES	9
3.1 Why is Joomla selected?	10
3.2 Joomla History	12
3.3 Joomla Requirements	12
3.4 Downloading and Installing Joomla	13
3.5 Features of Joomla	17
4 What is XAMMP?	19
4.1 XAMMP Downloading and Installation	19
5 JOOMLA ADMINISTRATION BASICS	23
5.1 Joomla Content Menu	25
5.1.1 Media Manager	25
5.1.2 Article Manager	27
5.1.3 Category Manager	27
5.1.4 Feature Article	28
5.2 Joomla Extensions	29
5.2.1 Module And Position	30
5.2.2 Installing And Uninstalling Extensions	31
5.2.3 Joomla Templates	32
5.2.4 Joomla Plung-in	33

5.2.5 Joomla Languages	34
5.3 Joomla Components	35
5.4 Joomla Menus	37
5.4.1 Joomla Help Menu	38
5.4.2 Control Panel	39
6 CREATION OF A JOOMLA WEBSITE	40
6.1 Website Title	41
6.2 Website Wireframe	41
6.3 Information Architecture (IA)	42
6.4 Defining and Grouping Website content	42
6.5 Creating Wireframe	43
6.6 Navigation Structure	44
6.6.1 Vertical Website Navigation Menu	44
6.6.2 Horizontal Website Navigation Menu	45
6.6.3 Vertical and Horizontal Navigation Menu	46
6.7 Website Template	47
7 WEBSITE RESULTS	48
8 CONCLUSION	60

REFERENCE

#### 1 INTRODUCTION

In this era of the electronic revolution, a website performs a vital function in improving either by connecting new people or the consumers in the globe. A Website is an essential source which connects in many aspects of life such as training, education, work, authorities, commerce, and well-being treatment. These days, a website turns into an interactive system for getting and supplying information. So it is momentous to create an effective website design that gives information in an exact and illustrated method.

When choosing this thesis topic made me interested in exploring how various technologies, especially web design, database and other software, collaborate with the internet and pass many sorts of information to people in the form of a web page. As my inquiry progressed, this question emerged:

What are the software types that is capable of putting pieces of information together to suit the purpose of creating an informative and innovative website? To be able to discuss this question, I found out that there are many website design software application such as Drupal, WordPress, Joomla, Zen Cart, and PhpBB. Eventually, Joomla was selected ahead of the other software because of its simplicity, affordable and free to use syndrome.

Information described as the source of knowledge in all areas of life will be the purpose of this thesis, to provide more insights to foreign students coming to Kokkola, Finland to study and what to expect. Foreign students in this context means the students from other countries coming to study full time or as exchange students.

However, the needed information is design in the form of a website which will be easy to reach by any categories of students planning to come to Kokkola for study irrespective of where they live. Joomla is an open source software that can run on any operation system. Later on more about Joomla will be discuss in detail. The website contain hint for the prospective students living and studying in Kokkola, Finland. The website will be largely helpful to foreign students in the sense that they will get to chat or read comment of other foreign students that are already living and studying in Kokkola, Finland. In summary, this thesis will consist of eight chapters including the conclusion.

Chapter One establish the thesis and Chapter Two described the meaning of content management system. Chapter Three gives insight about the types of content management system and Chapter Four define XAMMP. Moreso, in Chapter Five the administration basics of Joomla discuss the forms and features of Joomla and Chapter Six discuss the development of the website using Joomla. In conclusion, Chapter Seven shows the result after the creation of the website and Chapter Eight is the conclusion that ends the thesis report.

#### 2 CONTENT MANAGEMENT SYSTEM DEFINATION

A content management system is software that keeps track of every bit of content material on the website, just like the neighborhood community library keeps monitoring of publications and stores them. Content material could be text, photos, songs, video, paperwork. A major benefit of using CMS is that it requires almost no technical ability to manage. However, there are some aspect that require some skills of HTML and CSS. Various types of CMS can be seen out in the today's market. (Smith 2012a.)

However, some proprietary systems came with a cost (licensing fees) and some are totally free to download and install (**open source**). There are various types of CMS that serve different goals. For example, there are CMS used specifically for shopping carts, forums, blogs, customer relationship management, sales contacts management or CMS that can cover all of a website's features. Having mentioned a number of ways whereby CMS could be utilized, it is pertinent to identify some other CMS which are fully described in subsequent chapter. (Smith 2012b.)

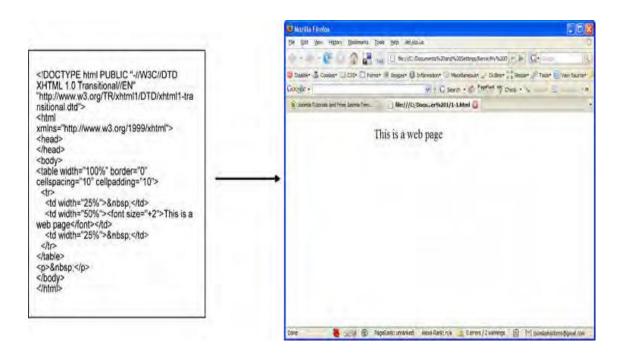
To better understand the power of a CMS, there is a need to understand a few things about traditional web pages. Conceptually, there are two aspects to a web page: content and presentation. Over the past decade, there has been an evolution in how these two pieces interact.

# 2.1 Static web pages

Static web pages are web pages made up of a set of instructions written in Hypertext Markup Language (HTML) which instruct the browser what and how to present the content of a web page. This style of creating a web page is old, but a considerable number of web designers still prefer to create sites using the static web page method. Website design with static web pages has two main drawbacks as described below. (North 2009, 2-3.)

Difficult to edit and maintain—Tied together are all the content shown on the page ("This is my web page"), the presentation (big and bold). If one wants to change the colour of all the titles, it is necessary to make changes to all the pages in the site. (North 2009, 2-3.)

Large file sizes—Because of the styled of each bit of content, the pages are slow which means they take a long time to load. Most experts agree that large file sizes hurt the search engine optimization efforts because most search engines tend not to fully index large pages, for example, the code might say, "Take this title 'This is my web page,' make it large, and make it bold." The page shown in the graph 1 below is an example of the result of large file sizes. (North 2009, 2-3.)



GRAPH 1 Results of code on a web page (ADAPTED from North 2009, 2)

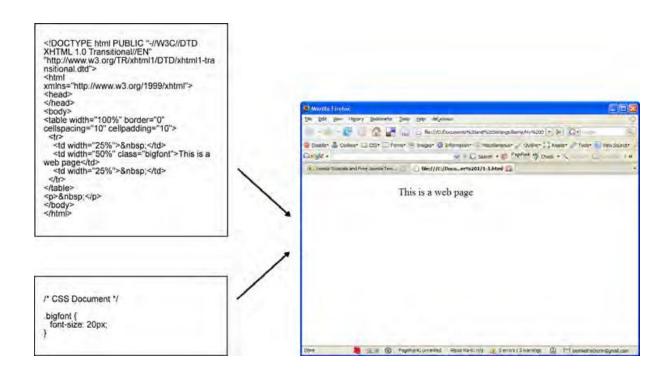
# 2.2 Web pages with Cascading Style Sheets (CSS)

In order to conquer the disadvantages of static internet web pages, in the last four or five years, much more complete internet requirements have already been created. Internet requirements are business broad "rules" that internet browsers like Web Explorer and Mozilla Firefox adhere to (to various levels, some much better than other people) to regularly output internet web pages onto the screen. One of those requirements entails utilizing Cascading Style Sheets (CSS) to regulate the visible presentation of the webpage. CSS is an easy system for adding style (for instance, fonts, colours, spacing) to web documents. (North 2009, 3.)

However, the presentation information of a web pages is usually contain in a file which are independent of the content material and reusable. Now the file that contains the content material is far smaller sized because it does not include presentation or style information. All of the styling continues to be positioned

inside an independent file the browser reads and relates to the content material to provide the ultimate outcome.

Using CSS to control the presentation of the content has advantages: maintaining and revising the page is much easier. If there is a need to change all the website title colours, one line in the CSS file can be changed. Both files are much smaller, which allows the data to load much more quickly than when creating web pages using HTML. The CSS files been cached (saved) on a viewer's local computer so that it will not need to be downloaded from the web each time the viewer visits a different page that uses the same styling rules. (North 2009, 3.)



GRAPH 2. A modern web page using CSS (ADAPTED from North 2009, 4.)

# 2.3 Dynamic web pages

A CMS helps to simplify internet web pages by making dynamic internet web pages, and separating the content material in the web page while CSS separates the presentation from content material. Consequently, it appears that in between CSS along with a CMS, there is certainly nothing still left of the internet web page, but what was still left may still be of an insertion factors, or placeholders, inside a structural template or format. (North 2009, 4.)

The "put some content material here" instruction tells the CMS to consider some content material from the database, the "pure content material," and location it inside a specified location around the web page. So what is so helpful about this trick? It is mainly effective: It separates out the duties for creating an internet site. An internet designer may be worried using the presentation or fashion and also the placement of content material inside the look layout of the placeholders. This implies that non-technical individuals may be accountable for that content in the phrases and photos of the website without getting to understand any code languages. The HTML and CSS are concern with the aesthetics of how the content material will probably be shown. Most CMS has built-in resources to handle the publication of content material. It is feasible to envision a workflow for content material administration that entails designers, and content material author. (North 2009, 4-5.)

Moreover, a CMS perfectly separates the content material forms of the web pages from their graphical style and format. This tends to make it easy to maintain the location broad style coherent and comprehensible to alter. Additionally, it tends to make content material simple for non-technical individuals. A web page does not

truly exist till it adhere to a hyperlink to see it, and also the content material may be varied every time. (North 2009, 5.)

However, page content material may be up to date and customized according to the viewer's interactions using the web page. For instance, in the event of locating a merchandise inside a buying cart that merchandise shows up around the buying cart web page save inside a database, and now will get insert in to the "shopping cart placeholder." Many complex web applications—for example, forums, shopping carts, and guest books, to name a few—are in fact, mini CMS. (North 2009, 5.)

There is one large drawback to using a CMS from a technical viewpoint: CMS can become extremely difficult, containing thousands of files and scripts that work together in concert with databases to present a comprehensive and feature-rich website. Normally, this means that the CMS site been designed and created by technical staff and managed and run by non-technical users. Joomla is probably

the easiest to set up among currently available CMS's, allowing users with modest technical skill to harness its power. (North 2009, 7.)

#### 3 OTHER CONTENT MANAGEMENT SYSTEMS

Currently available there are terrific deal or thousands of content management systems and each one of them slightly different from their rivals. However, here are lists of CMS that is in vogue now for the market. (Smith 2012b.)

Zen Cart is free open source and user-friendly CMS, majorly for e-commercial and shopping carts known for online shopping for the sales of both physical and downloadable products.

The most widely used content management system available is WordPress. It supplies a valid "core software" constructed to incorporate thousands of possible plugins and themes to help users create and customize their own unique site capable of doing exactly what their business require. (Smith 2012b.)

Drupal is likely the preferred free of charge CMS. Drupal offers capabilities for quick site design and supervision, as being a framework we need to use almost any repository server, a fairly easy Web interface of content management system, a variety of themes for custom site designs and around 16,600 modules to boost the website's functionality. (Smith 2012b.)

Impress CMS provides user the potential and possibility to create an individualized internet site depending on the requirements showcasing. This will be a community-created, database-driven, fully modularized technique of CMS. (Smith 2012b.)

The Frog Website CMS makes use of PHP directly, which means site *designers/editors* do not need to understand or make use of one more *scripting* vocabulary. (Smith 2012b.)

# 3.1 Why is Joomla Selected?

Millions of user take to Joomla simply because of its functionalities, easy to use, and no PHP knowledge require. This makes it the most successful open source CMS ever and the following are reasons to use Joomla.

Most open sources have to be paid for, but Joomla has no license costs being an open source project. Also, the cost of a website based on Joomla is lower than a website built on a proprietary CMS (CMS types that come with cost or incense fee). (Joomla Support 2012.)

Joomla has a solid framework with stable and reliable infrastructure, built-in core, and a vast library of free and flexible extensions. Joomla has become the most powerful, robust and extensible content management system available today. (Joomla Support 2012.)

The support from Joomla which is one of the largest active open source communities on the net gets a lot of supports, contributions on a daily basis from thousands of developers. (Joomla Support 2012.)

*Popularity*: In terms of popularity, Joomla is the most widely used open source CMS in today's market with over 6 million dollars invested into its development. (Joomla Support 2012.)

Joomla is usually a content management system (CMS) that is use to create a web site together with other online apps and makes it possible for web designers to build a strong internet site by combining modules and call for no information of programming. The Joomla framework composed of PHP, and can still be the modules used to customize web sites. There are certainly lots of modules available like RSS feeds, polls, and language internationalization, thus allowing it to become

straightforward for Joomla end users to publish content material for the internet, even with little net structure knowledge. (Joomla Support 2012.)

Joomla can even be utilized to publish information on internet, generated by the use of Joomla resources. Joomla has made some new changes previously in the calendar year to its task, rendering it rather distinctive between open resource CMS. On the other hand, the Joomla project now includes two entities like the CMS (more details on CMS in the later section of this chapter), and a fully independent framework. The framework of the Joomla platform was released in July 2011. The system may be used for many varieties of purposes in improvement. Quite possibly the most notable growth is eBay's adoption with the Joomla system because it grows an intranet method for measuring analytics. (Joomla Support 2012.)

Joomla is a wholly independent project, powered only by its volunteers. There is no substantial corporation contributing to Joomla or backing it in any way, as is true with WordPress and Drupal. Joomla's annual budget is less than \$400,000 per year, largely derived from Google Ad Words and donations. No one pays for his or her work on the Joomla project at this time. Furthermore, there is no "benevolent dictator" in the Joomla project. The Joomla community governed through three entities, which includes the Production Leadership Team (PLT), the Community Leadership Team (CLT), and the board of directors at Open Source Matters (OSM). The PLT's job is to set the vision and direction for the project's software. The CLT governs the community, including Joomla's websites. OSM is responsible for finances, legal aspects, and the trademark for the project. The three teams work together to govern Joomla and meet regularly to discuss the project. (Joomla Support 2012.)

# 3.2 Joomla History

Joomla is a free open source content management system written in PHP for the publishing and managing content on the web, using a MYSQL database. The name is a phonetic spelling of the Swahili word "Jumla" meaning "all together" or "as a whole". It has been chosen to reflect the commitment of the development team and community to the project. The announcement of the first release of Joomla was on September 16, 2005 (Joomla 1.0.0). This was a re-branded release of MAMBO 4.5.2.3 combined with other bug and moderate-level security fixes. In the project's roadmap, the core developers say Joomla! 2.0 will be a perfectly re-written code base built with PHP 5. (North 2009, 8.)

According to the Joomla website, "Joomla powers around 2.7% percent from World Wide Web and downloaded 19,000,000 times and available in 64 languages until November 2010". It has to date (publishing date of this article, 2011), almost 7,000 extensions, modules and plug-in in the extensions category (free and commercial). The extensions were downloaded 138,000,000 times until November 2010 when there were only 6,000 extensions in the extensions category (Teeman 2011).

## 3.3 Joomla! Requirements

In order to use Joomla, there are some platforms that need to be provided. That is the need for web designers to have an access to a server that is compatible with PHP, either on a computer or from web hosting company. For this thesis, there is a need to have a local host (which serves as a server on the computer) known as XAMMP which is an easy-to-set-up Apache server that will allow the running of PHP scripts. The final ingredient is a MYSQL database which will be interacting

with MYSQL through a program called PHPMYADMIN. More on XAMMP installation and downloading will be discuss in detail later.

# 3.4 Downloading and installing Joomla!

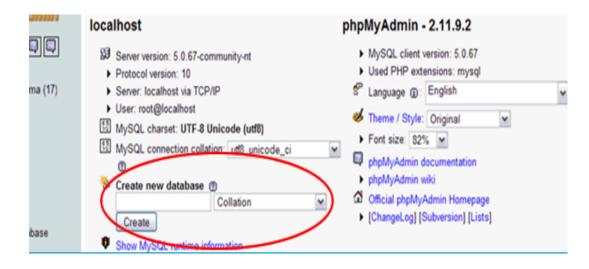
Joomla is one of the best available and most used open source application in the world. This thesis will discuss some steps and ways of downloading and installing Joomla. For the purposes of this thesis, the platform used was Joomla 1.5 but it is always advisable to get the latest version of Joomla and select the full package version and not the upgrade package. However, the following steps explain the full installation of Joomla:

Step One - Saving The Files: The most recent Joomla file package is obtain from www.joomla.org. When downloading Joomla, the installer should note that it came in a zipped (compressed) file and needed to be the unzipped and saved to a directory around the local host and the file is save in the XAMMP/htdocs/ folder. However, any file in this directory (htdocs folder of XAMMP) is accessed by opening a web browser and typing http://localhost/.

From this point forward, it is reasonable to refer to the folder in which the files been set up as the root folder or root directory.(Kuker 2009.)

Step Two - Creating The Database: After the saving of the files, it is time for database creation. This might sound intimidating, but it certainly will not be too hard. Now there is a need to write down a few items for the next step. Since, PHPMYADMIN will be used, there is the need to create a password through the XAMPP control panel and write down both the username and password and then log into PHPMYADMIN. A screen below appears after the logging and the only part that needs attention is the part circled in red, "Create a new database". The database been given any name, but for this thesis sake, it is going to be named "Joomla" and then click the create button. It is reasonable to write down the

database name for future use. Below is the Graph 3 which shows the installation LocalHost. (Kuker 2009.)



GRAPH 3. Shows LocalHost

Step Three - Installing Joomla!: The installation process from this point forward should simply be fairly straightforward. Navigating to the web browser and typing http://localhost/joomla, where Joomla is the database named created earlier. Then, the next screen that appears indicate seven steps, but none of them seems extremely complicated. (Kuker 2009.)

The **first step** is choosing a language for the administration section. The selected language of preference is English and then the next button to click is in the upper-right hand corner of the screen.

The **second step** is a pre-installation check, and it simply checks to ensure that the server environment can support Joomla. If each indicator is green, then there is a need to click the next button. Furthermore, If there are any red indicators, especially among the required features, there is a need to consult the web hosting

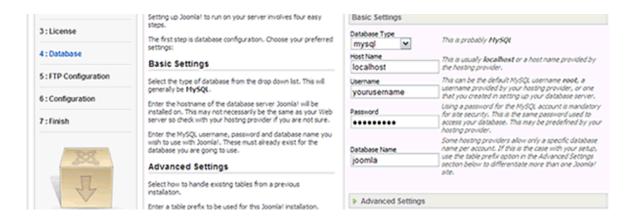
company. Below is the Graph 4 which shows the installation of Joomla. (Kuker 2009.)



GRAPH 4. Joomla! Installation

The **third step** is to indicate to agree with Joomla's licensing terms. Joomla uses the GNU GPL open source license. (Kuker 2009.)

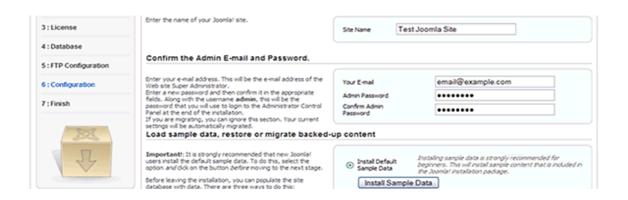
The **fourth installation step** is to enter the information recorded earlier in the space provided. For database type, it is MYSQL. Since XAMPP installation is already on the computer, LocalHost will be type for the host name. Otherwise, the host name given by the hosting provider will be used. The username and password would be the same as those that would be entered to access the database. There is no need to worry about the advanced settings for now because it can only be use if there is a previously installed version of Joomla in the same database. Below is the Graph 5 which shows the installation of Joomla. (Kuker 2009.)



GRAPH 5. Joomla! Installation

The **fifth step** is not a required step since installation is on a Windows operating system, and if not, the FTP information could be found through the hosting provider. (Kuker 2009.)

Now it is time to configure Joomla. In this **sixth step**, the site will have a name. Then the admin, email and password are to be chosen. (All could be written and store in a secure place). Joomla configuration also has the option of installing sample data that give a starting point to begin learning how Joomla functions by clicking on the button marked "Install Sample Data", and below is the Graph 6 which shows the installation of Joomla. (Kuker 2009.)



GRAPH 6. Joomla! Installation

Moreso, to complete the installation process and in order for Joomla to function properly, a folder named "installation" must be deleted from the root directory of the Joomla installation. This would be done for security purposes so that someone cannot overwrite the installed Joomla. This could be possible through whatever program or interface with which the files would be saved to the server. After the deletion of the installation directory, then Joomla is ready for use, and the public face shows and sometimes called the front end. Navigating to the root directory in the browser is the front end. However, to access the administration section, "administrator" must be added to the root directory. For an instance, http://localhost/joomla/administrator. In the final step of the installation process, the administrative user gives a name "admin" and could be change later, once logging. (Kuker 2009.)

# 3.5 Features of Joomla

Joomla is an open source that comes with several features after been downloaded from www.joomla.org and for the purpose of this thesis Joomla! 1.5 will be consider. In no order, the followings explained below are some of the features:

The administrator end of Joomla known as Back-end has simplified administrative interface, improved media manager (multi-delete, batch uploads), easy to use browsing media folder for inserting images, more control over pagination and search engine friendly URL's (North 2009, 9).

In Joomla Codebase is better organized giving designers hundred percent control over layouts. Moreso, Joomla create a custom module chrome and templates that require editing of variables. Hence, making Joomla the easy CMS to work with from time to time (North 2009, 9).

The developer aspect has been separated into a three-tiered stack that keep the internal structure clean and allow developers to leverage the different layers,

backwards compatible with PHP 4.3 that does support PHP 5. Lastly, document package gives extension developers control over the entire document rendered on any given page load. (North 2009, 10.)

However, other downloaded features that come with the install Joomla package includes the following; RSS (and other) syndication, display of news feeds on other sites, easy contact form, built-in site wide content search functionality. The remaining are: Private detailed site traffic statistics, public site statistic, control of editing and publishing of content (based on various admin user level), email, PDF, and printing capability. (North 2009, 10.)

#### 4 WHAT IS XAMMP?

XAMPP is free and Open Source Cross-Platform Web Server Solution Stack. It comes with Apache HTTP Web Server, MYSQL Database, Tomcat servers, PHP and Perl Programming Languages. Together with these, there is an SMTP and FTP server included as well. The best feature of XAMPP is ease of installation. Using XAMPP means the need to set up all single individual components of a web server individually will not exist. Hence the installation is easier and quicker to be access. The need to worry about the PHP configuration or MYSQL setup does not arise. (Search Engine 2008.)

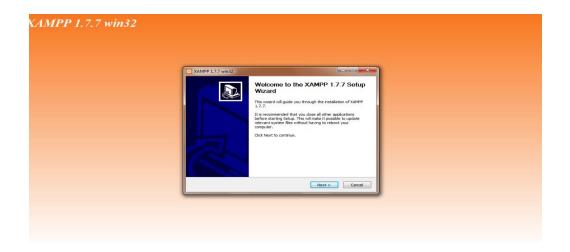
Legitimately, XAMPP designers only propose to make use of this as an improvement tool for allowing website designers and programmers to test their jobs by themselves with computers without any use of the internet. Many vital security features are disable by default, in order to make the XAMMP as easy and feasible. XAMPP sometimes use to serve internet pages around the World wide web. (Search Engine 2008.)

# 4.1 XAMMP Downloading and Installation

XAMPP is accessible for numerous platforms, such as Windows, Linux, Solaris and Mac OSX. It is important to identify the suitable one that is compatible to one's desire platform. XAMMP is download from Apachefriends.org, and it is possible to obtain the most recent version of the software program. For this thesis, the window version will be consider. This version consists from the following elements:

Apache 2.2.14 (IPv6 enabled) + OPENSSL 0.9.8l, MYSQL 5.1.41 + PBXT engine, PHP 5.3.1, PHPMYADMIN 3.2.4, Perl 5.10.1, FileZilla FTP Server 0.9.33. (Dkszone, 2010.)

However, when through with the downloading files, the next step is to double-click the file to start the installation. By default, XAMPP could be installed to C:\. The destination folder should be left as it is, and clicking the install button install XAMPP to a folder named 'XAMMP' in the root drive (C:). Below is Graph 10 that shows the installation of the XAMPP.



GRAPH 7. XAMMP Installation

Clicking the next button display on the screen a prompt with the installation options. Below is Graph 8 that shows the installation of the XAMPP.



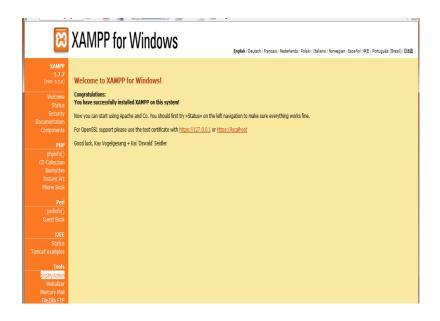
**GRAPH 8. XAMMP Installation Continues** 

It is therefore recommended that the box for choice of installation be check, and it may take quite a while (less than 10 minutes) for XAMPP to extract the package. After the extraction of the content, there will be an automatic running of the script. A series of questions been asked, the first one being 'Should the shortcut be added to the start menu/desktop?'. Enter "y" and click Enter. After the extract of files then the XAMMP is ready for use. Below is Graph 9 that shows the installation of the XAMPP.



**GRAPH 9. XAMMP Installation Continues** 

Moreover, clicking the finish button finalizes the installation. Now there is a need to confirm the running of a web server on the PC that the XAMPP been installed initially. In order to confirm that a web server is currently running on the PC, http://localhost has to be entered in the browser. This should bring up the XAMPP and a click on a language of choice (In this case is English) to open XAMPP admin panel would be required. Below is Graph 10 that shows the installation of the XAMPP.



GRAPH 10. XAMMP Installation Finalized

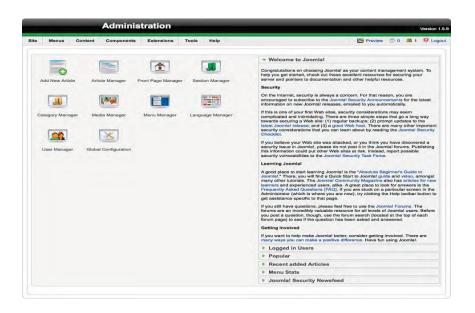
# 5 JOOMLA ADMINISTRATION BASICS

The Joomla administration holds the core and key functionality of Joomla as a whole and could be overwhelming sometimes but with a properly configured Joomla site the administration burden is relatively low. Most of the effort would be dedicated to generating all the essential content. In addition, there is the need to establish the difference between frontend and backend. Frontend is the public site that people can see at www.mysite.com and is the main website, while the backend is the administration site also called the admin which has URL like www.oursite.com/administrator. Whenever the backend would be call to action, then goes a login prompt that require a user name and password created during the installation. Below is Graph 12 that shows the installation of the Administrator end. (North 2009, 36.)



GRAPH 11. Backend login screen

If a super administrator account is use to log in then a display of the administrative backend of the web site would be presented. How it looks depends on the administrator level. Below is Graph 12 that shows the installation of the Administrator end.



GRAPH 12. Shows one possibility (Adapted from North, 2009, 10)

However, the menu bar is the tool for navigating the administration backend. This horizontal menu enables access to all the functions of administration by providing the following menus: Control panel, Menus Content, Components, Extensions, Tools, and Help. Also, on the right of the menu bar are some additional information and functions such as a link to preview site in a new window, a link to private messages (the number shows how many there are), a number showing how many viewers currently logged in on the site and a button/link to logout. (North 2009,39.)

#### 5.1 Content Menu

Joomla is actually a content management system. In most cases, content materials will refer to individual internet web pages. However, it could also include images, movies, as well as other kinds of media. Nevertheless, it consists of the all-important "Article Manager". Articles may probably be the sole content products that form the core of a website. Created content can easily be managed via the content material menu in the Joomla. Switching over to the content button within the administration area, the followings are visible; Article Manager, Feature Article, Category Manager, Media Manager. (Kuker 2009.)

For every article, Feature/category will create a sole page on the frontend from the web site and the elegance of utilizing a CMS is that the program will create both pages, so no coding experience is necessary. The majority parts of the web pages will contain written content material within Joomla that would be posted, but it is essential to know how Joomla organizes the content materials. Joomla follows a remarkably rigorous organizational construction and each article must possess a section and a category, and each category must belong to some section. Viewed in a different way, the content hierarchy is Feature->Category->Article-> Media. (Kuker 2009.)

## 5.1.1 Media Manager

The media manager is a tool for managing images used in a website, and it makes working with images and inserting them into pages easier than uploading them and inserting them manually. The principal manager pages can easily be access from the Joomla control panel by clicking on the media manager icon which

allows us to upload images, and mange images which has already been upload.(North 2009,45.)

Frequently, the first thing a new Joomla user desires to do using the media manager is to upload a picture which can be easily done by clicking the "browser Files" button and selecting the image to upload and then clicking on "start Upload". The picture ought to appear on the main media supervisor page. Note that files with file names that include space or unique character cannot be uploaded. (Baker 2012.)

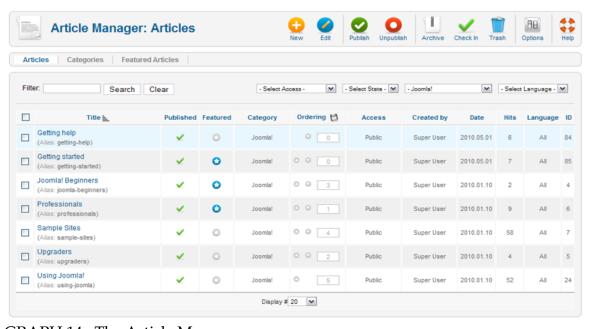
Folders within the media manager could be utilized to separate images into categories. If the need, to create a folder arises, the folder name is entered into the "Create Folder" textbox and click on enter. It is possible to create a subfolder of a folder by navigating to that folder and utilizing the links on the left side of the page shown (in the graph 13 below) which create the folder from the above mentioned steps. To upload a pictures or images into a folder, navigate to that folder using the links around the left aspect of the media manager page and stick to the above actions to add the images. Below is Graph 13 that shows the installation of the Media Manager. (Baker 2012.)



GRAPH 13. The Media Manager

## 5.1.2 Article Manager

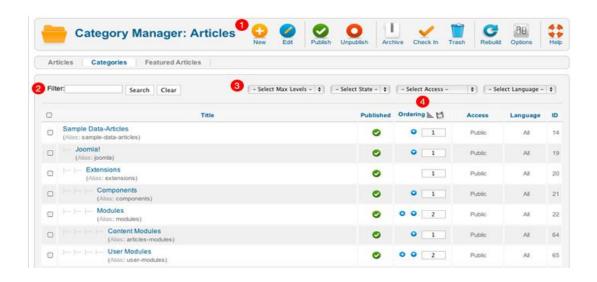
This shows all of the content items and offers various methods to put them to different sections, classes, or authors. The checklist of the article might be sort according to any column (ascending or descending) by clicking that column heading. There are some choices that articles have that the categories do not have, and these options might be discover within the parameters boxes on the right-hand side of a "New or Edit Article" web page and outlined as follows. It is possible to choose the publication start and end dates, metadata customized, and many of the settings in the "Advanced Parameters" box affect how the article will display on a "Section or Category" page. Below is Graph 14 that shows the installation of the Article manager. (North 2009,51.)



GRAPH 14. The Article Manager

## 5.1.3 Category Manager

In Joomla, all content articles are placed inside a category, and there is often quite a few categories that possibly can depend on the administrator. The advantages of utilizing category are simply because of its ability to position and group different products, and content with each other which presents bigger handle on how the website would be managed. The category manager allows the administer to know how the categories would be exhibited, and build or delete classes that exhibited, and build or delete categories. Below is Graph 15 that shows the installation of the Category Manager. (Kuker 2009.)

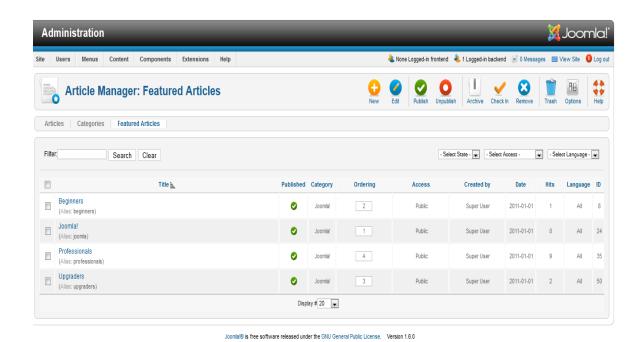


GRAPH 15. The Category Manager

#### 5.1.4 Feature Article

Once published, the content on the Joomla 1.5 website is saved in the report categories and never displayed up to the 'FrontPage' of the website. The need for content to pop out on the FrontPage/homepage make 'Featured Articles'. Together with the Joomla 1.5 web page, it is easy to manage the articles or blog posts that appear to the entrance web page aided by the "Featured Article Manager". The articles or blog posts that are exhibit on the 'FrontPage' been identified as feature articles or blog posts. (Kuker 2009.)

In summary, it is possible to say that a feature article in Joomla 1.5 is an article that could be highlighted and demonstrated on the FrontPage. There are essential handfuls of articles that could be made visible to the guest once they visit the website. Featured content pieces are managed in the featured article manager and not all articles publish for the website has to be proven on the 'FrontPage'. Should it not be for the front page, website visitors access published content pieces through the category menu merchandise, and in the same time posted content articles picked as feature been exhibited to the front website page too as well as in their specified category web page. Below is Graph 16 that shows the installation of the Feature Article Manager. (Kuker 2009.)



GRAPH 16. The Feature Article

## 5.2 Joomla Extensions

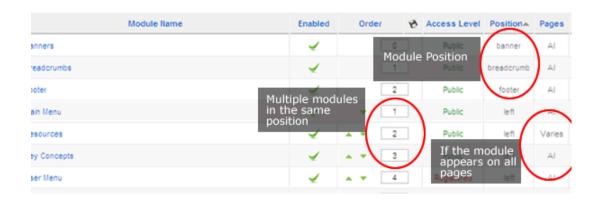
Great deal of the power of Joomla lies in its extensions. What been installed up to now is the Joomla Core, and it can expand what the website can do considerably beyond the qualities from the Core through various extensions. Joomla has five types of extensions: Extension, Modules, Plug-in, Languages, and Templates Manager. The descriptions of all the extensions are below.

#### 5.2.1 Module And Position

Since all tips on how to develop and organize content material has been known, it is necessary to get the perception of how information, as well as other essential sites parts, exhibited on the public end of the website. The template will be later modify a bit later on, but for now, what have to be realized is that every webpage on the website divides into diverse places, corresponding to a page position. Joomla makes it possible for the publish of different content blocks, which Joomla calls modules to different areas on the website. Examples of modules are menus, a most current blog posts widget, a banner ad, a listing of article, almost everything that would not be considered the main content of the site is a module. (Kuker 2009.)

Nevertheless, it is possible to move modules from one position to another, and in many cases there have been a number of modules place in the same position. To entry modules, one can hover to the "Extensions" button inside the essential administration menu and click on the "Module Manager" internet site link. Each module might be edited by either clicking on its title or building a new module by clicking towards the "New" icon though, inside the icon menu. When making a new module, it is crucial to decide on what modules to create. Most modules names have to be self-explanatory, but some may have little or more bit of explanation. (Kuker 2009.)

Furthermore, just about every sole module can have some regular configurations that will assist in assigning it into the website area, established an entry levels, and opt for which web pages the module will appear. Some modules may even have personalized configurations that will guide to the control of how the module appears and behaves. These options could be noticed within the parameters box. Below is Graph 17 that shows the installation of an Extension Manager. (Kuker 2009.)

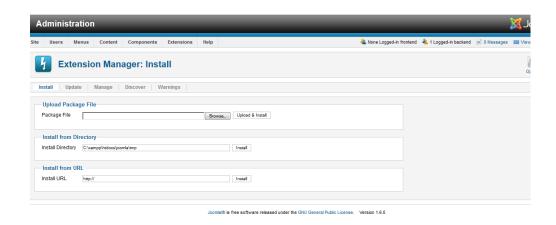


GRAPH 17. Extension manager (Adapted from Kuker, 2009)

## 5.2.2 Installing And Uninstalling Extensions

The "Extension Supervisor" often accessed throughout the "Install/Uninstall Extensions backlink" while in the Extensions menu. The simplest way to install extensions will be to upload a bundle file. No matter what form of extension been set up, the bundle files comes in "zip file" that is a compressed file format. There is certainly no need to unzip this file. The one exception to this is that some extensions will place many zip file into a single zip file. In this case, there would be a need to unzip the grasp zip file after which each of the zip file upload separately. (Kuker 2009.)

There are two alternate approaches to install a Joomla extension with the directory on to the server of choice or from an alternate URL. In both situations, there is a need to provide the full listing or URL path. However, to get a list of all installed extensions of all kinds, the tabs inside the extension manager is click. If the needs arise to uninstall an extension, the extension has to be chosen, and a click around the uninstall menu product within the icon menu is possible. There is a possibility of all extensions not in place to uninstalled after they are section from the Joomla main. Below is Graph 18 that shows the installation of an Extension. (Kuker 2009.)



GRAPH 18. Extension Installation

# 5.2.3 Joomla Templates

Templates help to alter the appearance and true feel of any website. It is easy to switch between templates and applying different kind of templates to various net web pages within the internet web page. The template can easily be access as a results of the extensions menu by clicking on template manager and inside the template manager, it is actually simple to find out a listing of install website and administrator templates and only one is going to get marked as default. The

default template may well be applied automatically to all website pages for that website other than setting another template to some specific web page.

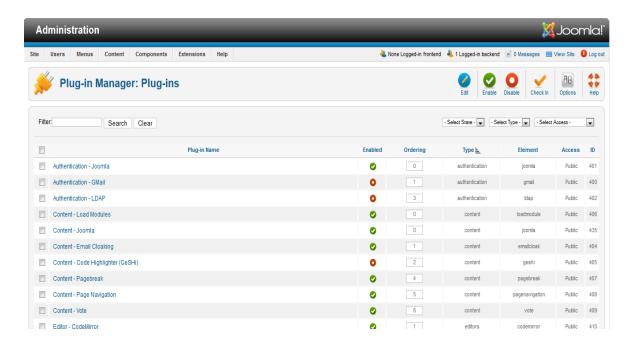
Templates help to alter the appearance and true feel of any website. It is easy to switch between templates and applying different templates to various net web pages within the internet web page. The template can easily be access as results of the extensions menu by clicking on template manager, and inside the template manager, it is straightforward to find out a listing of install website and administrator templates and only one are going to get marked as default. The default template may well be applied automatically to all website pages for that website other than setting another template to some unique web page. (Kuker 2009.)

On the other hand, some templates may contain parameters that can help the administrator to alter the appearance or style of the template. However, not each template is capable of changing appearance on the website and accessing this parameter is through the edit template show monitor. Any knowledge of either CSS or HTML is to be use because the template documents should be edited straight within the administration. As getting final words about templates, except it is possible to have a template that suit the basis of its value otherwise, modifications within the template files be required. The information will almost certainly be found over the templates listing in the root folder of the Joomla put in place. (Kuker 2009.)

## 5.2.4 Joomla Plug-in

Plug-in is a Joomla extension that gives added bits of operation to Joomla internet

site, and provide role similar to a trigger events. Truly is quite exceptional to consider it as a small robots or scripts that do a vast deal on its own. In general, when plug-in is to be build into the system, it permits operation at a fair deal far better. Plug-in can be edit, and either empower or disable as a result of the Plug-in Manager, that is available by means of the Extensions menu. Below is Graph 19 about Plug-in. (Kuker 2009.)



GRAPH 19. Plug-in Manager

## 5.2.5 Joomla Languages

Joomla has above fifty language translations for its administration and front-end and the default admin. Website language can be set inside the Language manager. Moreover, it is essential to notice that whilst a translation could exist for that Joomla Core and the default extensions, it may not exist for each extension been set up. Some extensions have more translations, but many do not and the web

page may have to adjust accordingly. Below is Graph 20 about Joomla Language. (Kuker 2009.)



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GRAPH 20. Language Manager

# 5.3 Joomla Components

Components are like modules in a few approaches, but they are usually greater and permit the completion of more things. Component usually enable the incorporating and handling of identical items on the database, considerably like adding and managing articles. However, few components package came with modules which make sure they display on-screen the information established from the component for the website as part of the website. Joomla comes with some pre-installed components. (Kuker 2009.)

Banner - A banner management system for preserving, monitoring of respective adverts or extremely similar banners (Kuker 2009).

Contacts - This is a straightforward contact administration that allows for several contacts in many category, and it is crucial for a bigger company or corporation (Kuker 2009).

News Feeds - News feed permits the combinations of RSS and Atom feeds on exterior websites into the website (Kuker 2009).

Polls - The Polls manager permits the additions of polls on the website and can be used along-side a module (Kuker 2009).

Search - The search reveals figures for searches done with the website and must have a tremendously lookup box enabled for its operation (Kuker 2009).

Web Links - Web links is another form of a menu, but use in listing links in a blog-roll list (Kuker 2009).

The components that are most outlined in Joomla's extension directory are so many, and listing them may be out of the question in order to checklist them all right here. It is possible to find browsing carts, slide-shows, video clip directories, classified advert directories, and almost the rest that can be considered. Searching for a distinct component types, may be extremely easy to locate quickly by browsing with means of the extension categories. Below is Graph 21 about the Joomla component. (Kuker 2009.)



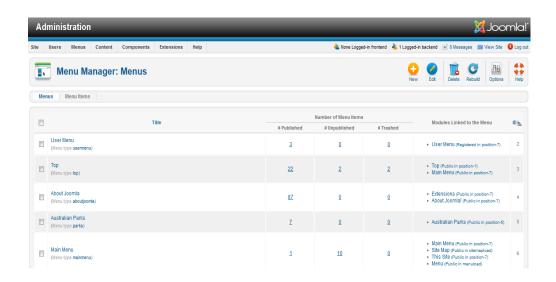
GRAPH 21. Components

## 5.4 Joomla Menus

Menus are just one style of the module, and because a menu shows up on almost each method of website, hence, menus present unique treatment solution in Joomla that can be access simply by the principle administration menu. It may become quite tricky when striving to edit or generate menus in the beginning. Primarily the menu manager only make it possible for editing the name, title, and outline of the menu. Other menu options accessed by locating the name associated with the menu that need been edited in the "Module Manager" and then clicking on the name. If the need arise to incorporate, edit, or delete menu items, then it should be done, as a result of the link labeled with that menu's name that certainly surface beneath the menu manager within the primary administration menu. The resulting screen is the menu item manager for that menu. (Kuker 2009.)

When making a new link, many choices are most presented as to the URL to create. Inner links allow linking to other web pages inside the web website while exterior links permit the listing of any URL which is in the menu merchandise. The separator provides a separator between links and selecting alias allows the generating of a different link to an existing menu item, which is useful. At the time

the selected link type is sorted, there will be a prompt asking for a title (that is the link text) and the menu it should be added to is chosen at the same time, then a parent item selected and an access level set as well. Some link styles will even have to offer further information from the parameters boxes, like deciding upon a short article or menu item. Below is Graph 22 about Menu Manager. (Kuker 2009.)



GRAPH 22. Menus within menu manager (Kuker 2009)

### 5.4.1 Joomla Help Menu

The help menu incorporates one-way links to the official Joomla documentation that will open up inside a wrapper and whilst in the backend working with this menu, there is a consistent entry on the most current documentation. Joomla offers a help button on every web page. The Joomla assistance functionality is commonly a searchable know-how base of almost all the basic features that is a mirror about the assistance or help documentation at "assistance.joomla.org". One particular far more convenient spot to acquire alternatives for troubleshooting concerning Joomla issues is at "forum.joomla.org". It is just a sizeable local community with a

good number of customers that are immensely helpful. Below is Graph 23 about the Joomla Help Menu. (North 2009, 60.)



GRAPH 23. Help Menus (North 2009, 60)

### 5.4.2 Control Panel

The control panel is the first page displayed when an administrator logs into the Back-end of the Joomla website, and there are three kinds of administrators namely, Manager, Administrator, and Super Administrator. The real content of the control panel that each level of administrator sees depends upon it access level. A manager sees less than an administrator, who in turn sees less than the super administrator (who sees it all!). This difference extends to the actual functions that each can carry out. More so, the control panel provides access to many default Joomla functions and features. From the control panel, it is possible to create and manage articles, sections, and categories. Other features available in the control panel are the media, menu, language, and user managers. The site "Global Configuration" can also be access from the control panel. Below is Graph 24 about the Joomla Administration. (North 2009, 41.)



GRAPH 24. Joomla! administrator View (Adapted from North 2009, 41)

Below is graph 25 which presents Joomla manager view, which is the least of the administrator tiers.



GRAPH 25. Joomla manager View

## 6 THE CREATION OF A JOOMLA WEBSITE

Joomla has one of the most useful tools for creating a website and updating a web page, but for this thesis which is to design a website and to start a Joomla website, there is a need to sign up for a hosting account (LocalHost or web server) and Joomla CMS install. All these mentioned were explained in details in the previous chapter, and now it is time to go ahead, and create a new site which is the main purpose for this thesis. However, there are some rudiments also employed for the establishment of a website apart from the once mentioned above and they shall be explain.

### 6.1 Website Title

For every website been created, there is always a name or title for the site which purpose is to give uniqueness and functionality to the website. For this site, a title name "Web-base Orientation To Living And Studying in Kokkola, Finland". The reason behind this title is to provide insight, information to foreign students coming for either exchange program or full-time study on what to expect when coming to Kokkola to live and learn.

#### 6.2 Website Wireframe

Wireframes are a hugely influential style device used in world wide web progress. This is a visualization tool for presenting proposed capabilities, framework and content material of an online website page or net web page. A wireframe separates the graphic elements of a world wide website through the functional elements, and it also describe how customers will interact with the web internet site. A normal wireframe has the following:

Key page elements and their location (which includes the header, footer, navigation, content objects, branding elements), Grouping of elements (which includes, the side bars, navigation bars and content areas), Place Holder (which are content text and images), headings to content objects (which are labeling, page titles, navigation links).

#### 6.3 Website Information Architecture

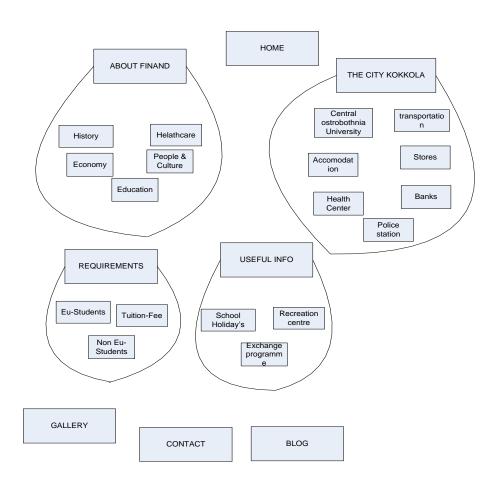
Website Information Architecture (IA) refers to the composition or structure of a website. IA explains the process the various pages of the net web page relate to one another, which makes certain information well structured in a consistent and predictable manner on each and every single site. It includes steps such as assessing existing and needed content, organizing the pages, providing clues to help manage the site efficiently, and developing navigational structure.

## 6.4 Defining and Grouping Website Content

Defining the content areas helps to develop the navigational structure. This step is to be done in a group of three to five people so that each person can represent the profiles from one or two of the user data sheets. First, analysis of the content that is ready is make first, and later deciding which pieces should be added, updated or discarded. Note that only the content that will be useful to the users is always updated.

Next is to list all of the content areas that users will want to get on the site. The ideal way to do this is to ask a broad sampling of existing users (who are members of the target audiences) what they will be seeking. If there is no access to actual users, then need to imagine what they will want to appear on the site arises, and there is genuine need to set any user goals aside that are not practical to include in

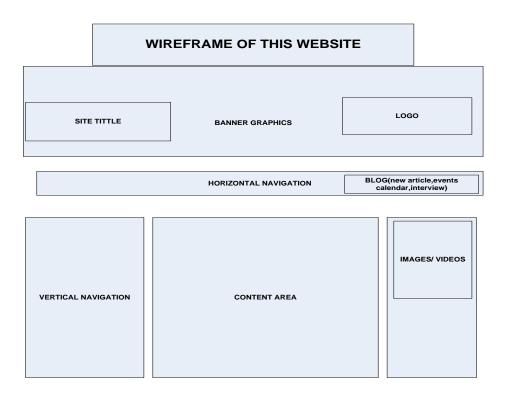
the scope of the project. Also, there is the need to add items which key stakeholders or clients want.



GRAPH 26. Example of Website Content Groupings

# 6.5 Creating Website Wireframe

A wireframe is a sketch or blueprint that closely represents how neatly organized the areas of page look. Graph 27 show a simple, hand-drawn wireframe sketch using Visio tools is properly used as a guide for incorporating all the necessary page elements in a well-organized and functional way. It is important that wireframes is used as a guide when collaborating with the designers and developers.



GRAPH 27. Example of a Website wireframe

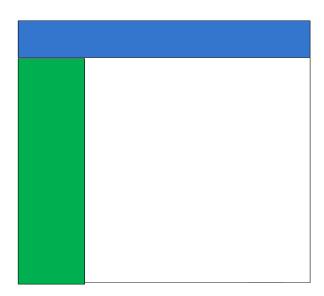
# 6.6 Website Navigation Structure

Website navigation is the science and skill employed by website designer that applied to a web site and helps visitors move freely from one page to another on the website. However, the best way to achieving navigation on a website is through the collection of links (text / images /flash /java applets) that form the website navigation menu. This navigation menu could either be place vertically on the left or horizontally near the top of the web page.

# 6.6.1 Vertical Website Navigation Menu

Graph 28 displays an exceptionally regular layout of internet sites. The header part of navigation in blue carries the logo, preferably around the left (sometimes it

is fantastic to be at the right depending on what style and structure that will probably be provided to the internet site), and may need other photographs or text. The vertical navigation menu detailed in the green part while the header part is in blue. The text would not span the whole height in the site and will produce other web page features or simply blank space down below it. The primary website contents (text and pictures) are inside the white space in the diagram beneath (Graph 28).



GRAPH 28. Vertical Navigation

## 6.6.2 Horizontal Website Navigation Menu

The internet website navigation menu can also be placed horizontally proper beneath the header segment of a net website as represented in green colour within the image underneath (Graph 29). The location of the main contents on the online web page is within the white location. The sole drawback of this navigation format is that the text spans all the range of the web page. This can make it hard to read because surfers find it real hard to browse the website text which spans in excess

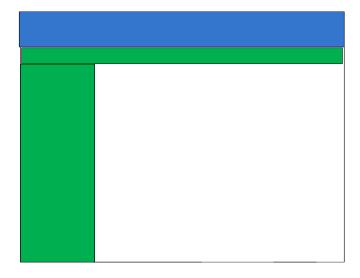
of 600 pixels. This issue can effortlessly be overcome by restricting the width in the text exhibit place so that it is real lesser than 600 pixels.



GRAPH 29. Horizontal Navigation

## 6.6.3 Vertical and Horizontal Navigation Menu

The third popular website navigation menu is shown in Graph 30. Here, the navigation technique exhibits both been a horizontal bar just below the header and also around the left. This is typically employed for the internet site, in which there are lots of pages. For instance, on the website for this thesis, the horizontal menu been placed just slightly above the header, and the pages to the article that is display inside the main content been properly placed on the vertical navigation (left). Furthermore, pages placed in the horizontal menu remain the same throughout the website navigation, and pages on the vertical menu remain consistent through the entire site navigation with the exception of few that shows also submenu.



GRAPH 30. Horizontal & Vertical Navigation

# 6.7 Website Template

A website template is a design used for the physical appearance or description of a website and separate content from presentation in a web design. Hence, it is a layout used to display content and information for a simple website, or used as a neat package to program additional features, such as scripts and databases.

Additionally, a template controls the overall appearance and layout of the website. It gives the framework that brings in concert typical things, modules and components at the same time as furnishing the cascading fashion sheet for the web page. Each of the front-end, as well as the back-end on the website, has templates. Alternatively, the internet template is practical in offering a thoroughly clean and skilled style which will quickly integrate with any programming kinds and on any system type.

### 7 WEBSITE RESULTS

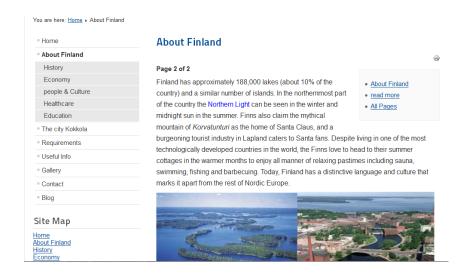
The topic of the newly created website "WEB-BASE ORIENTATION TO LIVING AND STUDYING IN KOKKOLA, FINLAND" has so many importance to foreign students (either as exchange students or full-time students) that are willing to come to Centria, Kokkola to study. However, the usefulness cannot be over emphasized to anyone visiting from abroad willing to study in Centria, Kokkola. This website provides all require tips, information required to have a pleasant study period in the school and city. The home page of this site provides a welcome gesture and random pictures of some of the place to visit while living in the city. Below is Graph 31 that is about the Home Page of the website.



GRAPH 31. Screenshot of Home page

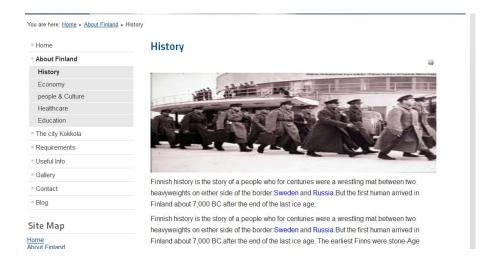
The "About Finland" page gives insight of the country itself. Since, the city Kokkola is a state province in Finland, It is necessary to talk about Finland. Finland which is one of the Nordic countries in Europe and has a lot of history and tradition. On this page are articles that describe the location, population, bordering countries, number of province, weather. Moreso, this web page has subcategories such as History, Economy, People & Culture, Healthcare and

Education. All these sub-categories helps to describe the whole functionalities of the "About Finland page".



GRAPH 32. Screenshot of About Finland page

Below is Graph 33 that is about the "History" page that described the history of the country Finland, how she came into being and colonial masters. Also on this page is a graphical representation that described the war within the Finnish independent.



GRAPH 33. Screenshot of Sub-category "History" page

Here is the "Economy" page describing the economy of Finland, how buoyant it is, the major sector of the economy, and per capital income.



GRAPH 34. Screenshot of Sub-category "Economy" page

This is the "People and Culture" page that talks about the Finnish culture, the food recipe and many more. Below is Graph 35 that is about a family in the Finnish sauna.



GRAPH 35. Screenshot of Sub-category "People & Culture" page

Below is Graph 36 that is about the "Healthcare" page Also on this page is more information about the healthcare system in Finland.



GRAPH 36. Screenshot of Sub-category "Healthcare" page

Below is Graph 37 that is about the "Education" page that shows kids in the typical Finnish school at a remarkably tender age.



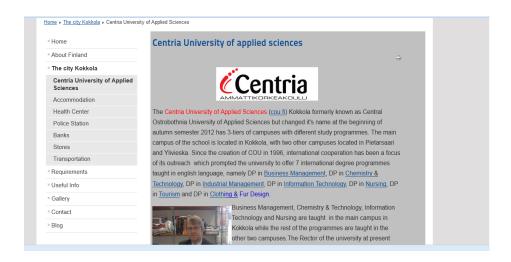
GRAPH 37. Screenshot of Sub-category "Education" page

The City of Kokkola page is one of the important pages on this website because, the articles on this page can make or break the decision of the intended reader about coming to the city in order to study. Therefore, the choice of information on this page is of uttermost important in order to make sense and convince the intend site user about the city and the people. This pages contain articles that mentioned the population of the entire city, brief history of the city, spoken language institution, e.t.c. However, this page has also, some sub-categories such as Centria University, Accommodation, Health centre, Police station, Banks, Stores and Transportation. However, the graphics on the city of kokkola page describe Kokkola train station, parks and one of many companies in the city.



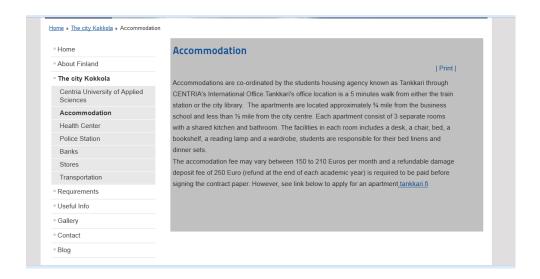
GRAPH 38. Screenshot of City Kokkola page

The "Centria University of Applied Sciences" page talks about the University CENTRIA and also has a graphics representation (Graph 39) of the Head of Information Technology.



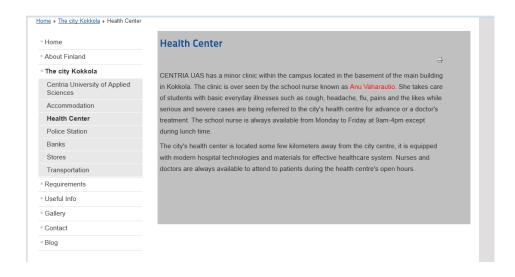
GRAPH 39. Screenshot of Sub-category "Centria University" page

The "Accommodation" page has a representation (Graph 40) that described how and what student need to get accommodation as well as the fees to be paid.



GRAPH 40. Screenshot of Sub-category "Accommodation" page

Below is Graph 41 that is about the ""Health centre" page that describe the city (Kokkola) heath centre, the school nurse.



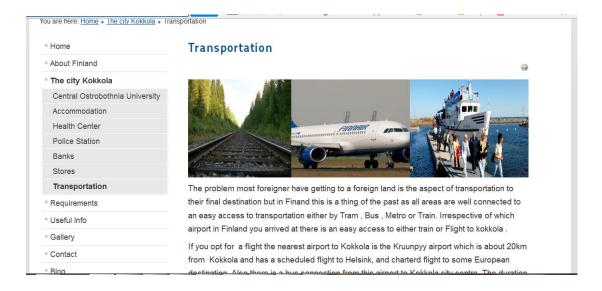
GRAPH 41. Screenshot of Sub-category "Health Center" page

Below is Graph 42 that is about the "Police Station" page and its symbol.



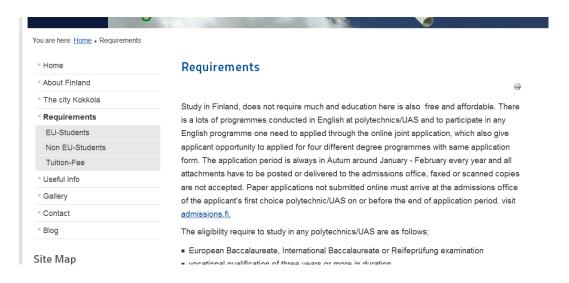
GRAPH 42. Screenshot of Sub-category "Police Station" page

The "Transportation" page has a graphical representation (Graph 43) of how to get to the city of Kokkola via three means (train, airplane, ship).



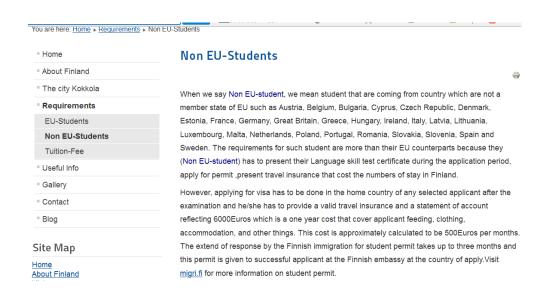
GRAPH 43. Screenshot of Sub-category "Transportation" page

The Requirement page gives site users an insight of what activities to encounter in Kokkola. The article here talks about the programmes conducted in English language in COU, eligibility, how to apply, admissions website, certificate needed for application and language skill test score required. Furthermore, this page also has some sub-categories that sum up all this earlier mentioned article. The sub-categories includes: EU-Students, non-EU Students and Tuition Fees.



GRAPH 44. Screenshot of Requirements page

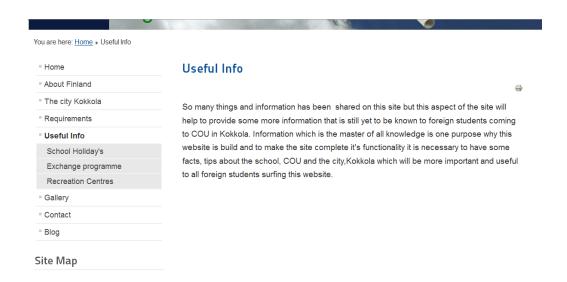
Below is Graph 45 that is about the "NON EU -Student" page that shows of information needed by foreign student that are not from EU.



GRAPH 45. Screenshot of Sub-category "Non EU-students" page

The Useful Info page provides user tips and quick facts and information about the school and the city. However, this pages also, contains some sub-categories that

gives more insight about the page as a whole. Sub-categories that can be found on this pages are as follows: School holiday's, exchange programmes and recreational centre.



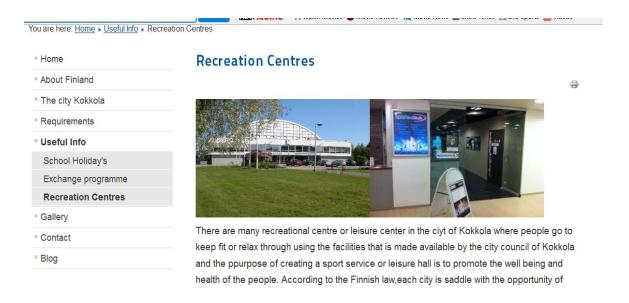
GRAPH 46. Screenshot of Useful Info page

The "School Holiday's" page below shows some important holiday's during the academic season in Centria University of applied Sciences.



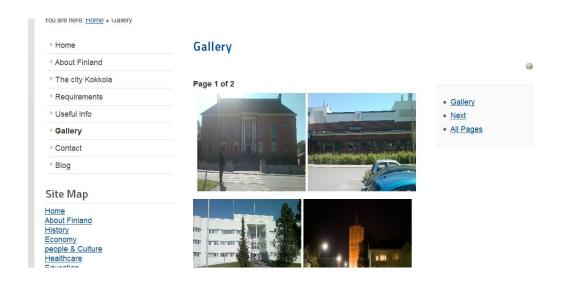
GRAPH 47. Screenshot of Sub-category "School holiday's "page

Below is Graph 47 that is about the "Recreation Centre" page that shows two of the most popular recreational centres in the city of Kokkola, information on how to register, opening time and so on.



GRAPH 47. Screenshot of Sub-category "Recreational centre" page

The Gallery page just contains a random pictures of some important place to visit in the city of Kokkola.



# GRAPH 48. Screenshot of Gallery page

The "Contact" page provide the access of contacting the website owner which in this case is the Centria University of Applied Sciences.



GRAPH 49. Screenshot of "Contact" page

Finally, the Blog page is also another useful part of this website where user can read experience of some of the current foreign students comments and advice that will be posted.



GRAPH 50. Screenshot of Blog page

### 8 CONCLUSION

Creating a website for the purpose of relaying information to applicants that want to study in CENTRIA, Kokkola is the main goal of this thesis. The platform used to create this site was known as "JOOMLA and XAMMP" which is a reliable, resourceful, and a strong content management system around now in the market. The results from the creation of this website are the template used, the banner and logos used, navigation structure types, content display on each page, menu displayed, and pictures displayed.

The template is a physical appearance of how the website appear because without the template, the website will not be organised especially in the context of the content. Therefore, the used template was built from a template generator known as ARTISTEER. The banner and logo give the website a full description of what the site is all about. However, in this case of this thesis, the banner contains a mixture of light blue and white colour with green text on it while the logo consist of a graduating cap well placed on a bunch of books and certificate. All these define the website as an educational site.

Joomla is an open source content management with various functionalities, flexibilities, and easy to use, and with the help of all these aspect of Joomla and XAMMP, creating an enlightened website for the intended users was imminent. However, there are a few trials encountered during the design of this website such as, creating suitable template that befits the site title, using the appropriate modules, and editing some lines of HTML or CSS. Overall, it was a great success using Joomla for creating this website.

#### REFERENCES

Baker, B. 2012. Using Joomla media manager. Available :http://www.joomlatutorials.com/joomla-tips-and-tricks/40-miscellaneous-joomla-tips/104-using-joomlas-media-manager.html. Accessed 18th August, 2012

Dkszone 2010. Installing XAMMP. Available: http://www.dkszone.net/install-xampp-windows-step-guide. Accessed April,2012.

Free Joomla extensions 2011. Category. Available: http://vinaora.com/tag/category/. Accessed April 2012.

Joomla 1.6 2011. What are feature article in Joomla 1.6. Available: http://www.joomlafanbox.com/what-are-featured-articles-in-joomla-1-6.html. Accessed 21st January 2012.

Kuker, B. 2009. Joomla Administration explained. Available: http://www.virtuosimedia.com/dev/php/joomla-administration-explained-a-joomla-15-admin-tutorial. Accessed 2nd May 2012.

North, B. June 2009. Joomla! 1.5 A User's Guide: Building a Successful Joomla! Powered Website. 2nd Edition.

Smith, C. 2012a. How content management system help the public and private sector. Available: http://www.csedev.com/how-content-management-systems-help-the-public-and-private-sectors/. Accessed September, 2012

Smith, M. 2012b. Free content management system. Available: http://spyrestudios.com/free-content-management-systems/. Accessed 3rd September, 2012.

What is Joomla? 2012. About Joomla. Available: http://www.joomla.org/about-joomla.html. Accessed 26th June, 2012.

XAMMP definition 2008. What is XAMMP. Available: http://www.searchenginegenie.com/programming-blog/what-is-xampp/. Accessed April, 2012.