System overview

This module will describe the methods and techniques that we have planned to follow in order to achieve our goal in this project. Basically our system overview is mainly based on MVC architecture. This system is a combination of user interfaces which can be web based and a robust common framework for health care systems to facilitate interoperability,extensibility,high security and high performance based on international health-care standards and software development standards.

Technologies used

- Hibernate

  Hibernates primary feature is mapping from Java classes to database tables. Hibernate also provides data query and retrieval facilities. It generates SQL calls and relieves the developer from manual result set handling and object conversion.

- PHP

  PHP is a open source server side scripting language,which is used to develop web applications. It gives the web application capability of delivering dynamic content according to the client request. System uses PHP to implement the back-end business logic,including file management,user and session management.

- CodeIgniter

  System use the Codeigniter3.0.0 PHP framework,which is based on the MVC(Model View Controller) design pattern. It is a fast and lightweight framework with a complete documentation provides the core architecture for developing fast and scalable PHP web application.

- MYSQL

  MYSQL is a popular choice of database for use in web applications.

- Eclipse

  Eclipse Kepler is used for the back-end implementation of the system. This website is developed using JAVA. Therefore ,we have used eclipse Kepler IDE for Java EE developer.

- Bootstrap

  Bootstrap is the most popular HTML,CSS and JS framework for develop responsive web applications. This is a large system with different modules,bootstrap enables us to use a same styling pattern to the entire HIS project.

Software Setups (Ubuntu)

1. Xampp server

Step1: Open terminal and download xampp1.8.3 package.

Step2: After downloading the XAMPP package, make it executable as shown below.

- sudo chmod +x xampp-linux-x64-5.6.8-0-installer.run

Step3: Now, install XAMPP stack as shown below

- sudo ./xampp-linux-x64-5.6.8-0-installer.run

Step4: You'll be asked to answer a couple questions Press Y to accept the defaults.

Step5: XAMPP will be installed in /opt/lampp directory. After installing XAMPP Start it using the following commands.

- Cd /opt/lampp
- ./manager-linux-x64.run

2. *Jdk*

Step1: Go to http://www.java.com/en/download/linux_manual.jsp and download the 64-bit package.

Step2: Open the terminal and type the command line as below.

- sudo apt-get install openjdk-7-jdk
- apt-cache search jdk

Step3: For "JAVA_HOME" (Environment Variable) type command as shown below, in "Terminal" using your installation path.

- export JAVA_HOME=/usr/lib/jvm/java-7-openjdk

Step4: For "PATH" (Environment Variable) type command as shown below, in "Terminal" using your installation path.

- export PATH=$PATH:/usr/lib/jvm/java-7-openjdk/bin

Step5: Check for "open jdk" installation, just type command in "Terminal" as shown below.

- javac -version

3. ***Spring-tool-suite***

Step1: Download the shell script for Ubuntu from spring website http://www.springsource.org.

Step2: Add the execution right to be able to run the script.

- chmod u+x spring-tool-suite-3.2.0.RELEASE-e3.8.2-linux-gtk-installer.sh.

Step3: Run the installation script.

- ./spring-tool-suite-3.2.0.RELEASE-e3.8.2-linux-gtk-installer.sh.

4. ***Apache Maven***

Step1: In a terminal type the following command, to get all the available Maven packages.

- apt-cache search maven

Step2: Run the following command to install the latest Apache Maven.

- sudo apt-get install maven

Step3: Run the following to verify your installation.

- mvn –version

5. ***CodeIgniter 3.0.0***

Step 1: Download codeIgniter.

Step 2: After downloaded codeIgniter extract in your server root directory i.e. your htdocs folder.

Step 3: After that rename that folder into your project.

Step 4: After that open your browser and run http://localhost/ (project name) /.

6. ***Sublime Text***

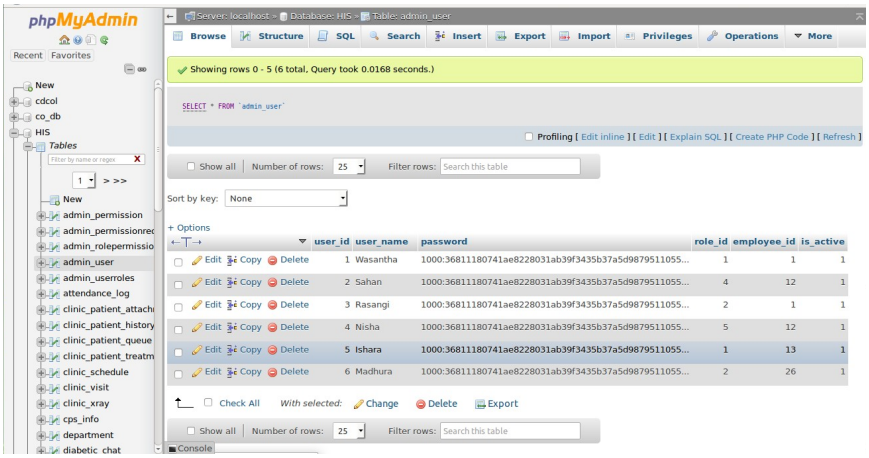
Step1: Download the compressed files.

Step2: Unzip them to a folder of your choice.

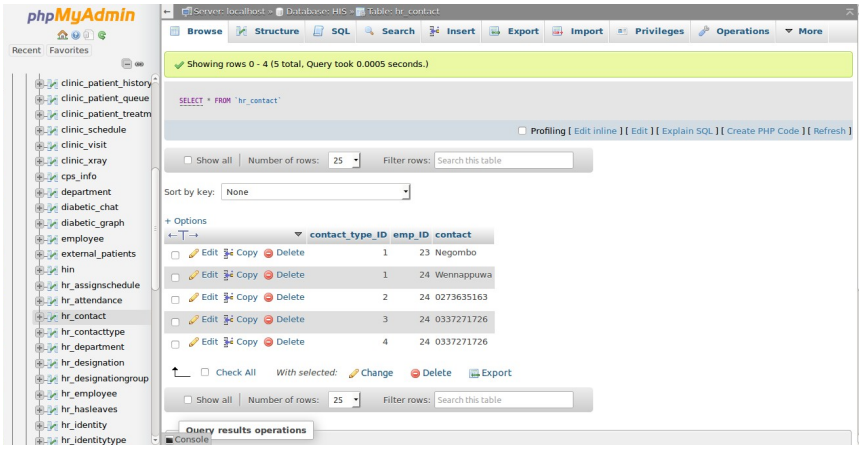
Step3: You will find the sublime_text.exe executable inside that folder. Double click on the installer.

Create MySQL database using xampp server

- Run xampp server and start all servers.
- Open browser and enter http://localhost/phpmyadmin. This will bring you to the MySQL setup page:
- Enter a name for the database, then click on the Create button.
- Ensure the database was successfully created.
- Under the database create the tables.



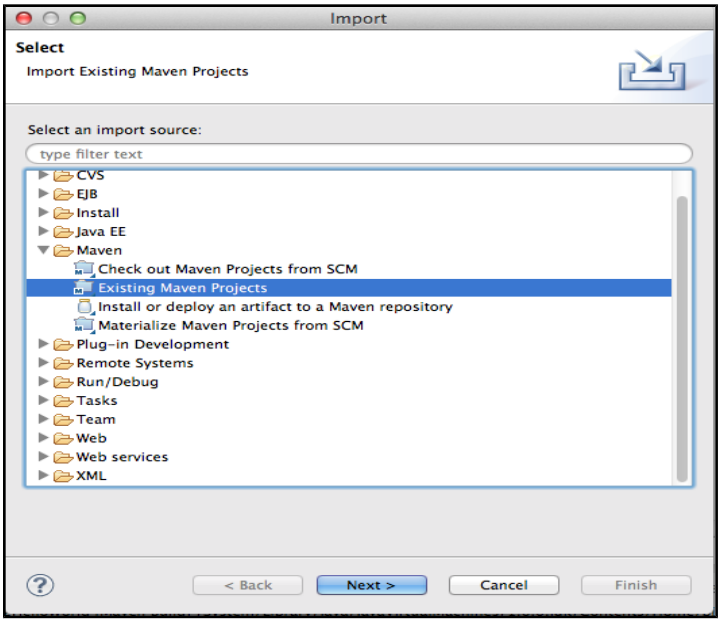
Sample database 1



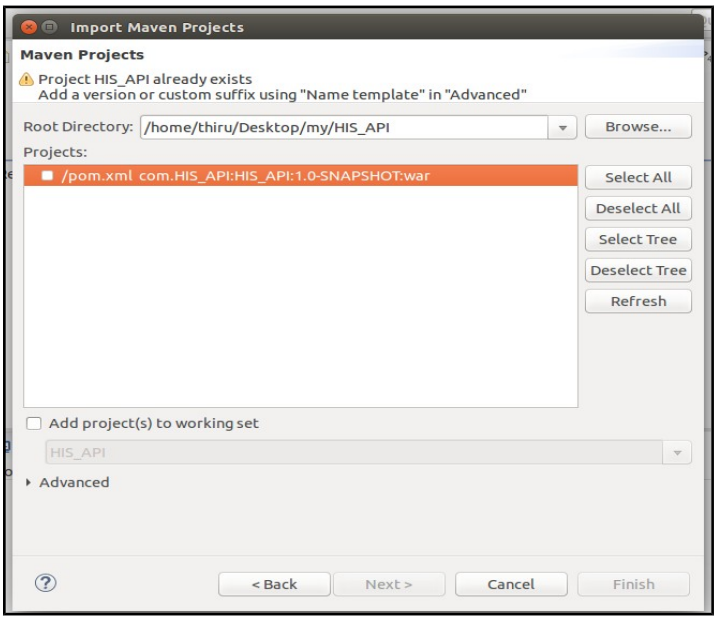
Sample database 2

Running Maven project within Eclipse on Tomcat

1. Click on File -> Import -> Maven -> Existing Maven Project



2. Browse to the location where the Maven project is located.

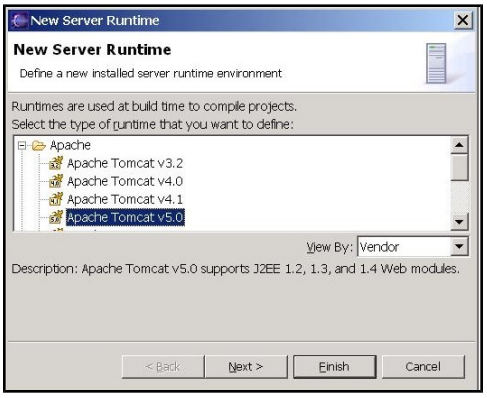


3. Click on the check-box for the pom.xml file and import the project.

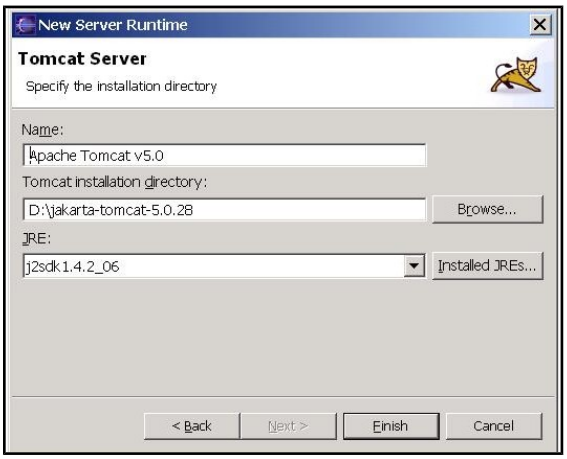
4. Click on File -> project -> Run-as -> Run on Server.

5. If the server is not available install the server.

- Open Window -> Preferences -> Server -> Installed Runtime to create a Tomcat installed runtime.
- Click on Add... to open the New Server Runtime dialog, then select your runtime under Apache (Apache Tomcat v7.0).



- Click Next , and fill in your Tomcat installation directory :
- Ensure the selected JRE is a full JDK and is of a version that will satisfy Apache Tomcat (this scenario was written using SUN JDK 1.4.2_06). If necessary, you can click on Installed JREs... to add JDKs to Eclipse.



- Click Finish..