Laboratory Sheet 6

XAMPP + PHP5

Published date: Monday, 5 November 2018
Due Date: Monday, 10 December 2018, 9:00 am

Successful completion of this lab is worth **2%** of the module marks.
Successful completion of all 7 labs is worth an additional 1% of the module marks.

Note:

1. All the code (e.g., .html, .css, and .js, and .sql files) must be submitted using webcourses – in zipped format.
2. Must be demo-ed in the labs either before or after submission.
3. Failure to provide code or demo will result in a mark of 0%.

What you need: Notepad++ (or another text editor), XAMPP; Eclipse for PHP (or another text edit with features with features specific to the PHP scripting language e.g., Brackets and Visual Studio Code), Chrome (or another browser); HTML5, CSS, JavaScript, jQuery, Bootstrap.

Where you can get support: Lecture notes on webcourses + full references on https://www.w3schools.com.

Part 1 – XAMPP Installations Required

1) Download and install XAMPP.

   https://www.apachefriends.org/download.html
   Note: choose the version with PHP 7.2.11.

2) Create a folder named "WDD" in "xampp/htdocs".
3) Create a file named "index.php" in xampp/htdocs/WDD.
4) Edit the file "index.php" so that it will output a string "Hello World!".
5) In the XAMPP Control Panel, start the Apache web server.
   Apache -> Start
   Note:
   If you have a service already on Port 80, you can configure Apache to use another port (e.g., Port 88) as follows:
   Apache -> Config -> Apache (httpd.conf) -> find "Listen 80" -> Change to "Listen 88".
6) Open a browser and type: http://localhost:/WDD/ (or http://localhost:88/WDD/) depending on which port you are using.
   If everything is OK, you should be able to see "Hello World!".

Part 2 – Change from MariaDB to MySQL

May be required since MariaDB is not 100% compatible with MySQL. You can try to complete the lab without making the change, however, you'll need to use MySQL for your Group Project.

1) In the XAMPP Control Panel, stop the MariaDB service.
   MySQL -> Stop
2) Rename the "xampp/mysql/" directory to "xampp/mariadb/".
3) Download MySQL Community Server.

   https://dev.mysql.com/downloads/mysql/

4) Create a new "xampp/mysql/" directory.
5) Extract the download file into the "xampp/mysql/" server.
6) In the XAMPP Control Panel, start the MySQL service.
   MySQL -> Start.

Part 3 – Install a PHP Editor, if required

These are instructions for installing Eclipse for PHP.

1) Download and install Eclipse for PHP.

   http://www.eclipse.org/downloads/packages/eclipse-php-developers/heliosr.

   Note:
   a) Choose the right version for your O.S. (32 or 64-bit).
   b) You need to have at least a JRE installed.

      http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html

2) Start Eclipse and go to "Workbench".
3) Set up an Eclipse PHP project (File -> New -> PHP Project).
   a) Project name: Lab5.
   b) Select "Create project at existing location".
   c) Browse to the "xampp/htdocs/WDD" directory.
   d) Use default PHP settings.
   e) Use project as source folder.
   f) Check the "Enable JavaScript support for this project" box.
      You should see your "index.php" file on the left.
   g) Edit the file to output "We're Ready!".
      If everything is OK, you should be able to see "We're Ready!" after refreshing the page.

Part 3 – Update CV Project

1) Save your CV from the previous labs (i.e., Lab 2) into a new directory "xampp/htdocs/WDD/CV".

   Note:
   If using Eclipse for PHP, you can refresh the project to see the CV directory now on the left.

2) Go to http://localhost:/WDD/CV/ to check the page working as expected.
3) Rename the html file you'd created (e.g., "index.html") as "index.php".
4) Go to http://localhost:/WDD/CV/ to check the page working as expected.
5) Change "index.php" to receive your name and surname via the HTTP GET method and display them properly within your page.

   E.g., http://localhost:/WDD/CV/cv.php?name=Bill&surname=Gates

   Note:
   Remember to avoid code injection.

6) In the XAMPP Control Panel, do the following:
   a) Start the MySQL service.
   b) Go to phpMyAdmin.
      MySQL -> Admin

   c) From phpMyAdmin, login using "root".
   d) Create a database named "cv".
   e) Create a table called "tbleducation" by running the following script:

```
CREATE TABLE tbleducation
(
eduID INT(11) NOT NULL AUTO_INCREMENT PRIMARY KEY,
eduSchool VARCHAR(50) NOT NULL,
eduDegree VARCHAR(50) NOT NULL DEFAULT 'Not Relevant',
eduGrade VARCHAR(50) NOT NULL DEFAULT 'Not Relevant',
eduStartYear INT(4) NOT NULL,
eduEndYear INT(4) NOT NULL,
eduDateAdded TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
eduDateUpdated TIMESTAMP NOT NULL DEFAULT '0000-00-00 00:00:00',
) ENGINE=InnoDB DEFAULT CHARSET=utf8 AUTO_INCREMENT=1;
```

   f) Use one or more SQL statements to insert some rows of data, with your details.
   g) Save the SQL statement(s) that you used to the insert the data into a text file named "cv.sql" and save in the "xampp/htdocs/WDD/CV" folder.

h) Change “index.php” to read the tbleducation information from the database, into your web page.

Note:

i) If you haven’t made any changes to the default configurations, use these details to access the DB with PHP:

```
$host = "localhost"; $user = "root"; $pwd = ""; $db = "CV";
```

ii) Database and table names are not case sensitive in Windows, but they are case sensitive in most varieties of Unix.

Part 4 – Form Validation Project

1) Continue with your Form Validation Exercise from Lab 4.

   Include server-side validation with PHP. Don’t forget to include proper communication with the user.
2) Upon successful validation, insert the form data into the database, and inform the user.
3) Protect your application from unexpected page reloads, and avoid repeated inserts into the database.