CET-223

Web Technologies

Experiment # 16

Experiment Title

Installation of XAMPP Server & Deploying Your Web Application on Localhost

Assessment of CLO(s): 03

Performed on _____

Student Name:			
Roll No.		Group	
Semester		Session	

Total (Max)	Performance (03)	Viva (03)	File (04)	Total (10)
Marks Obtained				
Remarks (if any)				

Experiment evaluated by

Instructor's Name	Engr. Bilal Iqbal		
Date		Signature	

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Objective:

This lab aims to guide you through the installation and configuration of the XAMPP server and deploying a sample website on localhost to simulate a development environment.

Introduction to XAMPP:

XAMPP is the title used for a compilation of free software. The name is an acronym, with each letter representing one of the five key components. The software packet contains the web server Apache, the relational database management system MySQL (or MariaDB), and the scripting languages Perl and PHP. The initial X stands for the operating systems that it works with: Linux, Windows, and Mac OS X.
Localhost refers to your computer running as a server environment, which allows you to view web pages as they would appear on the internet without needing to deploy them to an external server.
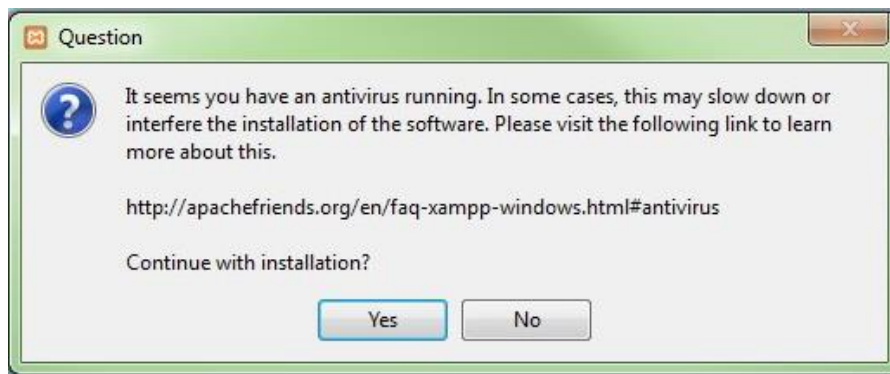
Step 1: Download

XAMPP is a release made available by the non-profit project Apache Friends. Versions with PHP 5.5, 5.6, or 7 are available for download on the Apache Friends website.

Step 2: Run .exe file

Once the software bundle has been downloaded, you can start the installation by double clicking on the file with the ending .exe

Step 3: Deactivate any antivirus software

Since an active antivirus program can negatively affect the installation process, it's recommended to temporarily pause any antivirus software until all XAMPP components have successfully been installed.

Step 4: Start the setup wizard

After you've opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on 'Next' to configure the installation settings.
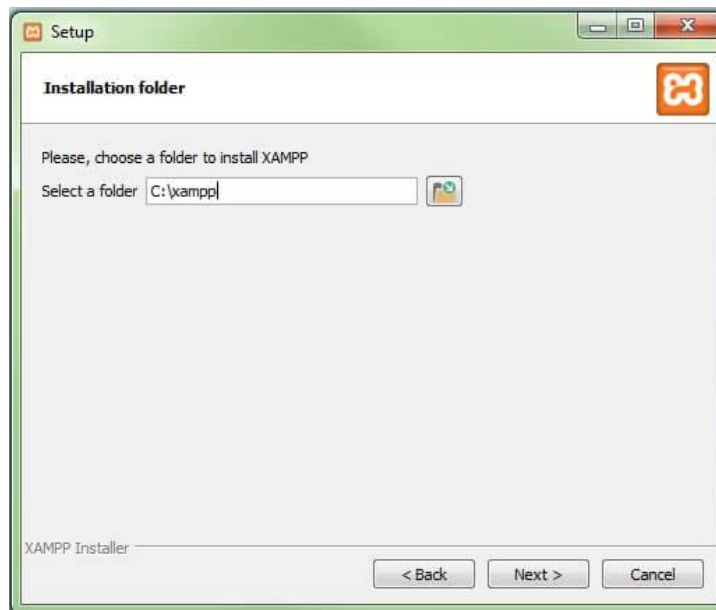
Step 5: Choose software components

Under 'Select Components', you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server, we recommend you install using the standard setup and all available components. After making your choice, click 'Next'.

Step 6: Choose the installation directory

In this next step, you have the chance to choose where you'd like the XAMPP software packet to be installed. If you opt for the standard setup, then a folder with the name XAMPP will be created under C:\ for you. After you've chosen a location, click 'Next'.

Step 7: Start the installation process

Once all the mentioned preferences have been decided, click to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory. This process can take several minutes in total. You can follow the progress of this installation by keeping an eye on the green loading bar in the middle of the screen.

Step 8: Complete installation

Once all the components are unpacked and installed, you can close the setup wizard by clicking on 'Finish'. Click to tick the corresponding check box and open the XAMPP Control Panel once the installation process is finished.

Starting and Configuring the XAMPP Server:
Starting XAMPP Services:
- Open the XAMPP Control Panel.

- Start the Apache server by clicking on the "Start" button next to it. This enables your computer to serve web pages.

- Start the MySQL server if your website requires a database.

Testing Apache Server:
- Open a web browser and go to http://localhost.

- You should see the XAMPP welcome page if Apache is running correctly.

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Creating a Database (Optional):

If your website uses a database, follow these steps:

- Open phpMyAdmin by going to http://localhost/phpmyadmin.

- Click on "Databases" in the top menu.

- Enter a name for your database and click "Create."

Deploying Your Website on Localhost

1. **Locating the htdocs Folder:**

   - Navigate to the XAMPP installation folder (e.g., C:\xampp on Windows).

   - Open the htdocs folder. This is the root directory for Apache where your website files need to be placed.

2. **Placing Your Website Files:**

   - Create a new folder within the htdocs folder for your project (e.g., mywebsite).

   - Place all your HTML, CSS, JavaScript, and other required files in this folder.

3. **Accessing Your Website:**

   - Open a web browser and enter the URL http://localhost/mywebsite.

   - Your website should now be visible and fully functional on the localhost.

Lab Task:

Deploy a Sample Website:
- Create a simple HTML page with basic CSS and JavaScript.
- Place it in a new folder within htdocs and ensure it displays correctly on http://localhost/samplewebsite.