Project's Title

Primary objective of this project is to create a login form for a web-based appointment and scheduling management information system (ASMIS) for Queens medical centre.

Project Description

This application will enable users to login to the above mentioned ASMIS through the web browser. HTML has been used here to create the page structure and CSS has been used for presentation and styling purposes.

Also, Python is the server side scripting language and JAVA script is the clint side scripting language here.

Programming Language	purpose	Environment for testing
Python	Server-side scripting	Web browser and Apache web server
Java script	GUI Behavior and alert	Web browser
Hypertext markup language (HTML)	Page structure	Web browser
Cascade style sheet (CSS)	Presentation and styling	Web browser

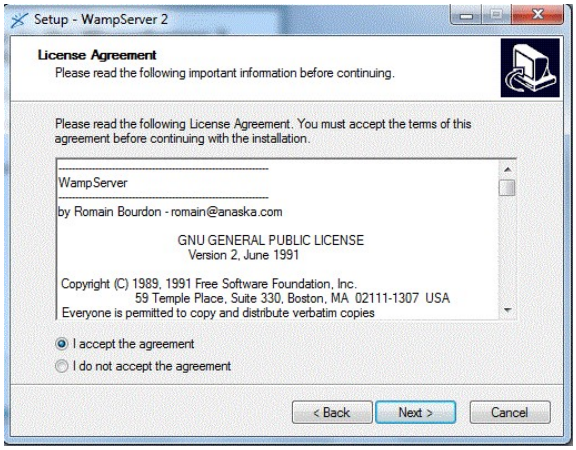
How to add libraries and Run the Project

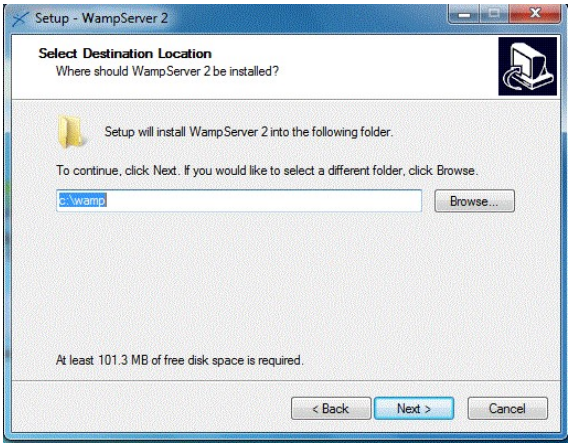
The project was run using WAMP, which is a collection of standalone applications that are installed on machines running the Microsoft Windows operating system. The web server utilised in this application was Apache. Python was the server side scripting language that was used to manipulate data. The client-side scripting language was Java script.

Python applications can be installed and run-on WAMP

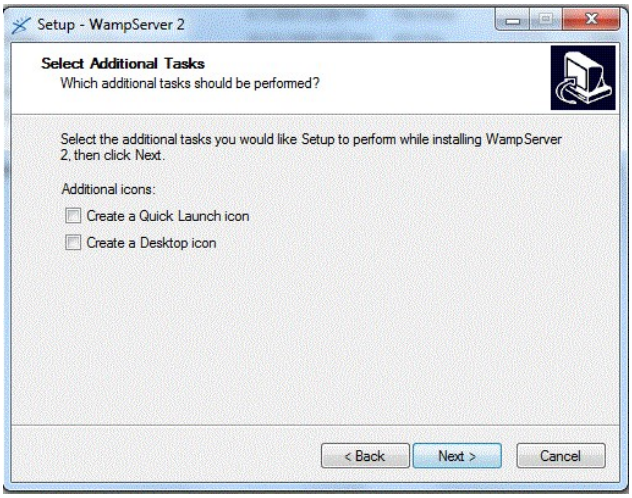
WAMP installation guide

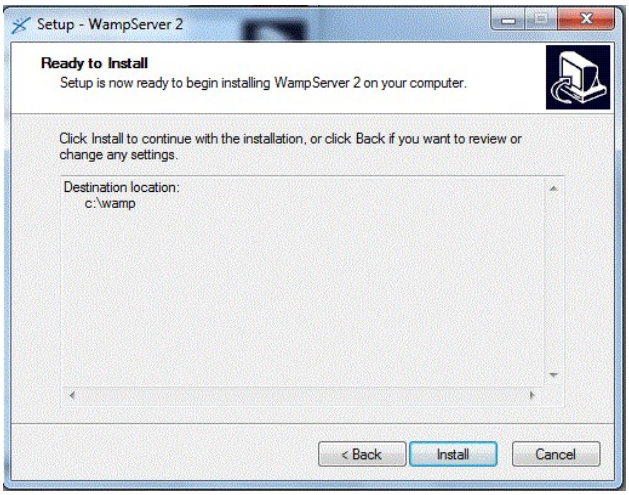
- Double click on the WAMP installation executable file (in this assignment, WampServer2.0i.exe) to start the installation. Then Select destination folder



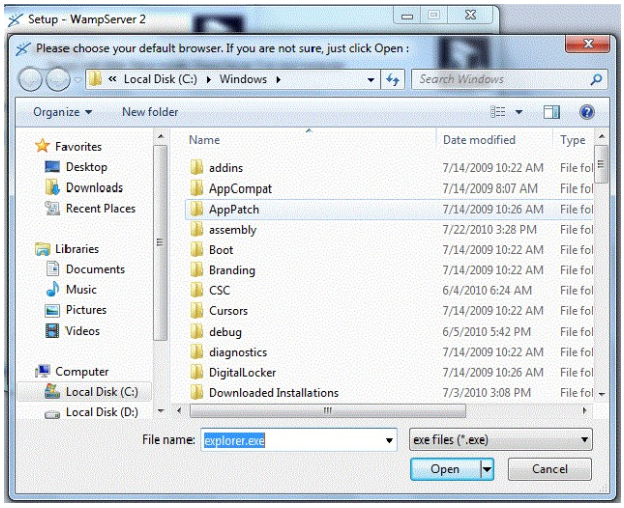


- Select quick launch icon and desktop icon based on the requirement. Then click install button to begin installation.





- Select the desired browser as “default.”



References - Codelone (2022)

Python installation guide

Launch web browser and go to the official Python website. For Windows, select the Downloads tab. Pick the most recent version of Python 3. Launch the installing programme. Launch the Python installer after downloading it. Select the box next to Install launchers for all users. If required, include the interpreter in the execution route by selecting the Add Python 3.7 to path check box.

Once the installation is done, follow these steps further,

- Open ***wamp\bin\apache\apachexxxx\conf\httpd.conf***, then search & replace options indexes ***followsymlinks*** with ***execcgi***, also, make sure that ***loadmodule cgi*** is not commented.
- Replace ***AddHandler cgi-script.cgi*** with ***AddHandler cgi-script.py***
- Find the line: ***DirectoryIndex index.php, index.html*** and replace them as ***index.cgi index.py*** Then restart the Apache server.

NOTE:

- Change ***C:|Python34*** path to your python installation path correctly.
- To avoid any problems, don't install PYTHON in a path, wherein any "folder name" contains a space.

References - www.digitalocean.com

How to Use the Project

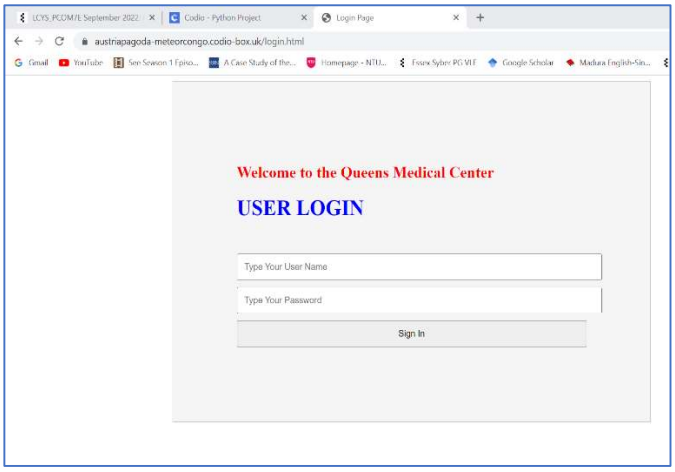
This web application can be run in any web browser runs in Windows platform. There are mainly two web interfaces : Login form and Home page. Login form is used to log into the application. If successfully logged in, it will automatically redirect the user to the home page.

User credentials of the application are as follows,

TestUserName = test

TestPassword = Abc123456

Screenshot of the login form and home page



Three class files have been used here,

- For user name and password validation - **CheckPWD.py**
- For multi factor authentication- **MFA.py**
- For encryption and decryption - **Encrypt_Decrypt.py**

Additionally, a JAVA script (**login.js**) has been used to GET and POST data from login form (**login.html)** to python login file (**login.py**).

CSS (**main.css**) has been used as styling sheets for HTML (**login.html** and **home.html**)

References

- www.digitalocean.com. (n.d.). How to Install Python on Windows 10 | DigitalOcean. [online] Available at: https://www.digitalocean.com/community/tutorials/install-python-windows-10 [Accessed 11 Dec. 2022].
- Codelone (2022). How to install wamp server on windows. [online] Codelone. Available at: https://codelone.com/blog/setup-installation/how-to-install-wamp-server-on-windows [Accessed 11 Dec. 2022].