Deployment Document

The following tools and environment were used for local development:

- Windows 11
- Google Chrome
- Visual Studio Code
- Github Desktop
- XAMPP/ Docker Desktop

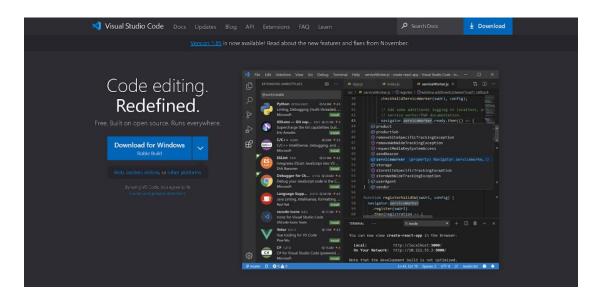
Running the Program

To run the systems successfully, all you have to do is make sure to install the correct IDE and run the program.

IDE

For the IDE, the one we decided to use was Visual Studio Code. This is because first of all it is the recommended IDE for developed Angular and Python applications. And also because it is very easy to install npm packages and start the program.

This is the link to install the IDE, https://code.visualstudio.com/



You will also have to install Node.js if you have not installed that before.

https://nodejs.org/en/download/

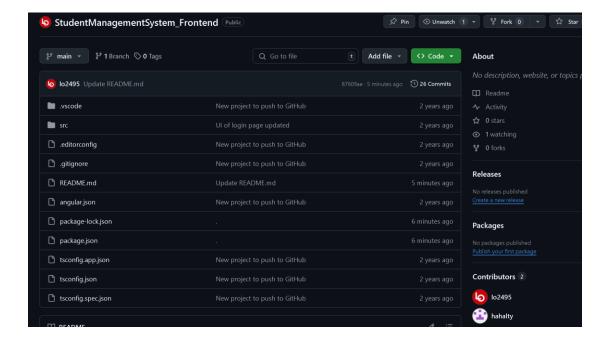


Program Files(Front-end)

After downloading the IDE and Node.js the next step is to download the program files and put them into the IDE workspace.

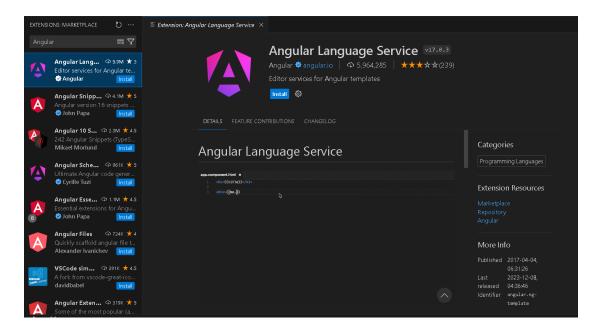
The program files are at

https://github.com/lo2495/StudentManagementSystem_Frontend



After cloning the repository to your computer, use Visual Studio Code to open the folder.

Install Angular Language Service From the extension.



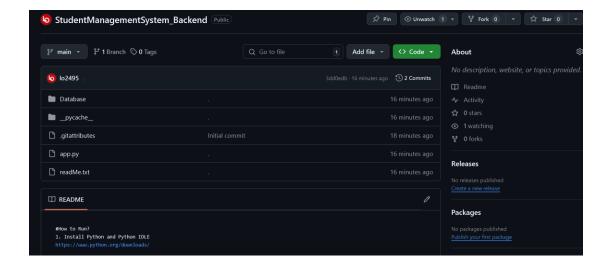
Then open the terminal and type npm install and npm start/ ng serve to run the Front-end program.

```
PS C:\Users\lohiy\MUHK\S350F\StudentManagementSystem\StudentManagementSystem_Frontend> npm start
 gp50-group-project-frontend@0.0.0 start
 ng serve
 Browser application bundle generation complete.
Initial Chunk Files | Names
                                      | Raw Size
endor.js
                       vendor
                                     5.41 MB
865.33 kB
                      main
polyfills
styles.css, styles.js | styles
runtime.js | runtime
                                     6.55 kB
                     | Initial Total | 6.90 MB
Build at: 2025-04-10T12:16:51.394Z - Hash: 4ac9bfc7b57b1adb - Time: 2860ms
** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/ **
 Compiled successfully.
```

Program Files (Back-end)

The program files are at

https://github.com/lo2495/StudentManagementSystem_Backend/tree/main



After cloning the repository to your computer, download python at https://www.python.org/



Then open the terminal and type "py -m pip install flask" to install the flask web framework.

Then type "py -m pip install flask_cors" in the terminal.

Then type "py -m pip install flask_mysqldb" in the terminal.

Finally, type "py -m flask run" or "python -m flask run" in the terminal then the back-end system should be run properly.