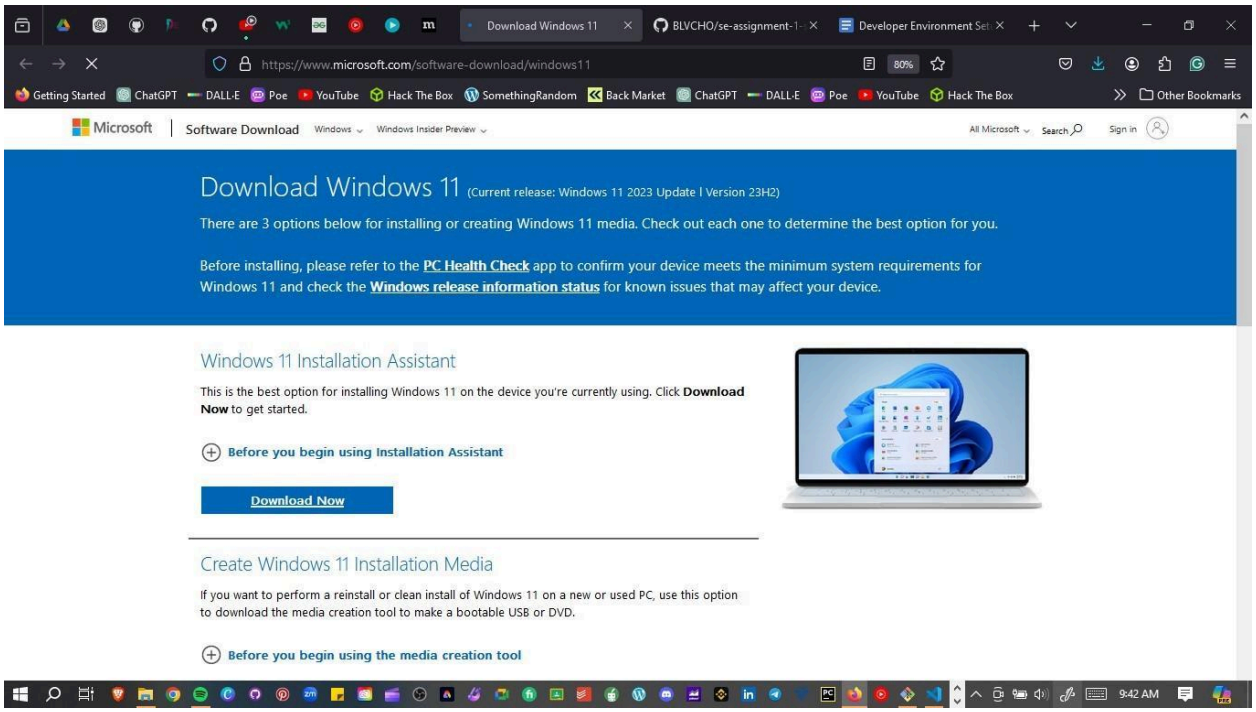
Developer Environment Setup Documentation

1. Operating System Installation

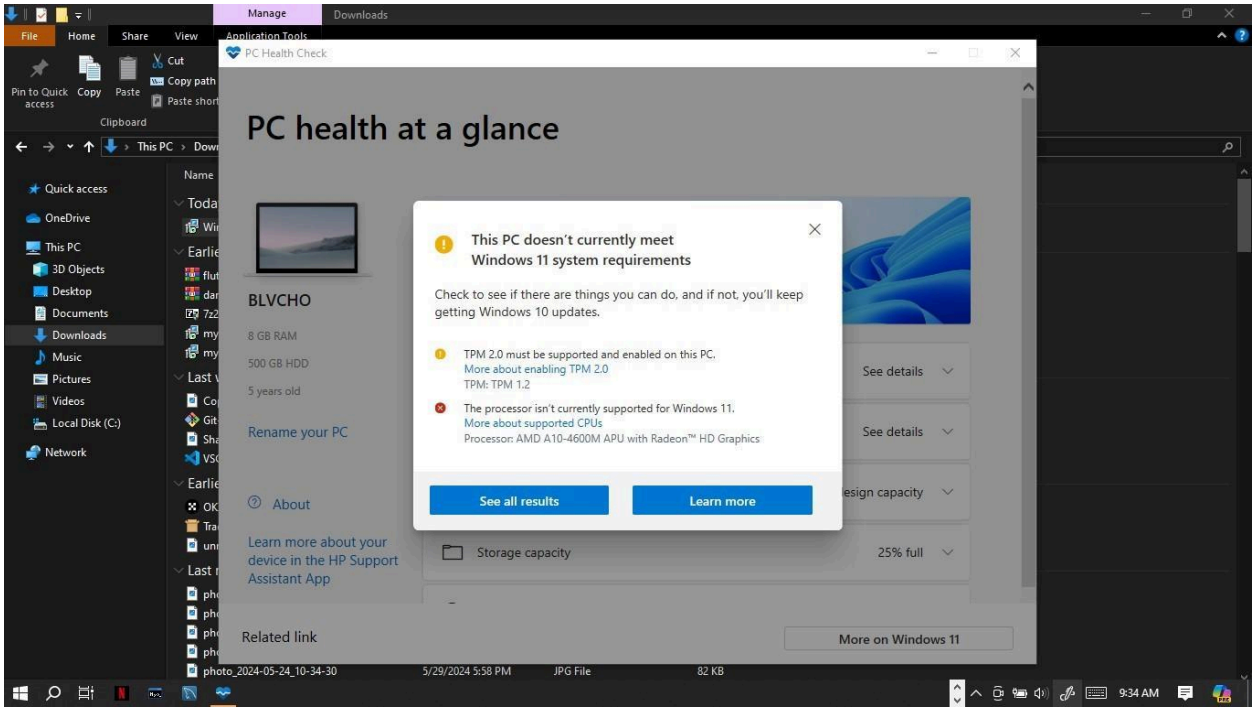
Steps and Screenshots of Windows 11 Installation:

1. Download Windows 11:
   - Visit the official Microsoft website: [Windows 11 Download](https://www.microsoft.com/software-download/windows11).
   - Download the Windows 11 Installation Assistant.
   - Run the downloaded file and follow the on-screen instructions to upgrade or install Windows 11.



2. Installation Process:
   - Ensure your PC meets the minimum system requirements.
   - Back up your important files.

- Follow the installation steps, including selecting the installation type, partitioning your hard drive if necessary, and configuring initial settings.



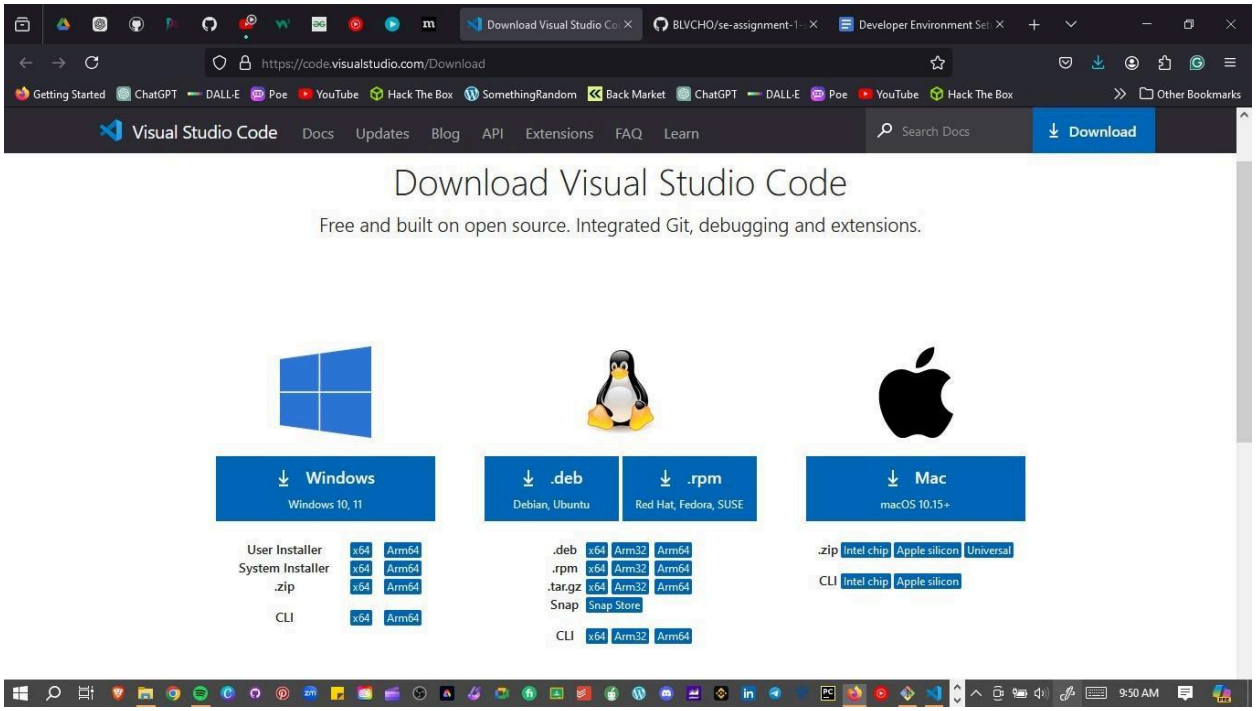
3. Post-Installation Setup:
   - Configure your user account, regional settings, and privacy settings.
   - Install necessary drivers and updates.

NB: MY PC DOES NOT SUPPORT WINDOWS 11

2. IDE Installation

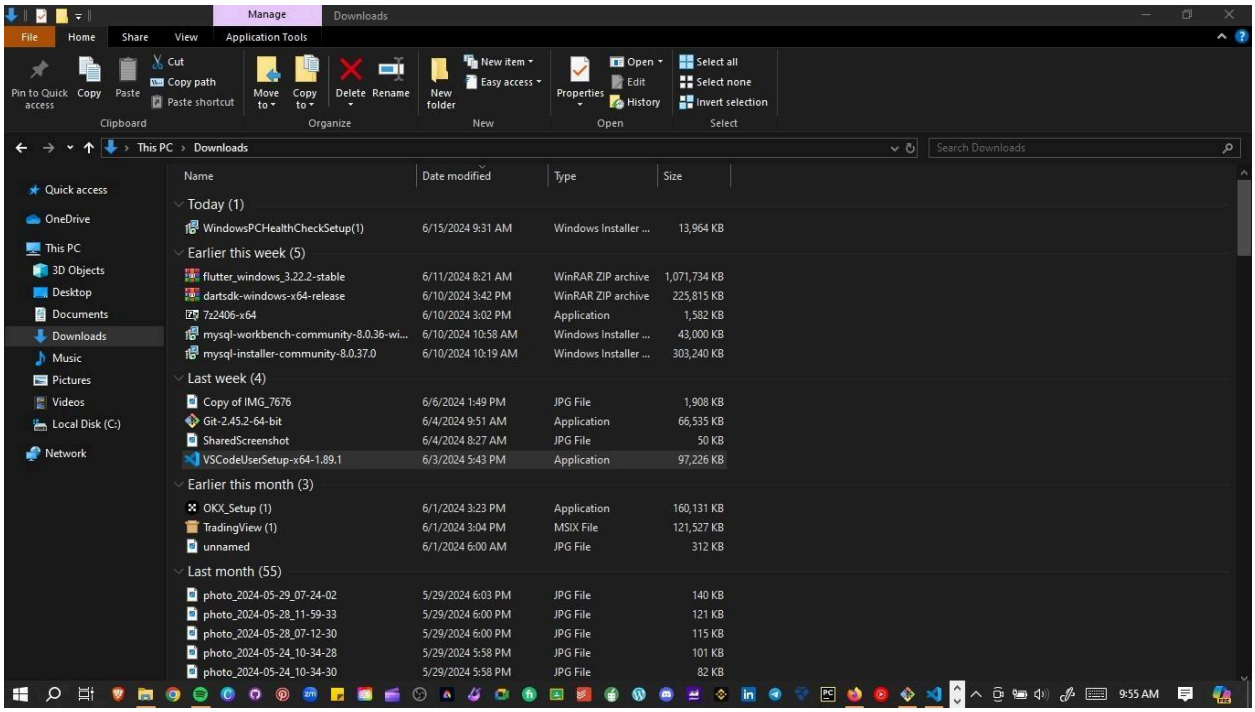
Steps and Screenshots of Visual Studio Code Installation:

1. Download VS Code:
   - Visit the Visual Studio Code download page: [VS Code Download](https://code.visualstudio.com/Download).
   - Select the appropriate version for Windows and download the installer.



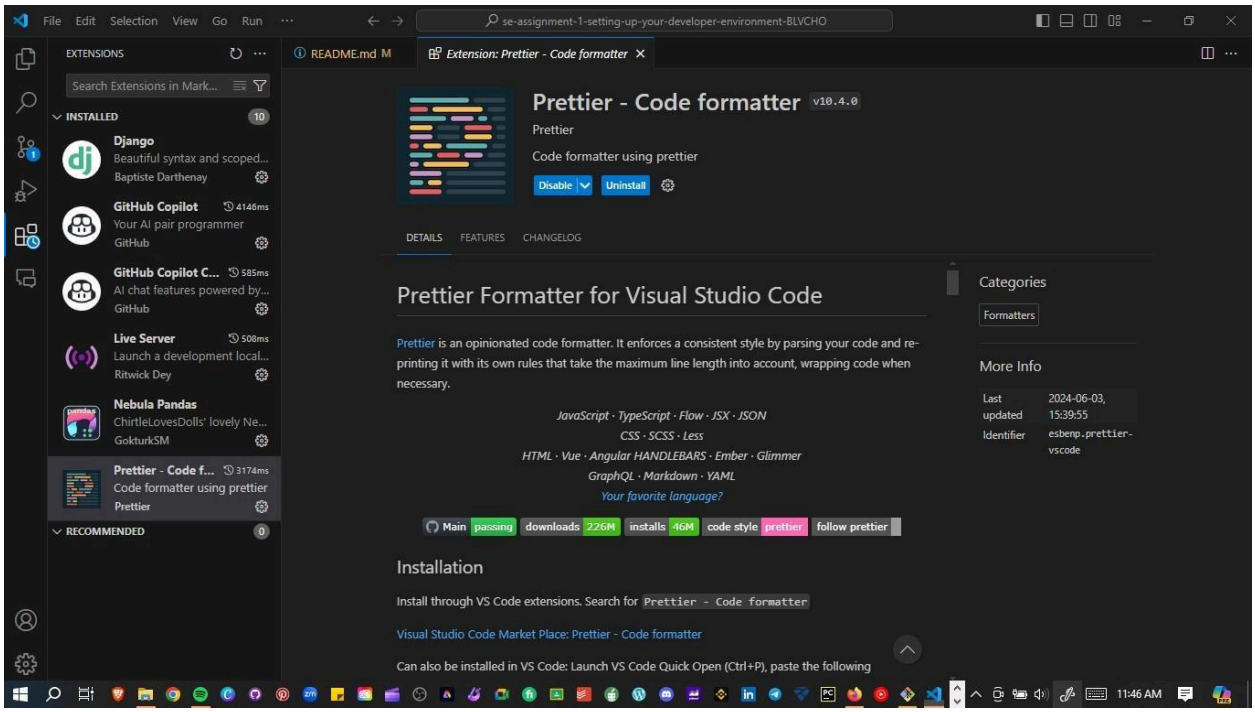
2. Installation Process:

- Run the downloaded installer.
- Follow the installation wizard, accepting the license agreement and choosing the installation location.
- Select additional tasks such as adding to PATH and creating a desktop icon.



3. First Launch and Setup:

- Launch VS Code and install recommended extensions like Python, GitLens, and Docker.


File Edit Selection View Go Run
se-assignment-1-setting-up-your-developer-environment-BLVCHO
EXTENSIONS
Search Extensions in Mark...
INSTALLED 10
Django
Beautiful syntax and scoped...
Baptiste Darthenay
GitHub Copilot 4146ms
Your AI pair programmer
GitHub
GitHub Copilot C... 585ms
AI chat features powered by...
GitHub
Live Server 508ms
Launch a development local...
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Prettier
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Extension: Prettier - Code formatter
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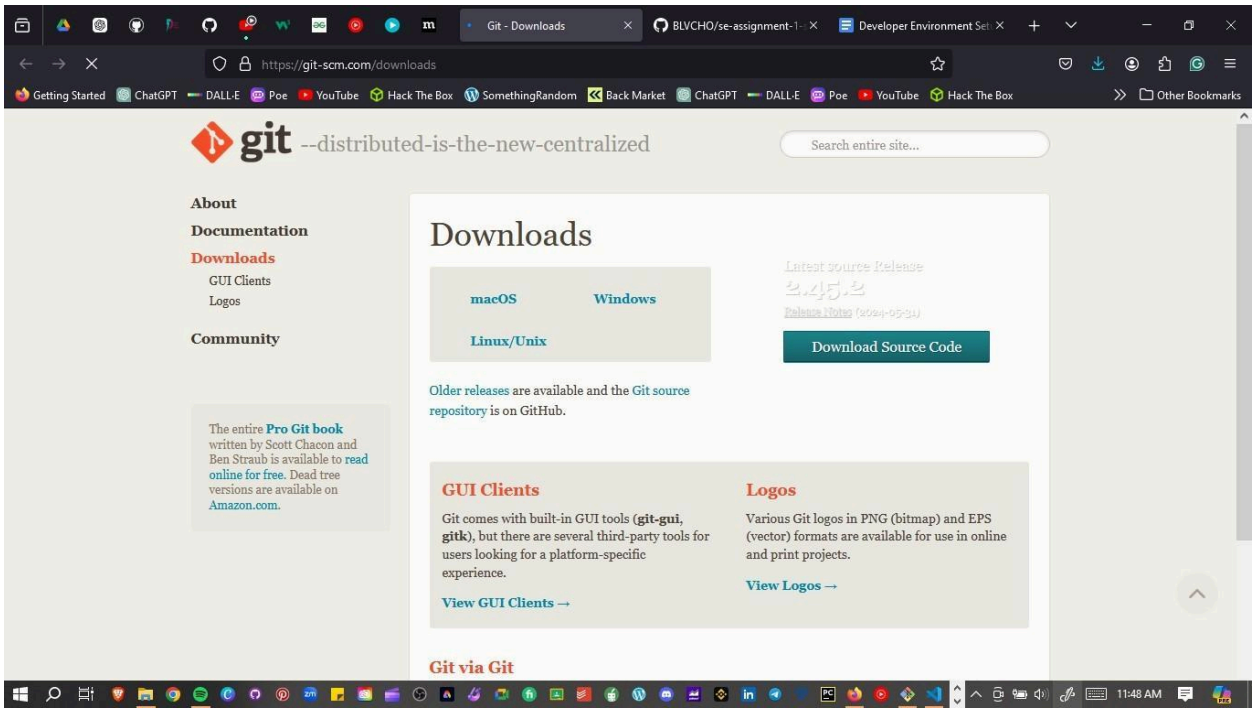
Prettier
Code formatter using prettier
Disable
Uninstall
DETAILS FEATURES CHANGELOG
Prettier Formatter for Visual Studio Code
Prettier is an opinionated code formatter. It enforces a consistent style by parsing your code and re-printing it with its own rules that take the maximum line length into account, wrapping code when necessary.
JavaScript · TypeScript · Flow · JSX · JSON
CSS · SCSS · Less
HTML · Vue · Angular HANDLEBARS · Ember · Glimmer
GraphQL · Markdown · YAML
Your favorite language?
Main passing downloads 226M installs 46M code style prettier follow prettier
Installation
Install through VS Code extensions. Search for Prettier - Code formatter
Visual Studio Code Market Place: Prettier - Code formatter
Can also be installed in VS Code: Launch VS Code Quick Open (Ctrl+P), paste the following
Categories
Formatters
More Info
Last updated 2024-06-03, 15:39:55
Identifier esbenp.prettier-vscode
11:46 AM

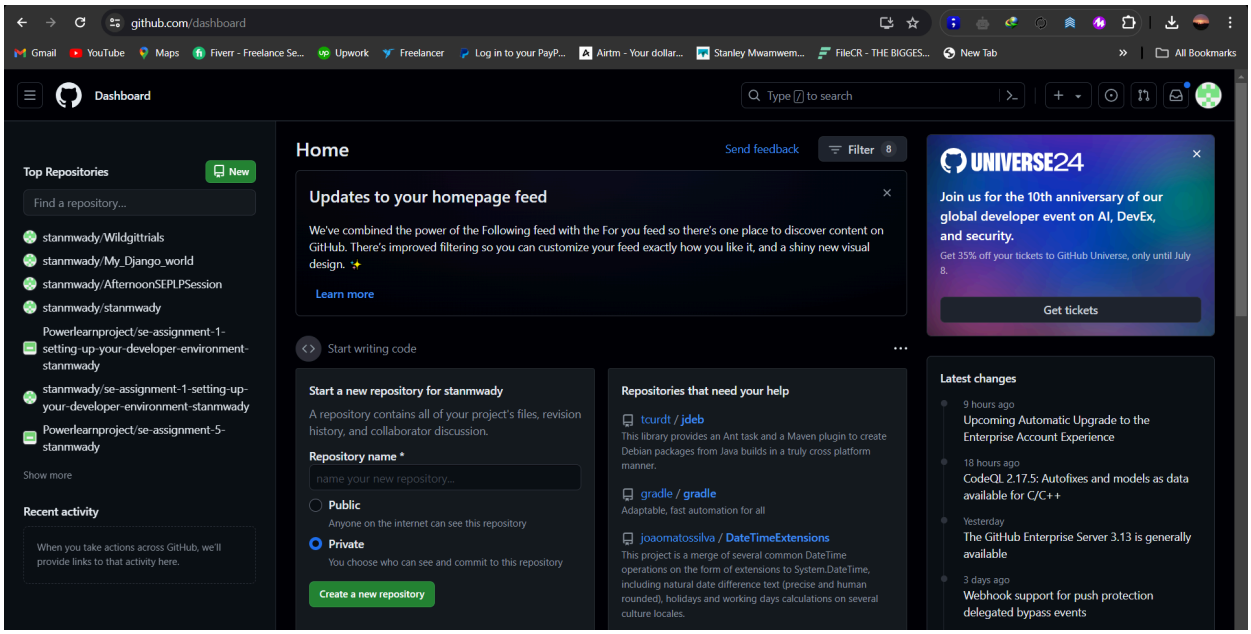
3. Version Control Setup

Steps for Installing Git, Creating a GitHub Account, Initializing a Repository, and Making the First Commit:

1. Install Git:
   - Download Git from the official site: [Git Download](https://git-scm.com/downloads).
   - Run the installer and follow the setup instructions, choosing your preferred options for PATH, line endings, and other settings.

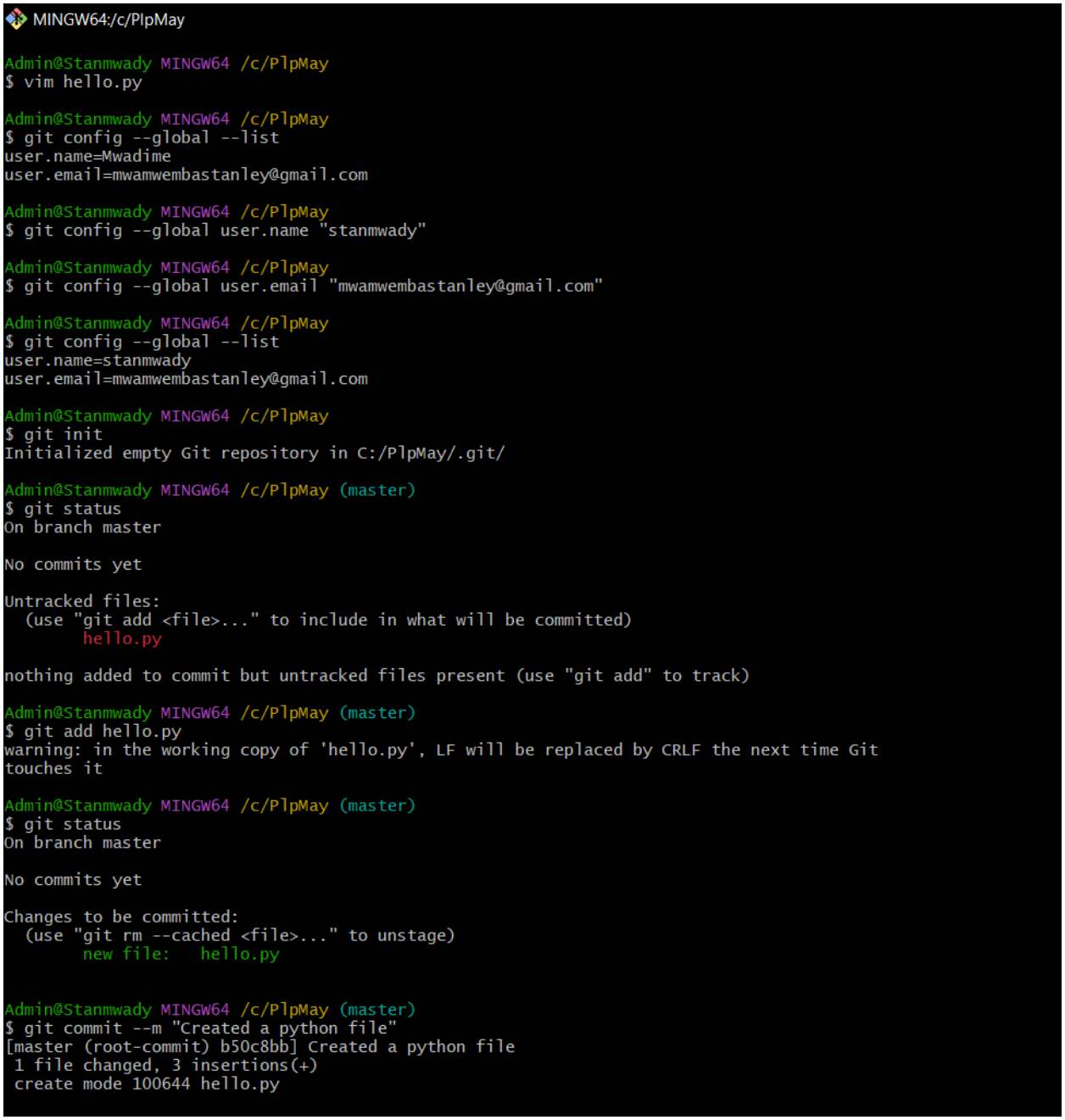


2. Create a GitHub Account:
   - Visit [GitHub](https://github.com) and sign up for a new account if you still need to get one.



3. Initialize a Git Repository:
   - Open Git Bash or the terminal in VS Code.
   - Navigate to your project directory or create a new one:
     ```bash
     mkdir my_project
     cd my_project
     ```
   - Initialize a Git repository:
     ```bash
     git init
     ```
   - Create a README file:
     ```bash
     echo "# My Project" >> README.md
     ```
   - Add the README file to the staging area:
     ```bash
     git add README.md
     ```
   - Commit the changes:
     ```bash
     ```

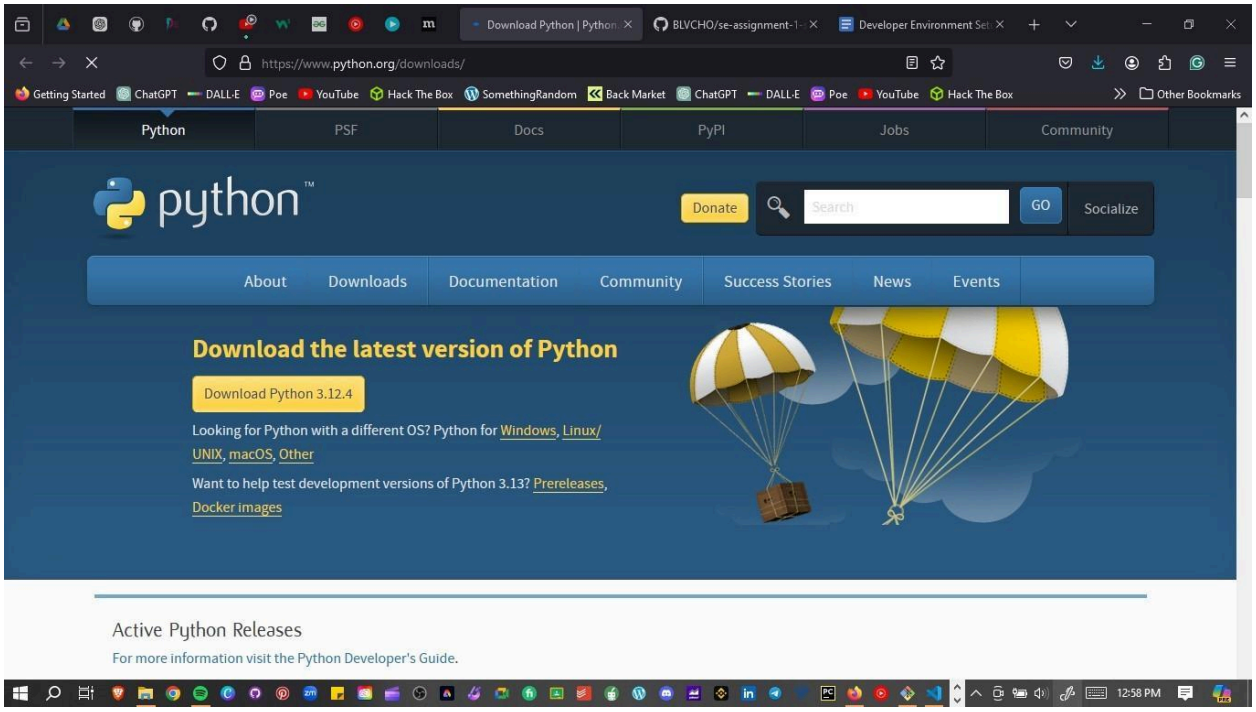
git commit -m "Initial commit"



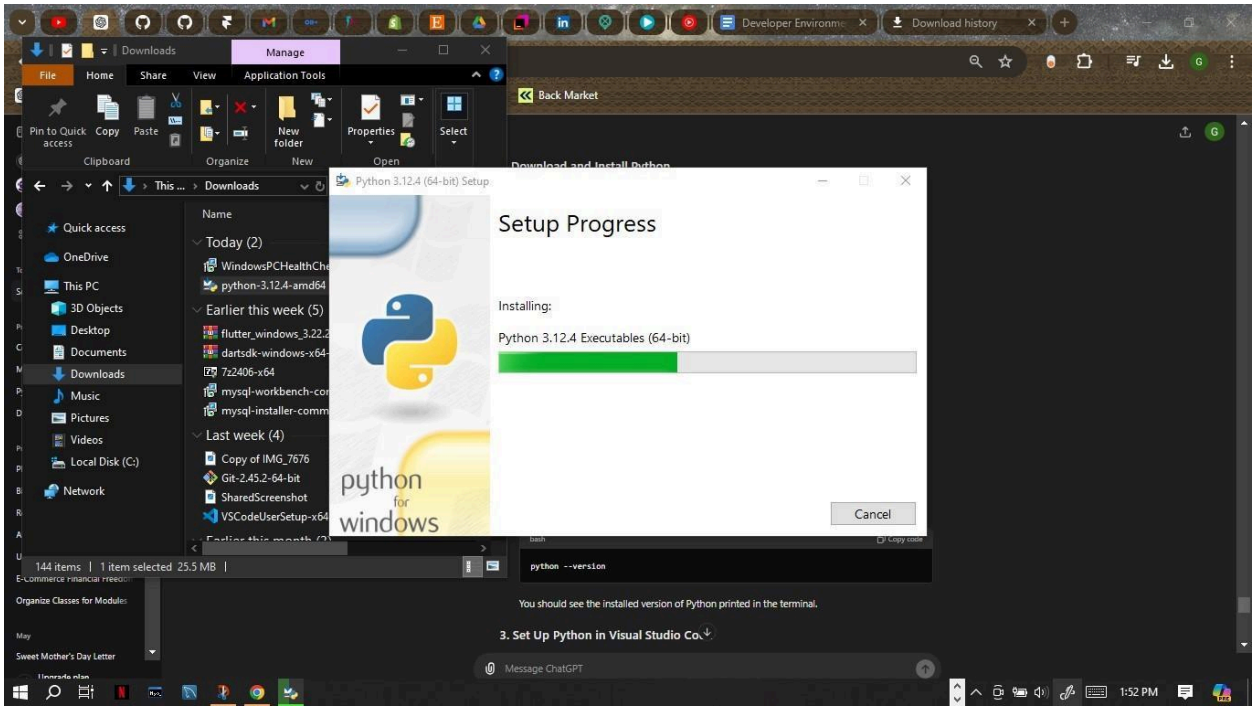
4. Programming Languages and Runtimes

Steps for Installing Python:

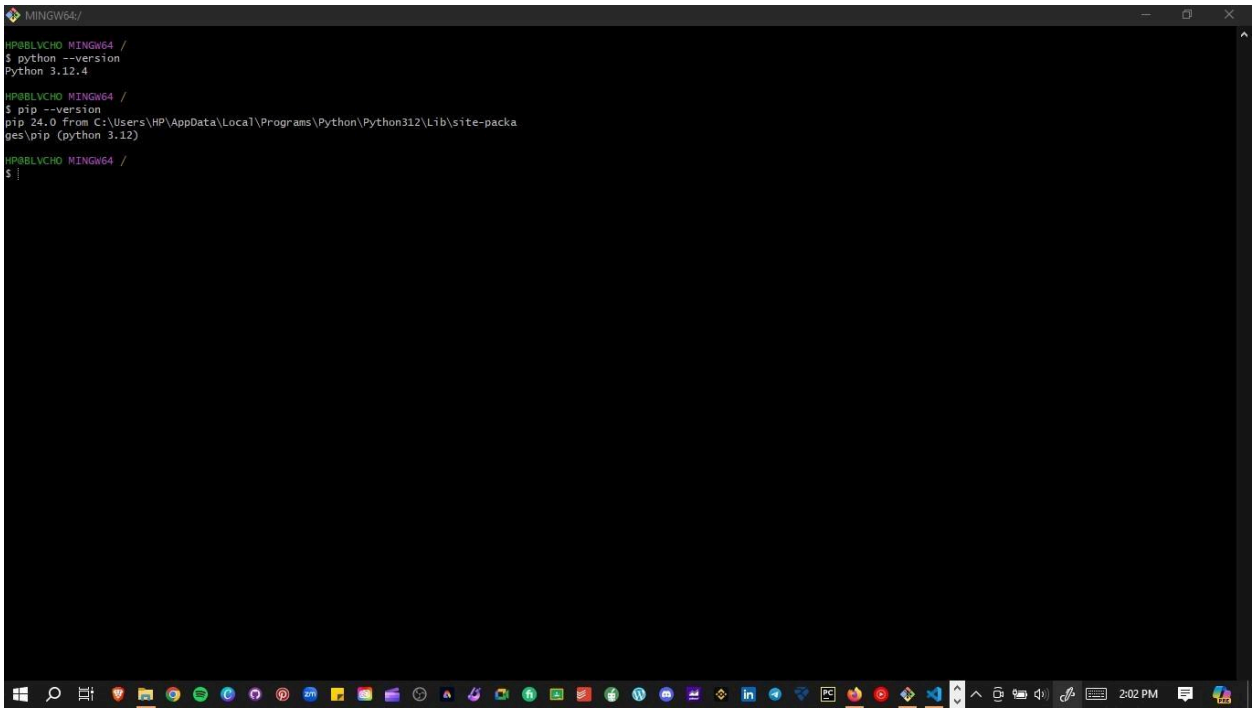
1. Download Python:
   - Visit the official Python website: [Python Download](https://www.python.org/downloads/).
   - Download the latest version of Python for Windows.



2. Installation Process:
   - Run the installer, ensure you check the option to add Python to PATH.
   - Follow the installation wizard.



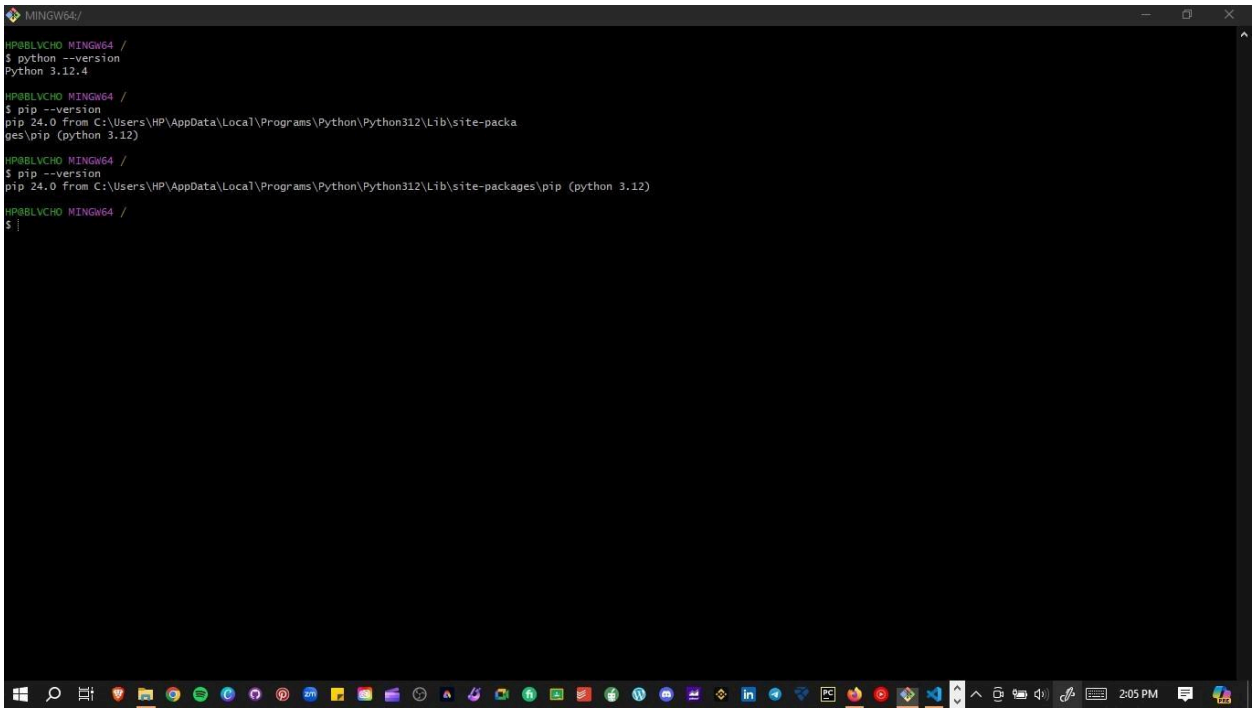
3. Verify Installation:
   - Open Command Prompt and type:
     ```bash
     python --version
     ```
   - Verify pip installation:
     ```bash
     pip --version
     ```



5. Package Managers

Verification of pip Installation:

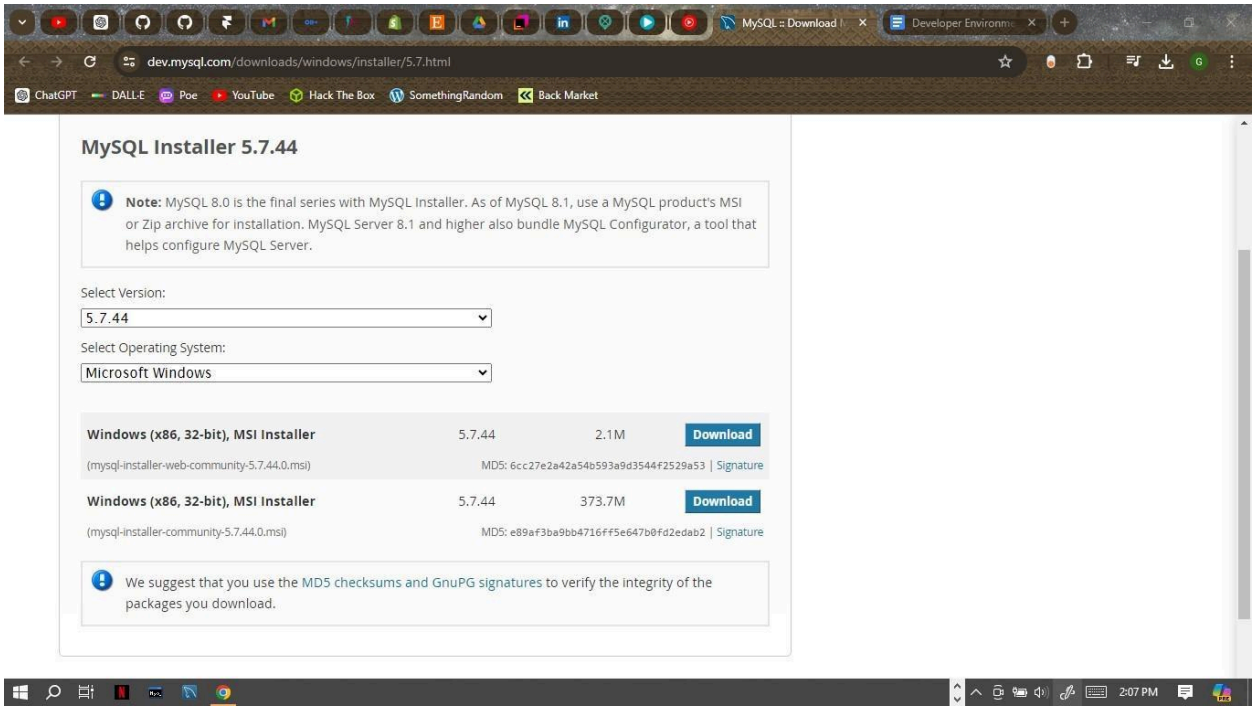
1. Verify pip:
   - Open Command Prompt and type:
     ```bash
     pip --version
     ```



6. Database Configuration

Steps for Installing MySQL:

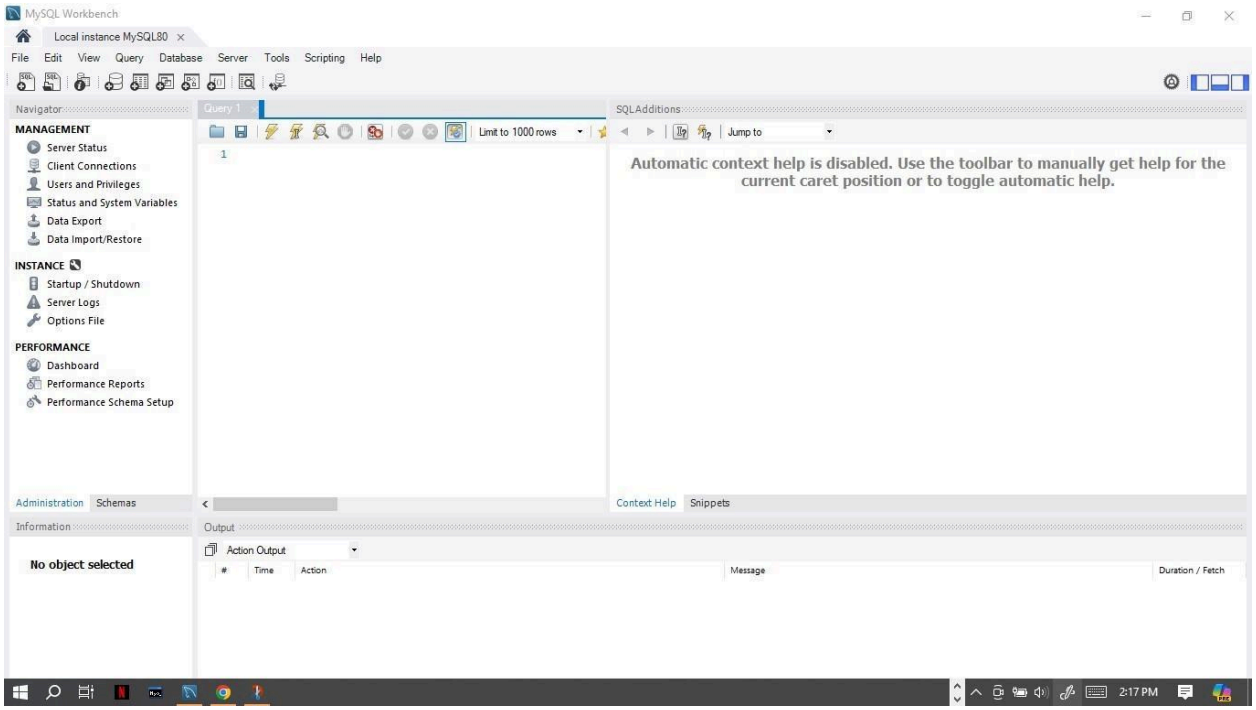
1. Download MySQL:
   - Visit the MySQL download page: [MySQL Download](https://dev.mysql.com/downloads/windows/installer/5.7.html).
   - Download the MySQL Installer for Windows.



2. Installation Process:
   - Run the MySQL Installer and follow the setup wizard.
   - Choose the setup type (e.g., Developer Default).
   - Configure MySQL Server settings, including the root password.

   NB: MYSQL IS ALREADY CONFIGURED WITH PASSWORD

3. Verify Installation:
   - Open MySQL Workbench or MySQL Shell and connect to your MySQL server.



7. Development Environments and Virtualization (Optional)

Optional Steps for Installing and Setting Up Docker:

1. Download Docker:
   - Visit the Docker Desktop download page: [Docker Download](https://www.docker.com/products/docker-desktop).
   - Download and run the Docker Desktop installer.

   ![Docker Download](images/docker-download.png)

2. Installation Process:
   - Follow the installation instructions.
   - Start Docker Desktop and follow the setup wizard.

   NB: NOT OPTED FOR

3. Verify Installation:

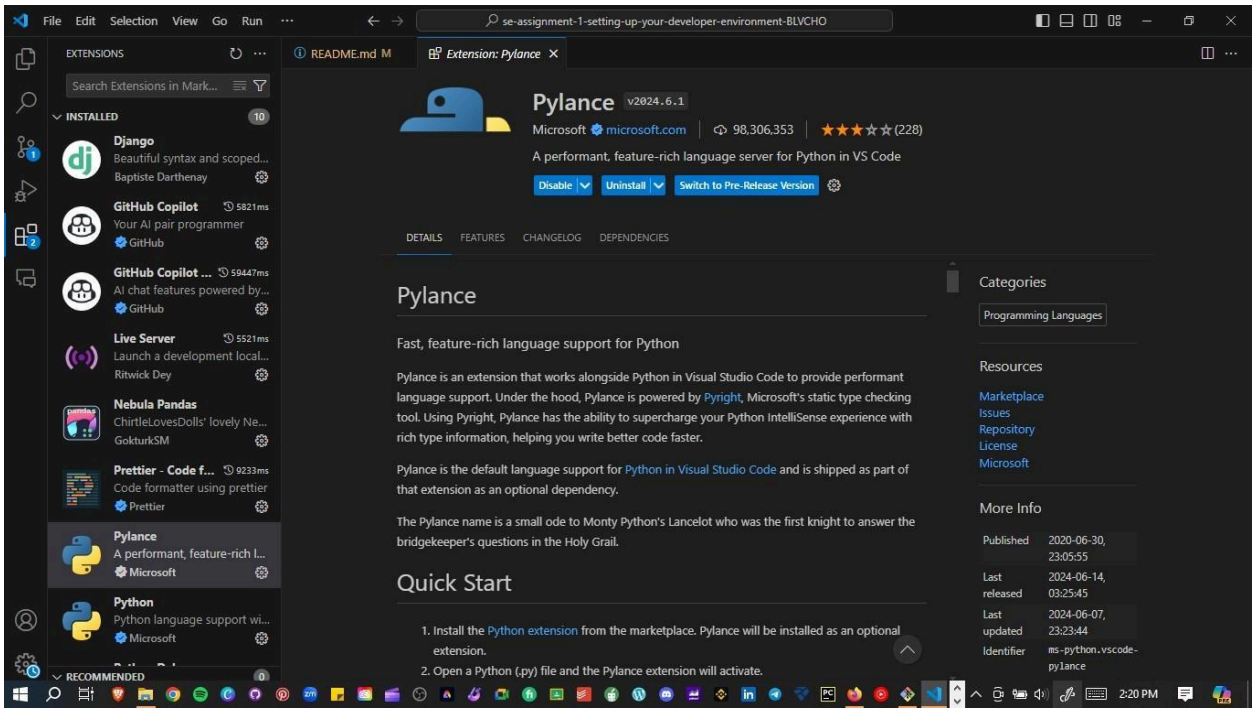
- Open Command Prompt or PowerShell and type:
    ```bash
    docker --version
    ```

NB:NOT OPTED FOR

8. Extensions and Plugins

List of Installed Extensions for VS Code:

1. Install Extensions:
   - Open VS Code.
   - Go to the Extensions view (`Ctrl+Shift+X`).
   - Search for and install the following extensions:
        - Python
        - GitLens — Git supercharged
        - Docker
        - Prettier - Code formatter
        - ESLint
        - MySQL



9. Challenges and Solutions

1. Challenge: Installing MySQL and Configuring the Root Password
   - Solution: Followed a step-by-step tutorial and used the official MySQL documentation for troubleshooting.

2. Challenge: Initializing a Git Repository and Making the First Commit
   - Solution: Used Git documentation and GitHub guides to understand the commands and workflow.

Deliverables

1. Setup Documentation:
   - This document with detailed steps and screenshots.

2. GitHub Repository: https://github.com/stanmwady/Wildgittrials.git
3. Reflection:

   ✔ The software engineering has been a success so far despite some challenges here and there. Below is a list of challenges I have generally faced

   I. Balancing between classes and work time challenge. I was initially prepared to attend one session per day that would best fit my schedule. My challenge comes in when I have to join all three classes in a day.

   II. Timetable confusion. From time to time it has been challenging to access meeting links due to some mix-up with the timetable schedule. Kindly fix that.