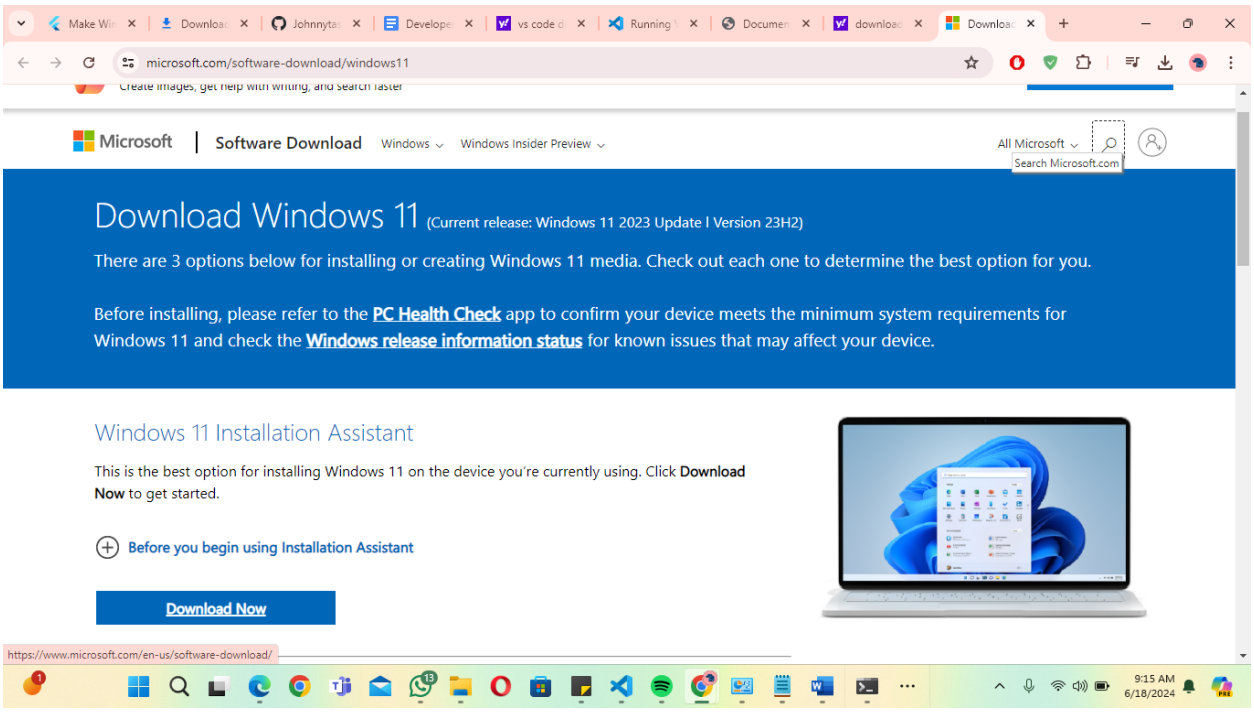
Developer Environment Setup Documentation

1. Operating System Installation

Steps and Screenshots of Windows 11 Installation:

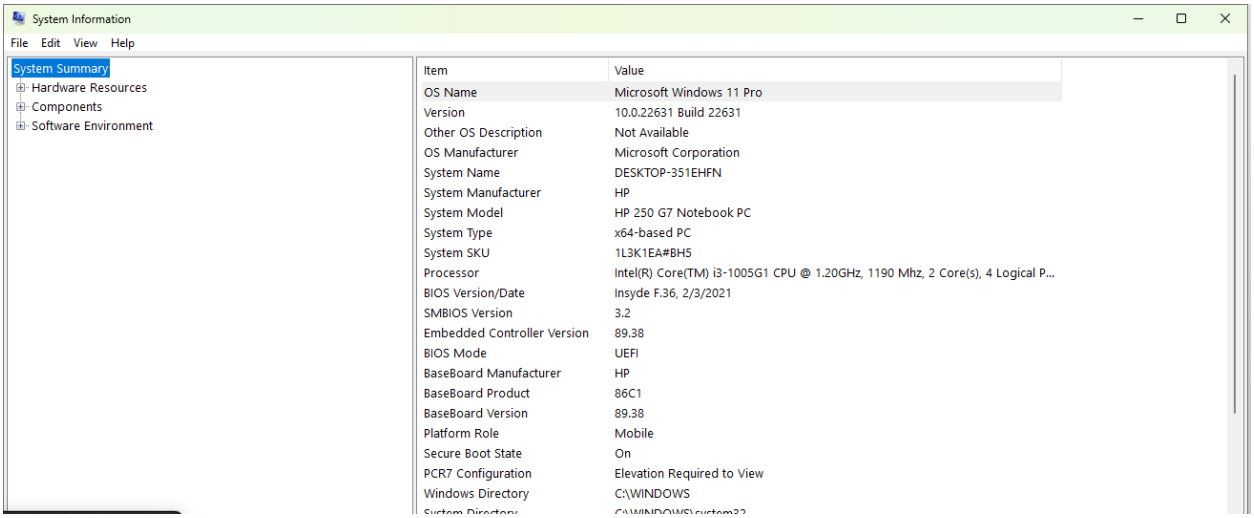
1. Download Windows 11:
   - Visit the official Microsoft website[https://www.microsoft.com/software-download/windows11]
   - Download the Windows 11 Installation Assistant.
   - Run the downloaded file and follow the on-screen instructions to upgrade or install Windows 11.



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.

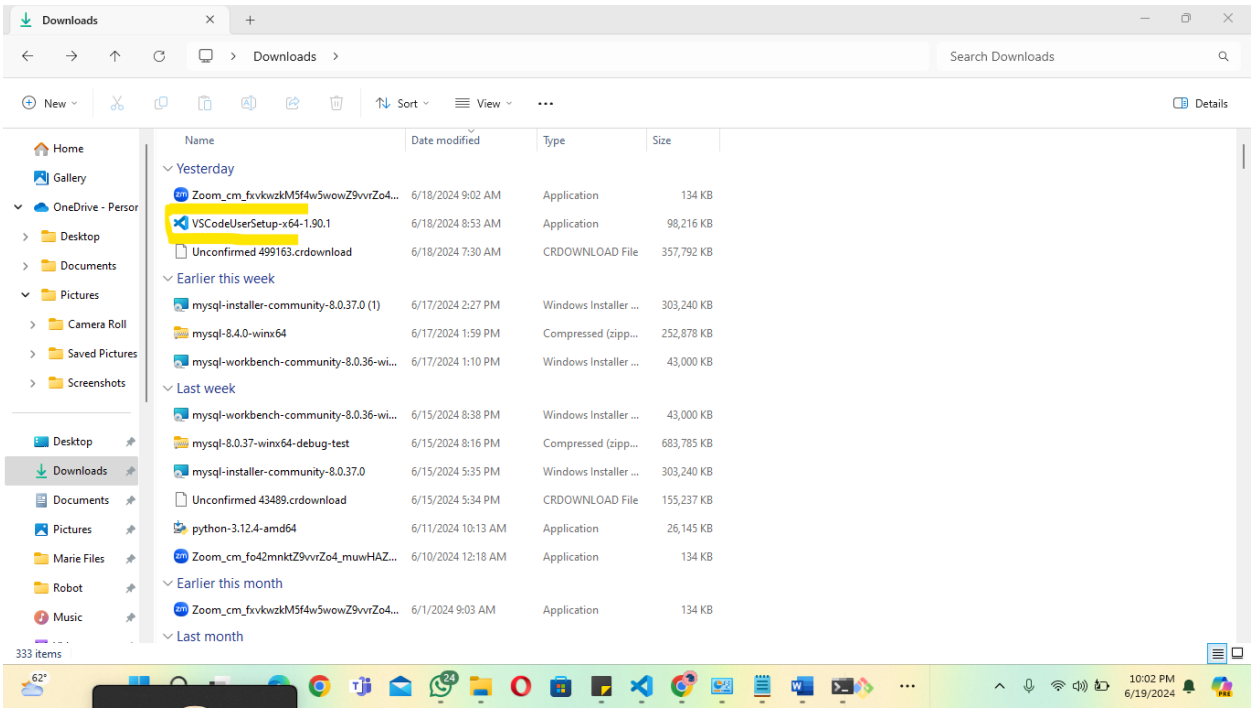


2. IDE Installation

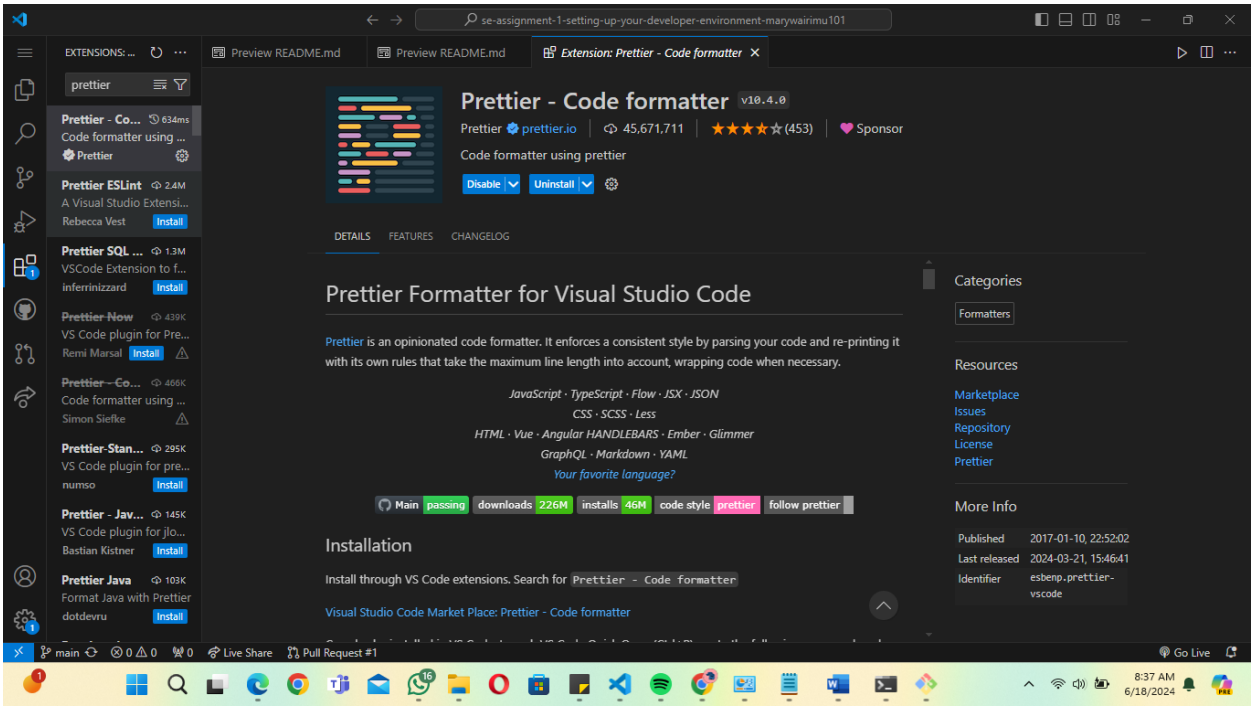
Steps and Screenshots of Visual Studio Code Installation:

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.



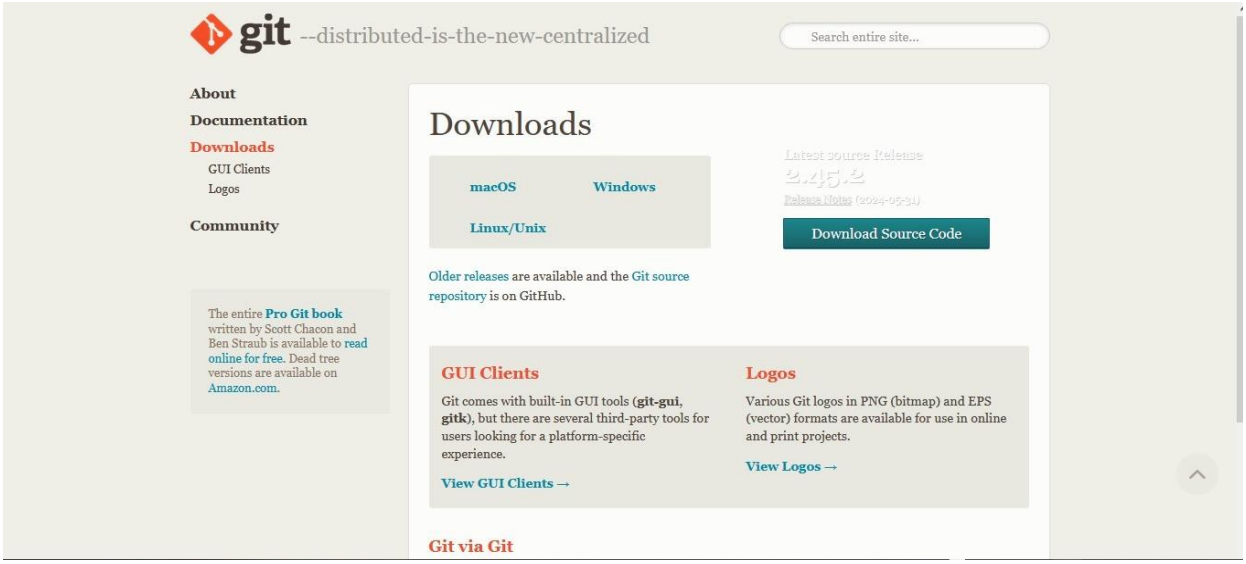
3. First Launch and Setup:
   - Launch VS Code and install recommended extensions like Python, GitLens, and Docker.



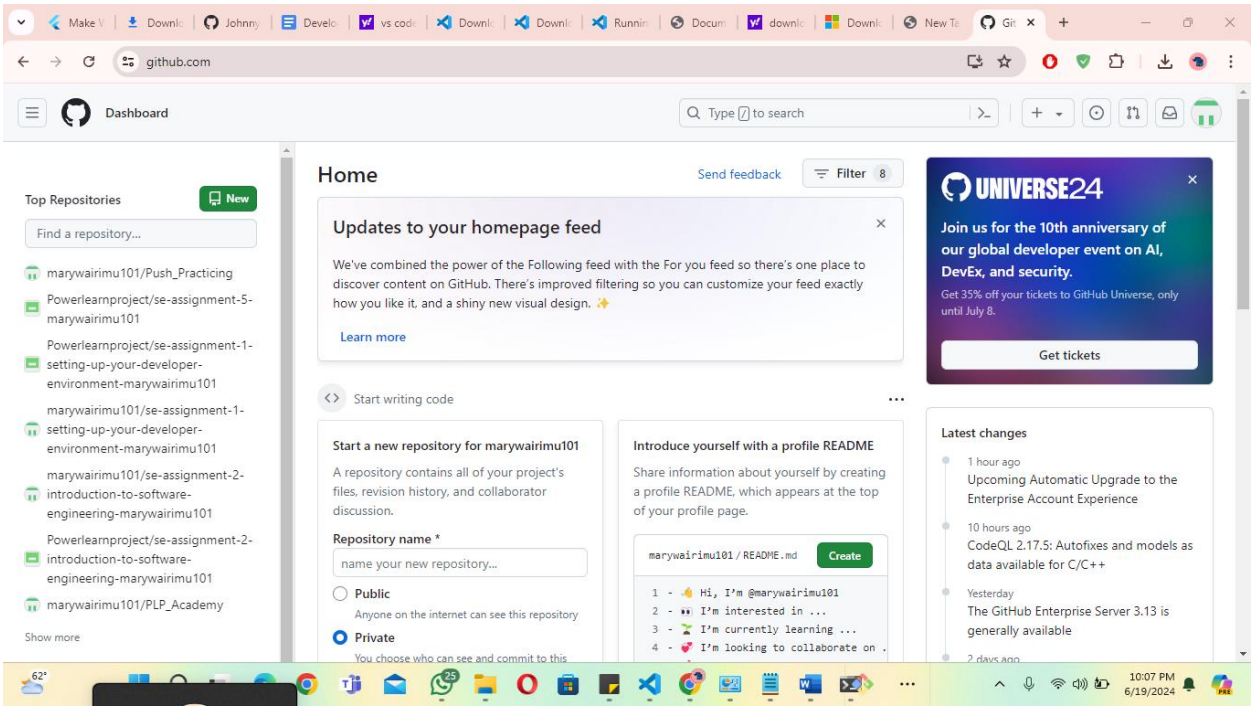
3. Version Control Setup

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

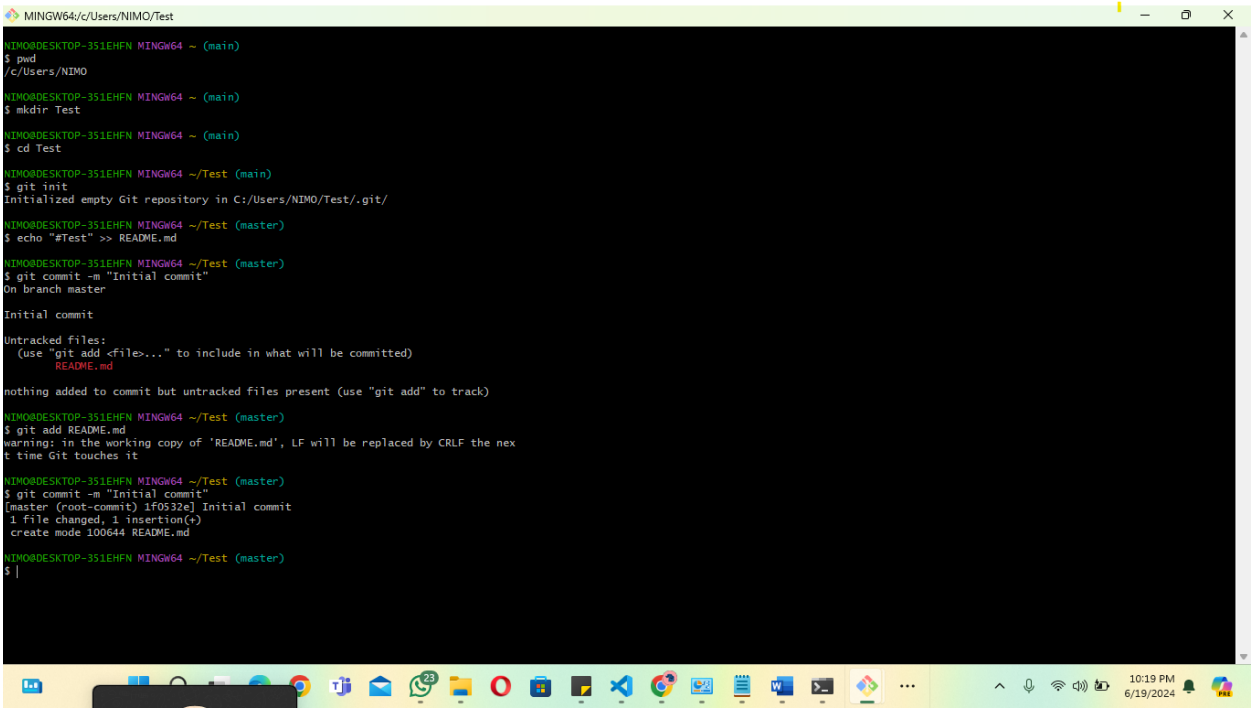
1. Install Git:
   - Download Git from the official site: [Git Download](https://git-scm.com/downloads).
   - Run the installer and follow the setup instructions, choosing your preferred options for PATH, line endings, and other settings.

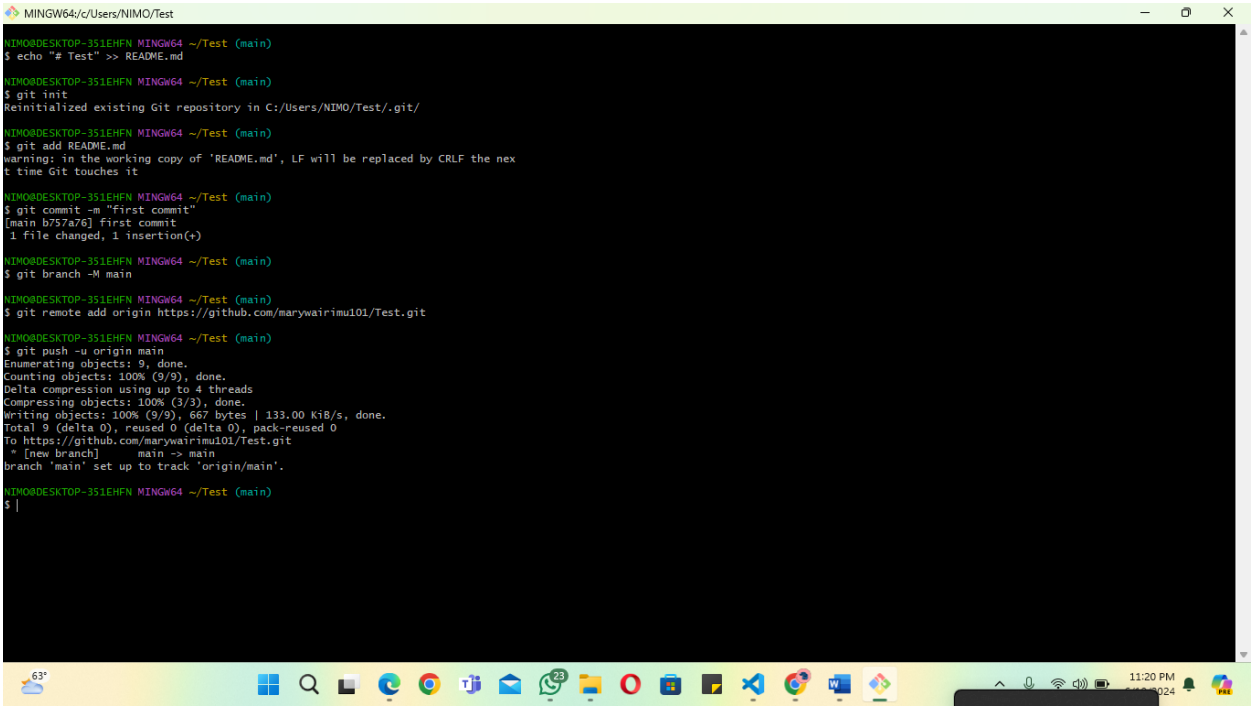


2. Create a GitHub Account:
   - Visit [GitHub](https://github.com) and sign up for a new account if you still need to get one.



3. Initialize a Git Repository:
   - Open Git Bash or the terminal in VS Code.
   - Navigate to your project directory or create a new one:

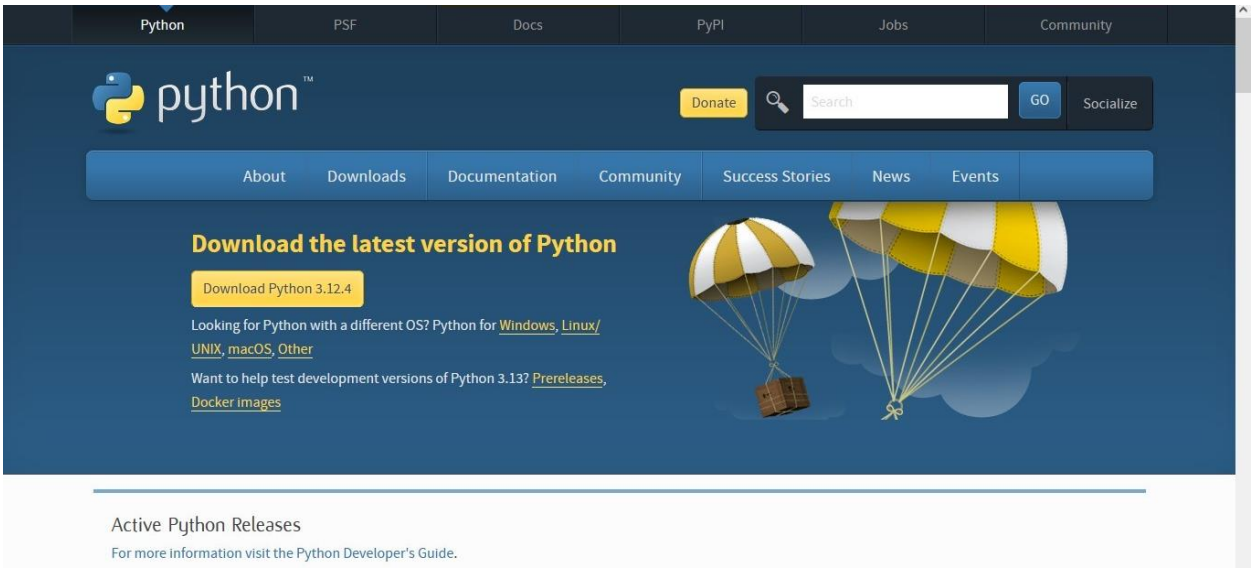




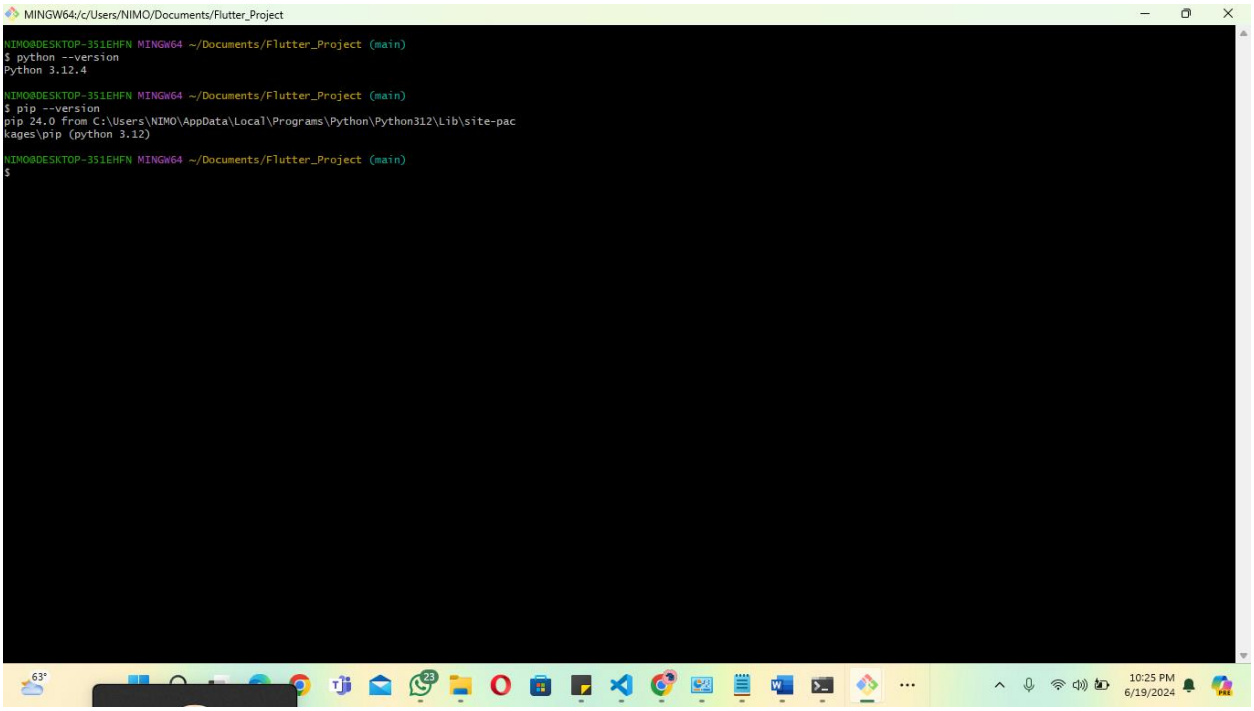
4. Programming Languages and Runtimes

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.



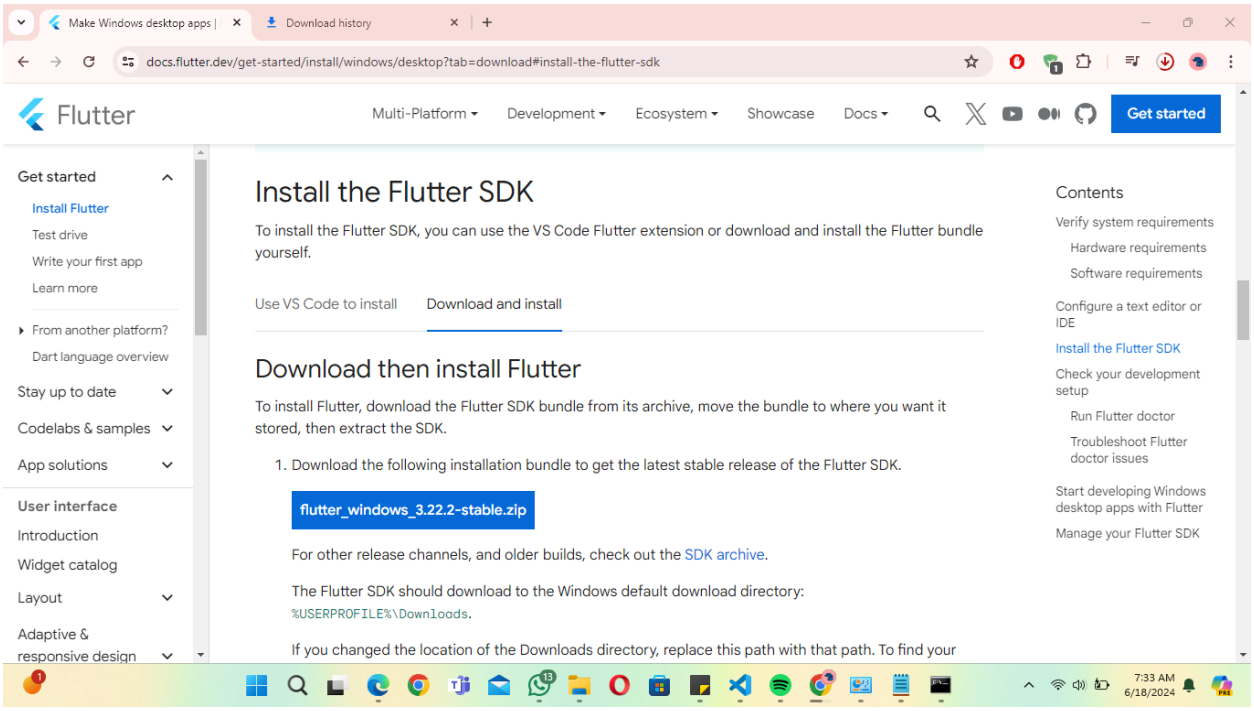
2. Verify Installation:
   - Open Command Prompt and type:
     ```bash
     python --version
     ```
   - Verify pip installation:
     ```bash
     pip –version
     ```



Flutter Installation

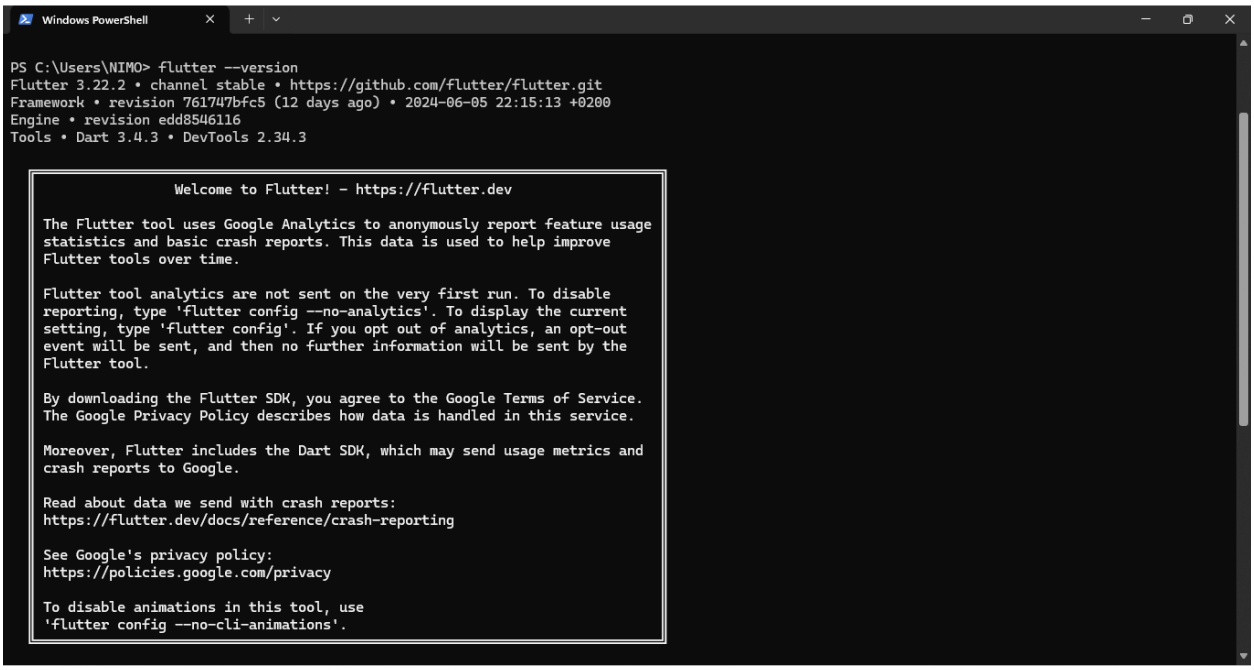
1. Download Flutter SDK:

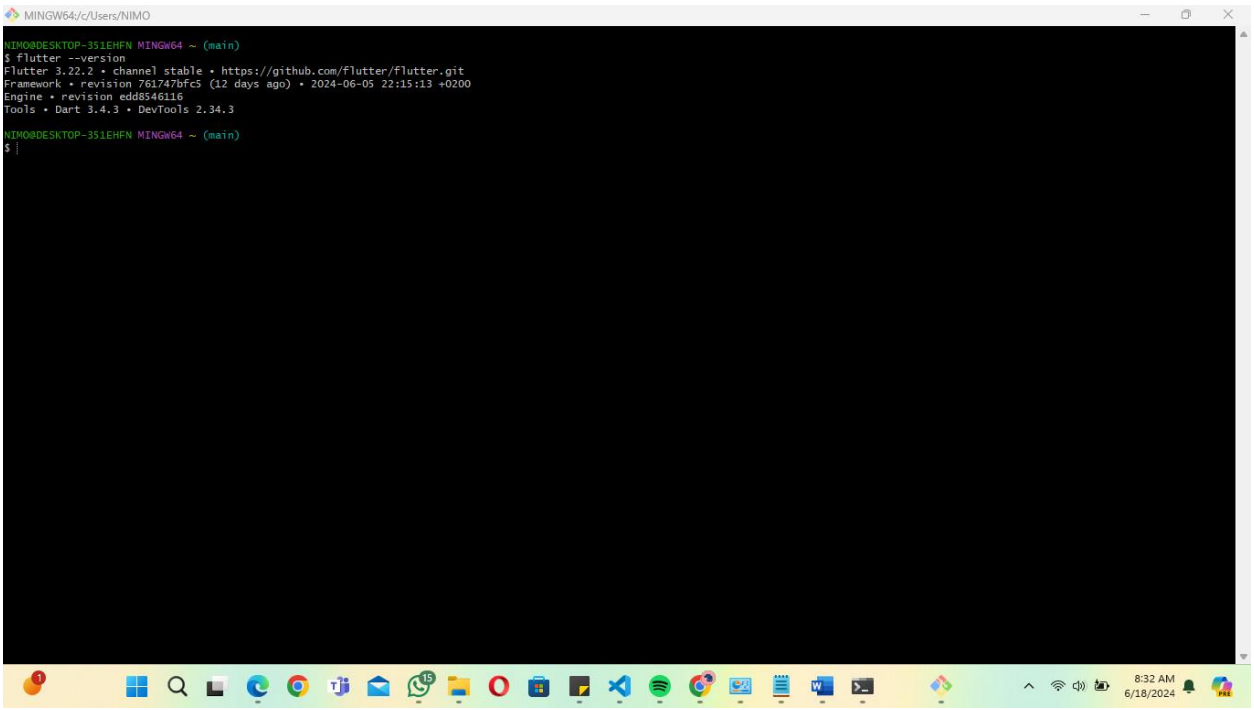
- Go to https://flutter.dev/docs/get-started/install/windows
- Download the latest version of Flutter for Windows.
- Select the installer that corresponds to the version of Flutter you want to install.



2. Verify Flutter Installation

- Open Command Prompt or Git Bash.
- Run flutter –version
- Verify the installation by checking the version number.

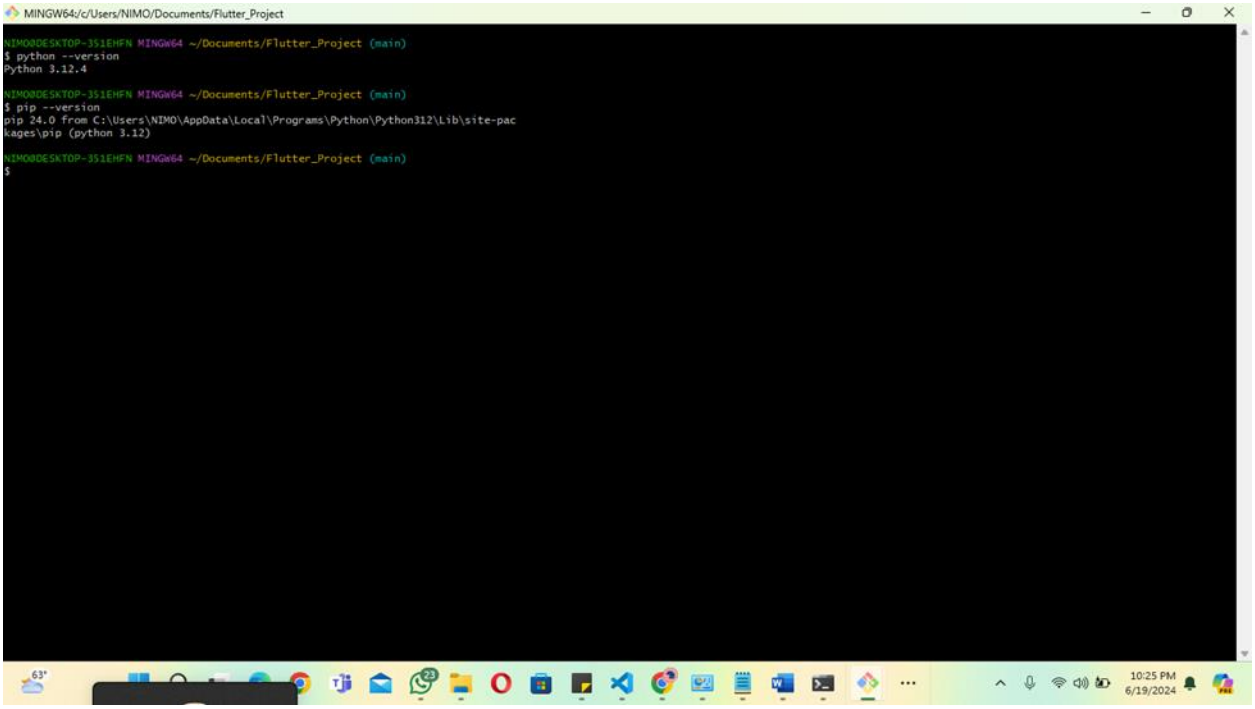

Windows PowerShell
PS C:\Users\NIMO> flutter --version
Flutter 3.22.2 • channel stable • https://github.com/flutter/flutter.git
Framework • revision 761747bfc5 (12 days ago) • 2024-06-05 22:15:13 +0200
Engine • revision edd8546116
Tools • Dart 3.4.3 • DevTools 2.34.3
Welcome to Flutter! - https://flutter.dev
The Flutter tool uses Google Analytics to anonymously report feature usage statistics and basic crash reports. This data is used to help improve Flutter tools over time.
Flutter tool analytics are not sent on the very first run. To disable reporting, type 'flutter config --no-analytics'. To display the current setting, type 'flutter config'. If you opt out of analytics, an opt-out event will be sent, and then no further information will be sent by the Flutter tool.
By downloading the Flutter SDK, you agree to the Google Terms of Service. The Google Privacy Policy describes how data is handled in this service.
Moreover, Flutter includes the Dart SDK, which may send usage metrics and crash reports to Google.
Read about data we send with crash reports:
https://flutter.dev/docs/reference/crash-reporting
See Google's privacy policy:
https://policies.google.com/privacy
To disable animations in this tool, use
'flutter config --no-cli-animations'.


MINGW64:/c/Users/NIMO
NIMO@DESKTOP-351EHFN MINGW64 ~ (main)
$ flutter --version
Flutter 3.22.2 • channel stable • https://github.com/flutter/flutter.git
Framework • revision 761747bfc5 (12 days ago) • 2024-06-05 22:15:13 +0200
Engine • revision edd8546116
Tools • Dart 3.4.3 • DevTools 2.34.3
NIMO@DESKTOP-351EHFN MINGW64 ~ (main)
$
8:32 AM
6/18/2024

5. Package Managers

Verification of pip Installation:

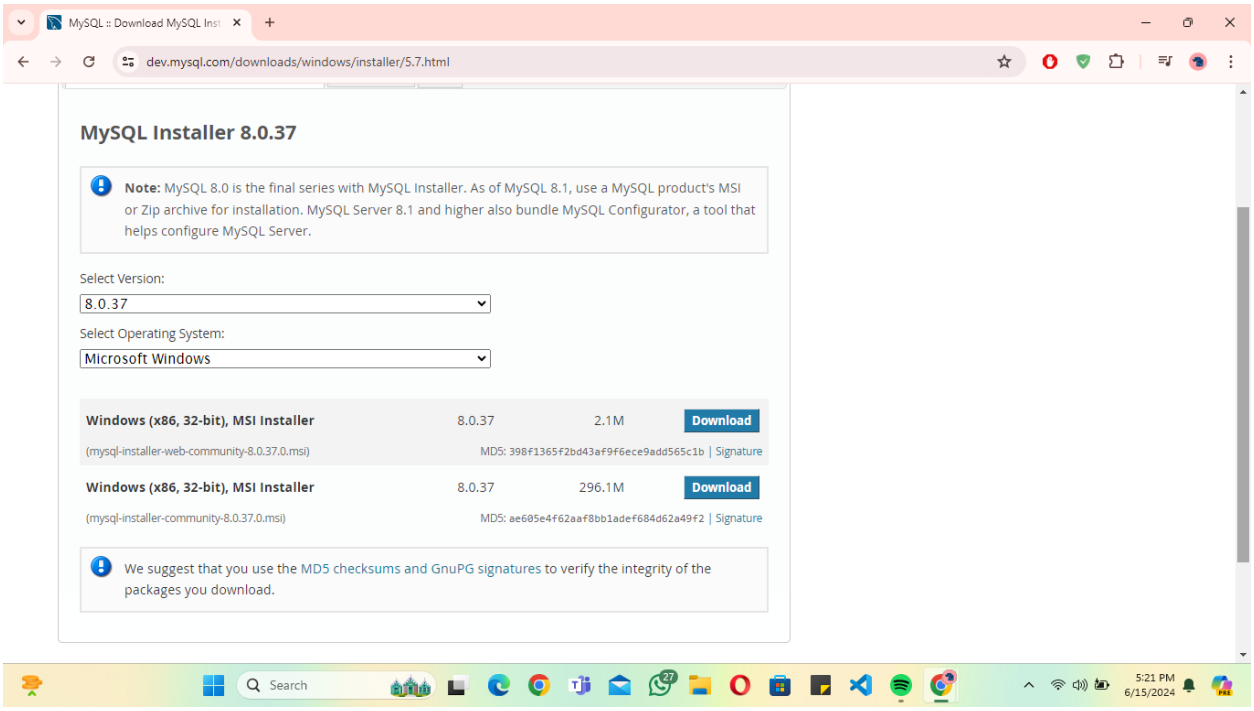
1. Verify pip:
   - Open Command Prompt and type:
     ```bash
     pip --version
     ```



6. Database Configuration

Steps for Installing MySQL:

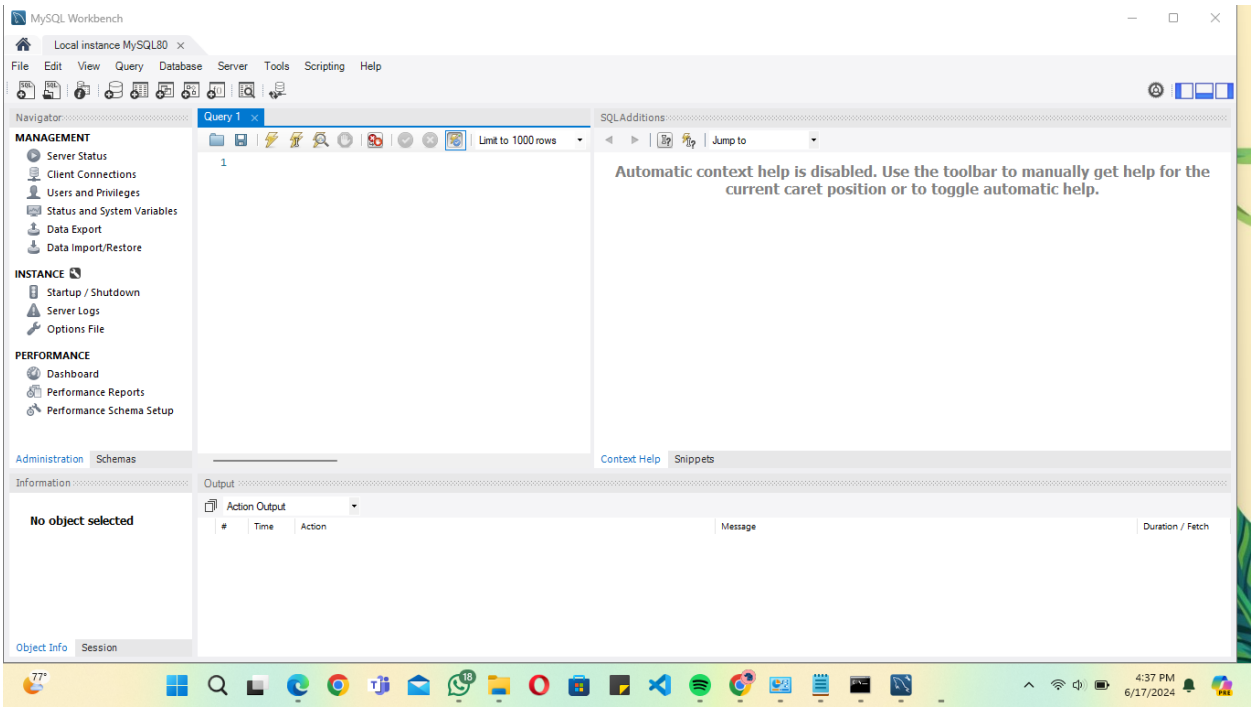
1. Download MySQL:
   - Visit the MySQL download page: [MySQL Download](
(https://dev.mysql.com/downloads/windows/installer/5.7.html)
   - Download the MySQL Installer for Windows.



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: My account is already configured with a 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)

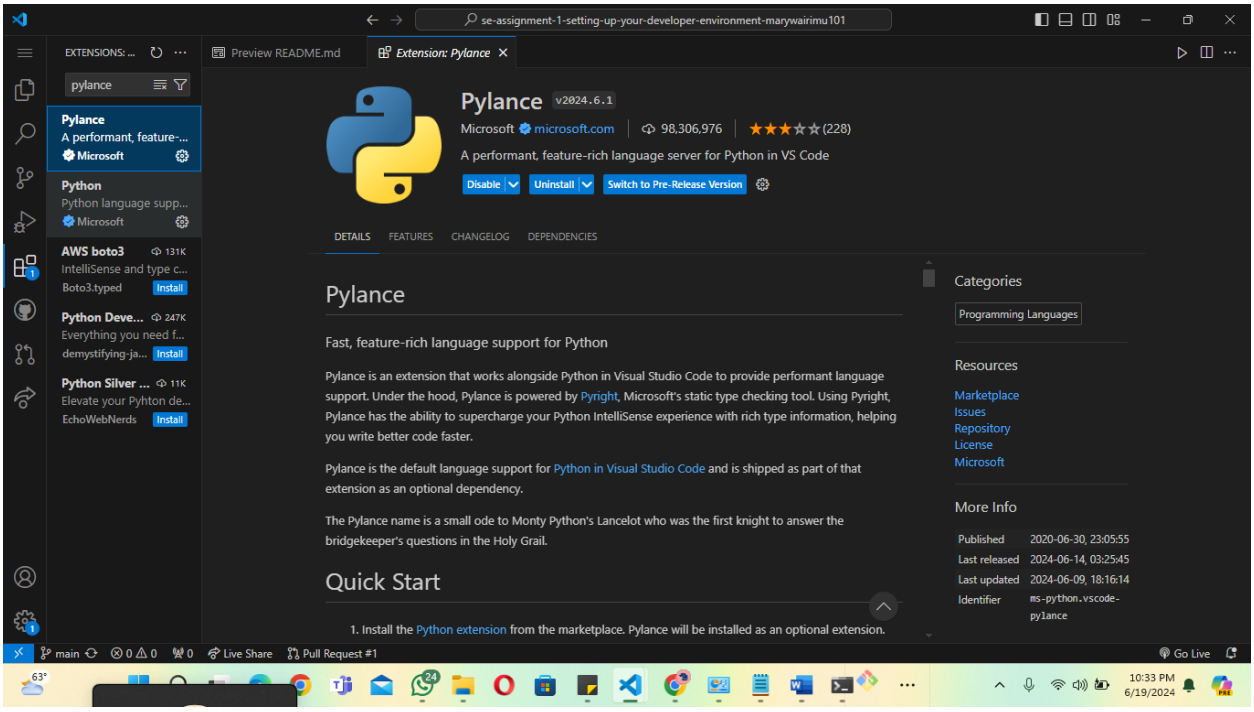
2. Installation Process:
   - Follow the installation instructions.
   - Start Docker Desktop and follow the setup wizard.

   NB:NOT OPTED FOR

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. <u>Workbench was not part of the MySQL file after installation</u>
   Solution: I uninstalled the MySQL file and watched a few tutorials on YouTube and consulted the official MySQL documentation and I was able to acquire it

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