Week 2 Software Engineering Assigment: Environmental Setup

Install Windows 11

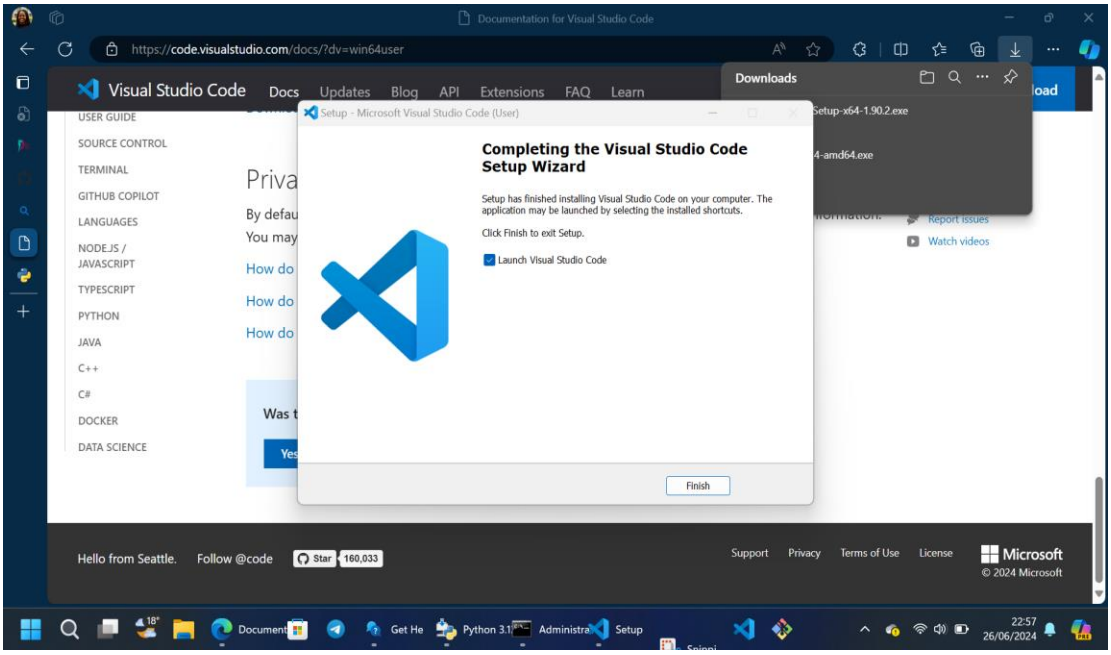
1. **Backup Your Data**:
    - You can use an external hard drive or cloud storage for this.
2. **Create a Windows 11 Installation Media**:
    - Download the Windows 11 Installation Assistant or use the Media Creation Tool to create a bootable USB drive or DVD.
3. **Install Windows 11**:
    - **Using Installation Assistant**:
        i. Run the Windows 11 Installation Assistant.
        ii. Follow the on-screen instructions to upgrade your current Windows version to Windows 11.
    - **Using Bootable Media**:
        iii. Insert the bootable USB drive or DVD into your PC.
        iv. Restart your PC and boot from the USB drive/DVD. You may need to change the boot order in your BIOS/UEFI settings to do this.
        v. Follow the on-screen instructions to install Windows 11.
        vi. Choose your language and other preferences, then select *Next*.
        vii. Select *Install Now*.
        viii. Enter your product key if prompted, or select *I don't have a product key* if you're doing a clean install and will enter it later.
        ix. Choose the installation type: *Upgrade* or *Custom*. Select *Custom* if you want to do a clean installation.
        x. Select the partition where you want to install Windows 11. You can delete existing partitions if you're doing a clean install. Note that this will erase all data on the partitions.
        xi. Follow the remaining prompts to complete the installation.
4. **Set Up Windows 11**:
    - After the installation process, you'll go through a series of setup screens to configure your settings, such as language, keyboard layout, and network preferences.
    - You'll also need to sign in with a Microsoft account or create a local account.
5. **Install Drivers and Updates**:

- Once Windows 11 is installed, check for the latest drivers for your hardware and any available updates via Windows Update.

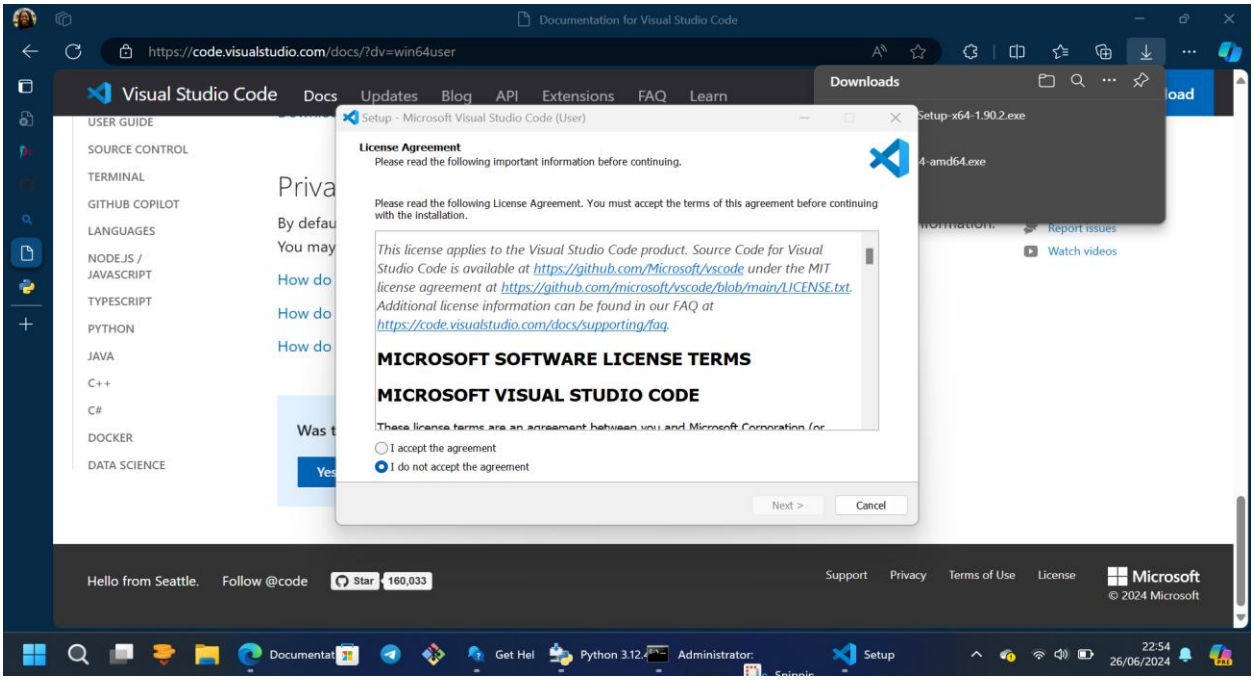
6. **Restore Your Data**:
    - After setting up your system, restore your data from the backup you created earlier.

Install Visual Studio Code

1. **Download the Installer**:
2. Go to the Visual Studio Code download page.
3. Click on the download button for Windows. The installer will be downloaded to your computer.

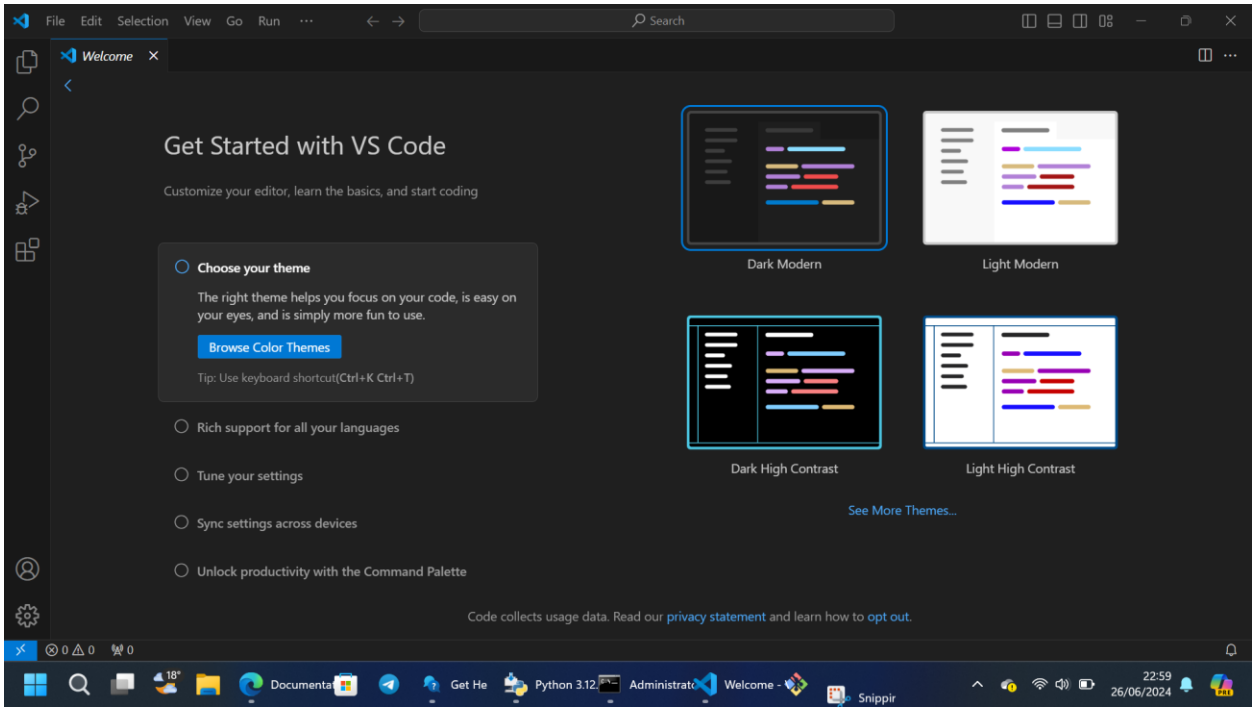


4. **Run the Installer**:
   Once the download is complete, open the downloaded `.exe` file.



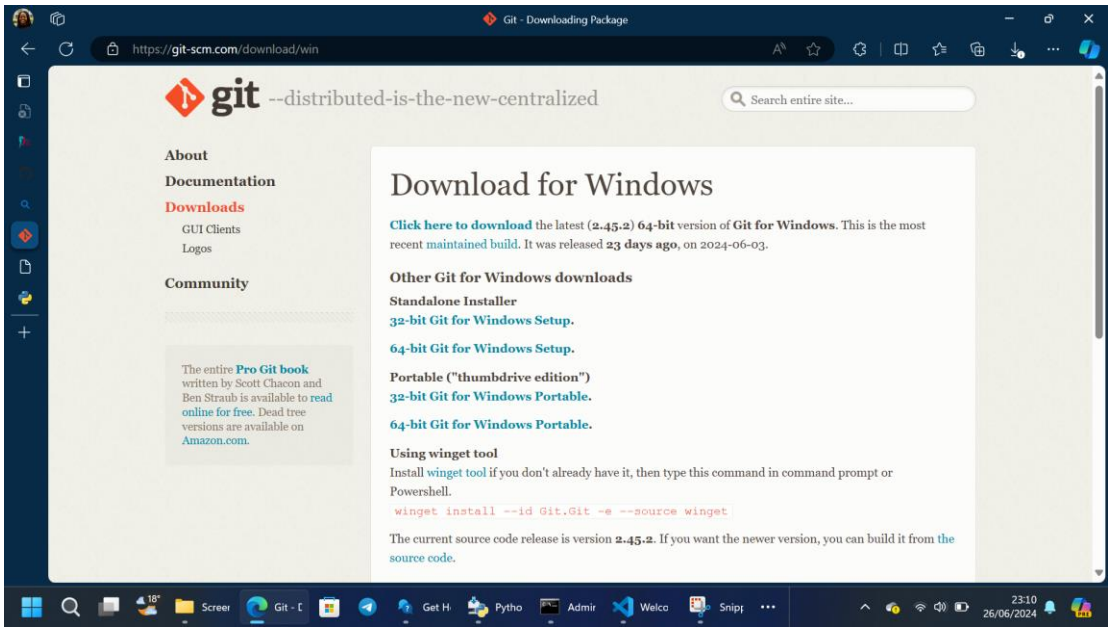
5. The installation setup wizard will open. Follow the prompts to install VS Code:
    5.1. Accept the license agreement.
    5.2. Choose the installation location (default is usually fine).
    5.3. Select additional tasks such as creating a desktop icon, adding to the PATH, and registering the code as an editor for supported file types.
6. **Complete the Installation**:
    6.1. Click the "Install" button to begin the installation.

6.2. Once the installation is complete, you can launch Visual Studio Code from the setup wizard by clicking "Finish" or by finding it in your Start menu

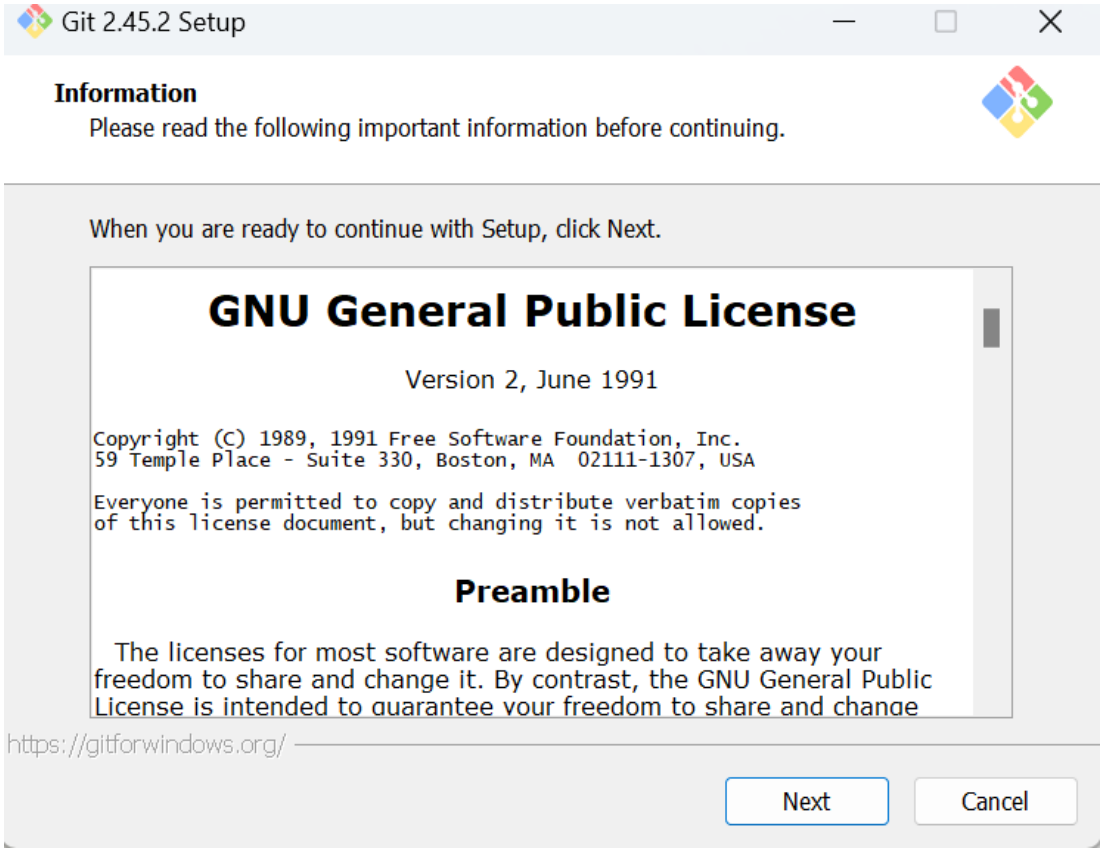


Install Git

1. **Download Git Installer**:
   1.1. Visit the official Git website and click on "Download" for Windows. The installer will download it to your computer.

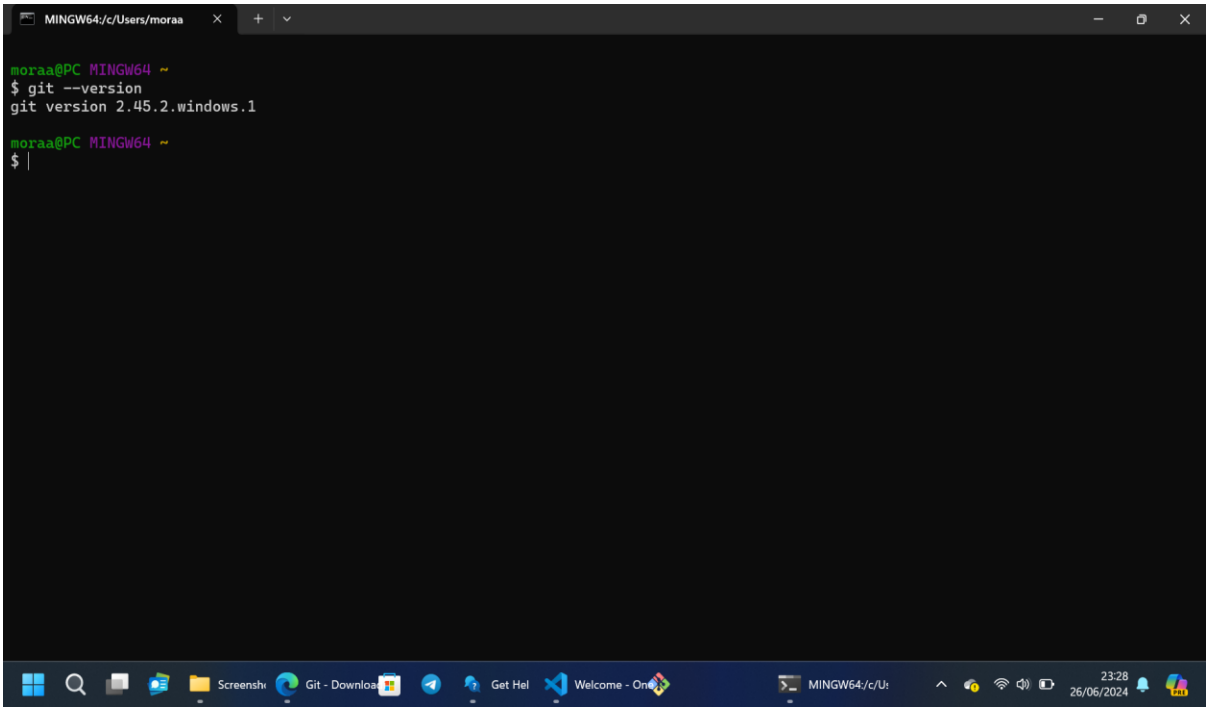


2. **Run the Installer**:
    2.1. Once the download is complete, open the downloaded `.exe` file.
    2.2. Follow the prompts in the setup wizard. You can generally accept the default options unless you have specific needs.



    2.3. Key options include:
        2.3.1. Selecting the components (it's usually best to leave the defaults).
        2.3.2. Choosing the default editor (you can select one if you prefer, otherwise it defaults to Vim).
        2.3.3. Adjusting your PATH environment (it's recommended to use Git from the command line and also from third-party software).
3. **Complete the Installation**:
    3.1. Click "Install" and wait for the installation to complete.
    3.2. Once installed, you can check if Git was installed correctly by opening Command Prompt and typing:

```
git –version
```



3.3. You should see the version number of Git if it's installed correctly.

Creating a Github Account

1. Visit GitHub

1.1 Go to https://github.com

2. Sign Up

2.1 On the homepage, click on the **"Sign up"** button in the upper-right corner.

3. Enter Your Information

3.1 **Username**: Choose a unique username.

Email Address: Provide your email address.

Password: Create a strong password.

3.2 Click on **"Create account"**.

4**. Verify Your Account**

4.1 Complete a puzzle or CAPTCHA to verify that you're not a robot.

4.2 Afterward, GitHub will send a verification email to the email address you provided. Check your inbox and click on the link in the email to verify your account.

5. Choose a Plan

5.1 Choose the **Free** plan.

6. Personalize Your Account

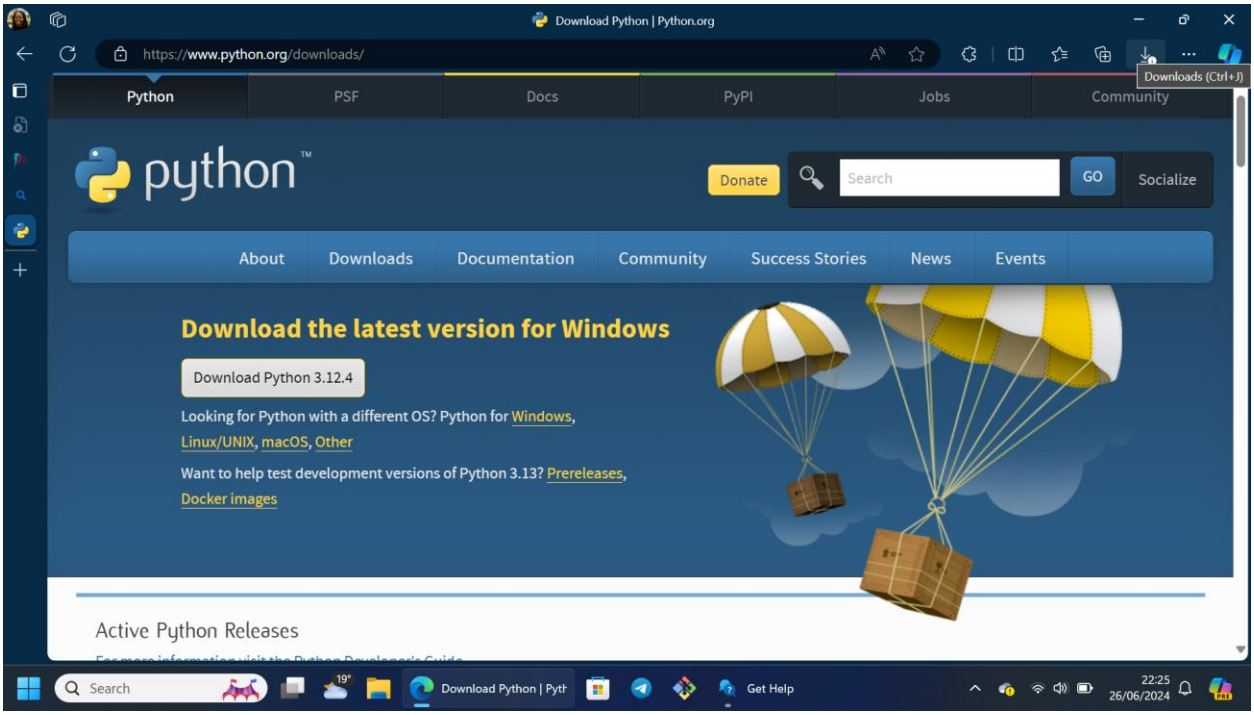
6.1 Fill in your experience level and interests. You can skip this if you want.

7. Set Up Your Profile

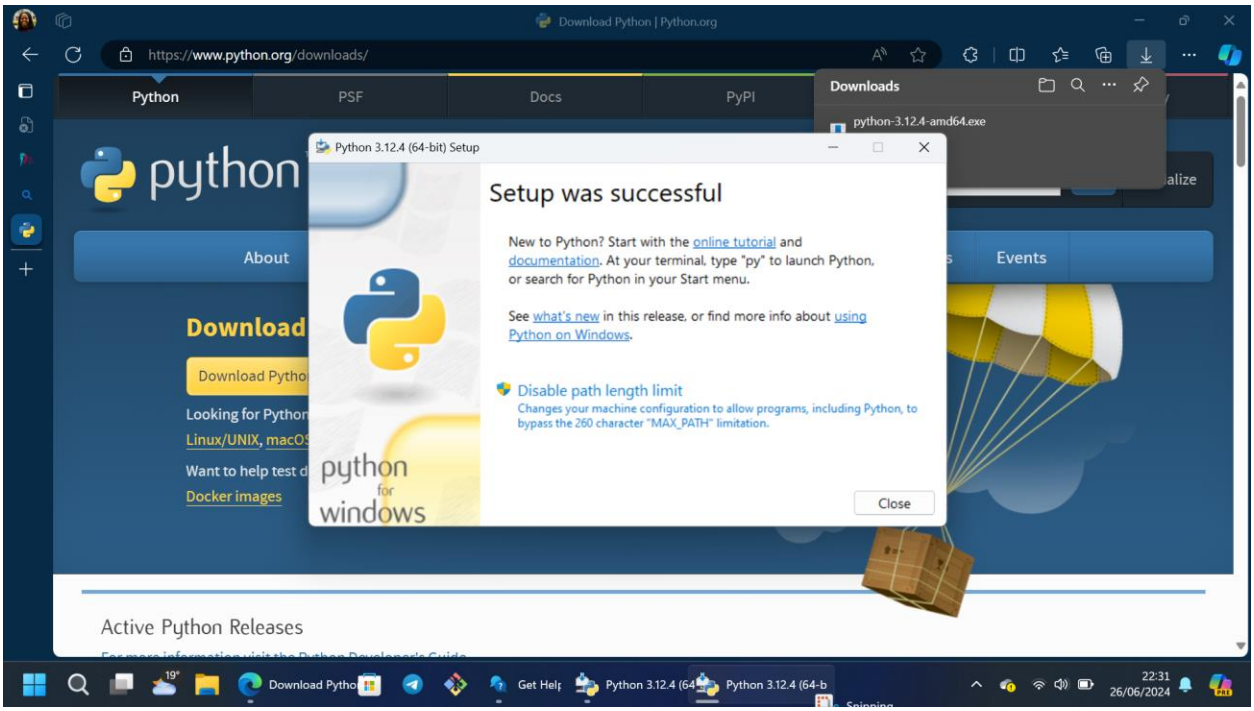
7.1 Personalize your profile by adding a bio, profile picture, and other information.

Installing Python

1. **Download the Installer**:
    1.1. Go to the official Python website and download the latest version of Python for Windows.



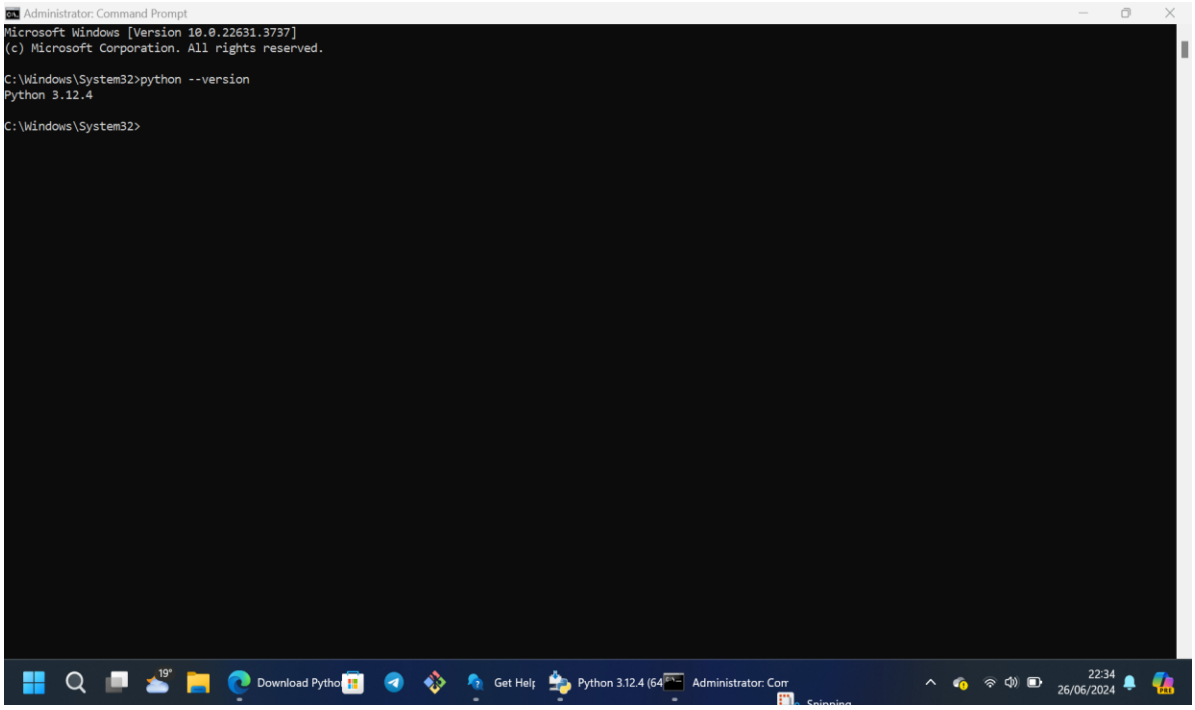
2. **Run the Installer**:
    2.1. Open the downloaded `.exe` file.
    2.2. **Important**: On the first installation screen, check the box that says "Add Python to PATH." This will ensure that you can use Python from the command line.
    2.3. Click "Install Now" or "Customize installation" if you want to choose specific features or the installation location.



3. **Verify Installation**:

3.1. Open Command Prompt and type:

```
python -version
```



4. This command should display the installed Python version if the installation was successful.

Installing Package Managers

1. **Ensure Python is Installed**:
   1.1. First, ensure that Python is installed on your system. You can verify this by opening Command Prompt and typing:
   `python –version`

   1.2. If Python is not installed, install it first by following the instructions here.
2. **Download `get-pip.py`**:
   2.1. Download the `get-pip.py` script by visiting the official link. You can also use the following command in Command Prompt to download it:

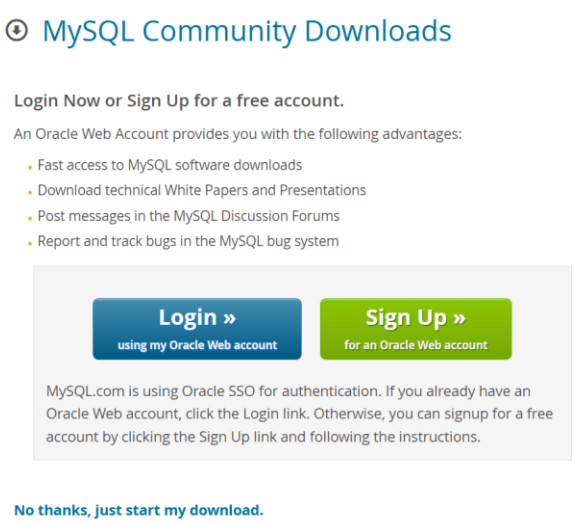
   `curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py`

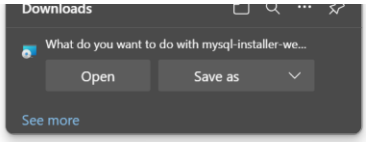
3. **Install `pip`**:
   3.1. Once the script is downloaded, run it using Python:
   `python get-pip.py`

4. **Verify Installation**:
   4.1. After installation, verify that `pip` is installed correctly by typing:
   `pip --version`

Installing MySQL database

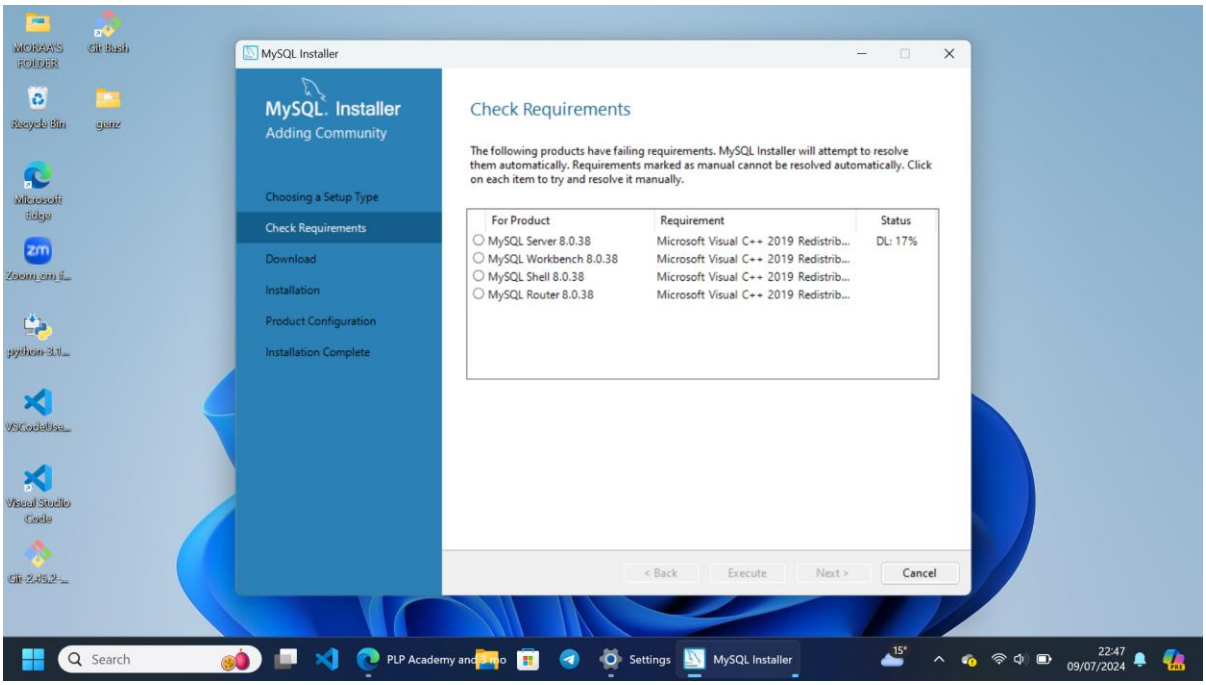
1. **Download MySQL Installer**:
   1.1. Visit the MySQL downloads page and download the MySQL Installer for Windows.





2. Run the Installer

2.1. Open the downloaded `.msi` file and follow the installation wizard.



2.2. You will be prompted to choose a setup type. You can select one based on your needs:

- 2.2.1. *Developer Default*: Installs the MySQL server and other essential tools.
- 2.2.2. *Server only*: Installs only the MySQL server.
- 2.2.3. *Client only*: Installs only the MySQL client tools.
- 2.2.4. *Full*: Installs everything.
- 2.2.5. *Custom*: Allows you to choose which components to install.

3. **Configure MySQL**:
   - 3.1. After selecting the setup type, you will proceed to the configuration step:
4. **Type and Networking**: Choose the configuration type (usually "Development Computer" or "Server Computer"), specify the port number (default is 3306), and optionally configure the networking.
5. **Authentication Method**: Choose the authentication method. It's recommended to use the "Use Strong Password Encryption" option.
6. **Accounts and Roles**: Set a root password and create additional user accounts if needed.
7. **Windows Service**: Choose whether to run MySQL as a Windows service and optionally set the service name.
8. Click "Execute" to apply the configuration and complete the installation.
9. **Verify Installation**:

9.1. After installation, you can verify that MySQL is running by opening the MySQL Command Line Client from the Start menu and logging in using the root account and password you set during installation.