### **Select My Operating System (OS)**

1. **Choose Operating System:**
   * For the installation I used Windows 11.
2. **Download and Install Windows 11:**
   * Go to the [Windows 11 Download page](https://www.microsoft.com/software-download/windows11).
   * Click on "Download Now" and follow the instructions to create a bootable USB or DVD.
   * Boot your computer from the USB/DVD and follow the on-screen instructions to install Windows 11.

### **Install a Text Editor or Integrated Development Environment (IDE)**

1. **Select IDE:**
   * I decided to use Visual Studio Code (VS Code).
2. **Download and Install Visual Studio Code:**
   * Visit the [VS Code Download page](https://code.visualstudio.com/Download).
   * Click on "Windows" to download the installer.
   * Run the installer and follow the installation prompts.

### **Setting up the Version Control System**

1. **Install Git:**
   * Go to the [Git download page](https://git-scm.com/download/win).
   * Download the installer and run it. Follow the installation steps, ensuring to select "Use Git from the command line and also from 3rd-party software".
2. **Configuring Git:**

Open Git Bash and set up your user name and email:  
bash  
Sample code:  
git config --global user.name "Your Name"

git config --global user.email "your.email@example.com"

1. **Create a GitHub Account:**
   * I visited [GitHub](https://github.com) and signed up for an account.
   * **Initialize a Git Repository:**

Open a terminal in your project directory or create a new directory:  
Example

mkdir my\_project

cd my\_project

git init

1. **Making my First Commit:**

Create a README file and make your first commit:  
echo "# My Project" > README.md

git add README.md

git commit -m "Initial commit"

### **Install Necessary Programming Languages and Runtimes**

1. **Install Python:**
   * Go to the [Python download page](https://www.python.org/downloads/).
   * Download and run the installer. Ensure to check "Add Python to PATH" during installation.

### **Install Package Managers**

1. **Install pip:**

pip is included with Python installations from version 3.4 and above. Verify pip installation:  
pip --version

### **Configure a Database (MySQL)**

1. **Download and Install MySQL:**
   * Visit the [MySQL download page](https://dev.mysql.com/downloads/windows/installer/5.7.html).
   * Download the MySQL Installer and run it.
   * Follow the installation prompts to install MySQL Server and MySQL Workbench.

### **Set Up Development Environments and Virtualization**

1. **Install Docker:**
   * Visit the Docker download page and download Docker Desktop for Windows.
   * Follow the installation instructions.

### **Explore Extensions and Plugins**

1. **Installing Extensions in VS Code:**
   * Open VS Code.
   * Click on the Extensions icon in the Activity Bar or press Ctrl+Shift+X.
   * Search for and install essential extensions:
     + **Python:** Provides Python language support.
     + **Prettier:** Code formatter.
     + **GitLens:** Git supercharged.
     + **ESLint:** Integrates ESLint into VS Code.

**Challenges faced during installation**

**1.python installation**

At first when i tried to run python - -version in my command line the python version was not identified.

I later came to realize that I forgot to add python to my path environment variables.

**Github repository with a sample project**

**https://github.com/hicks14856/Hackathon-website.git**