

MARY MWANIKI

ENVIRONMENT SET UP DOCUMENTATION

1. SELECTING YOUR OPERATING SYSTEM

Windows 11 installation:

[Download Windows 11](#)

STEPS:

- ✓ Visit the Windows 11 download page.
- ✓ Download the Windows 11 Installation Assistant.
- ✓ Run the Installation Assistant and follow the on-screen instructions to install Windows 11.
- ✓ Complete the setup and personalize your Windows 11 environment.

2. INSTALLING A TEXT EDITOR OR INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)

Download and install Visual Studio Code (Vs Code):

[Download Vs Code](#)

STEPS:

- ✓ Visit the Visual Studio Code download page.
- ✓ Download the appropriate installer for Windows Os.
- ✓ Run the installer and follow the on-screen instructions to complete the installation.
- ✓ Launch VS Code and customize the interface according to your preferences.

3. SETTING UP VERSION CONTROL SYSTEM

Install Git and configure it on your local machine. Create a GitHub account and initialize a Git repository.

[Create an Account on GitHub](#)

[Download Git](#)

STEPS:

- ❖ Download and install Git from the link above.
- ❖ Open a terminal and configure Git:

```
MINGW64/  
Raven@Ravine MINGW64 /  
$ git config --global user.name"Rayven"  
Raven@Ravine MINGW64 /  
$ git config --global user.email'muringim18@gmail.com'
```

- ❖ Create a GitHub account if you don't have one already.
- ❖ Create a new repository on GitHub.
- ❖ Initialize a local Git repository:

```
```bash  
git init
```
```

- ❖ Add your files and make your first commit:

```
```bash  
git add .
git commit -m "Initial commit"
```
```

- ❖ Link your local repository to GitHub and push your changes:

```
```bash  
git remote add origin https://github.com/yourusername/your-repo.git
git push -u origin main
```

## 4. Installing Necessary Programming Languages and Runtimes

### Install Python:

#### [Download Python](#)

#### STEPS:

- ❖ Visit the Python download page.
- ❖ Download the installer for your OS.
- ❖ Run the installer and ensure to check the option "Add Python to PATH."
- ❖ Follow the on-screen instructions to complete the installation.
- ❖ Verify the installation:

```
Raven@Ravine MINGW64 /
$ python --version
Python 3.11.7
```

## 5. Installing Package Managers

### Install pip for Python

## STEPS:

- ❖ Pip is included with Python installation. Verify by running:

```
raven@Ravine MINGW64 /
$ pip --version
pip 23.3.1 from F:\Users\M.K\anaconda3\Lib\site-packages\pip (python 3.11)
raven@Ravine MINGW64 /
```

- ❖ If not installed, download `get-pip.py` and run it:

```
```bash
```

```
python get-pip.py
```

```
```
```

## 6. Configuring a Database (MySQL via XAMPP)

Utilize the MySQL server provided by XAMPP

### Download Xampp

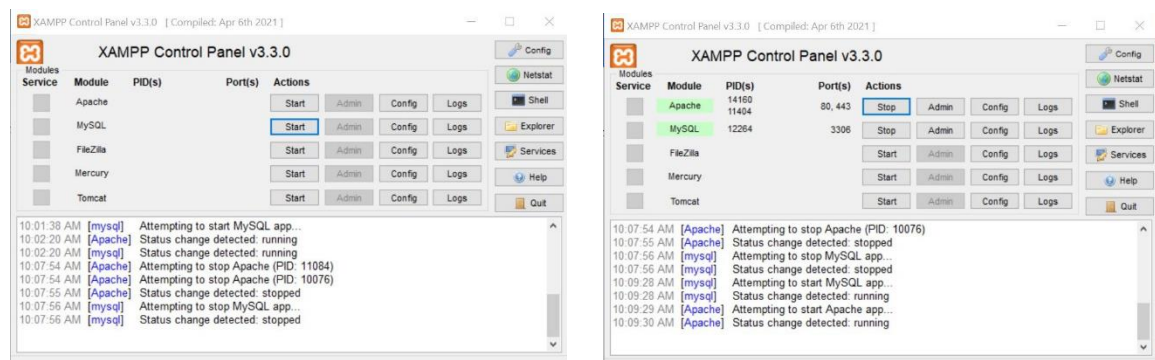
## STEPS:

### 1. Download and Install XAMPP (if not already installed):

- Visit the XAMPP download page.
- Download the installer for your OS.
- Run the installer and follow the setup instructions to install XAMPP.

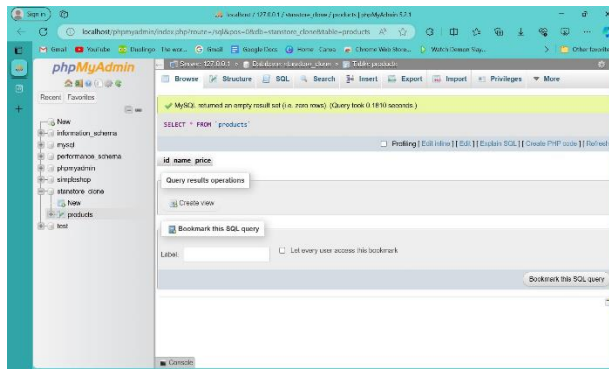
### 2. Starting MySQL Server with XAMPP:

- Open the XAMPP Control Panel.
- Start the MySQL service by clicking the "Start" button next to "MySQL".



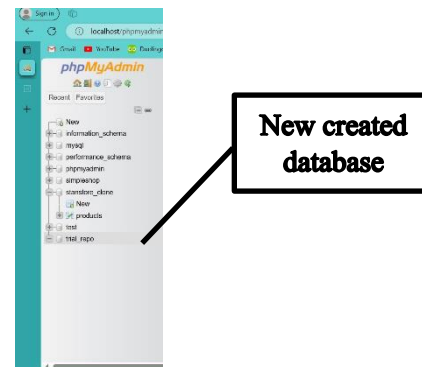
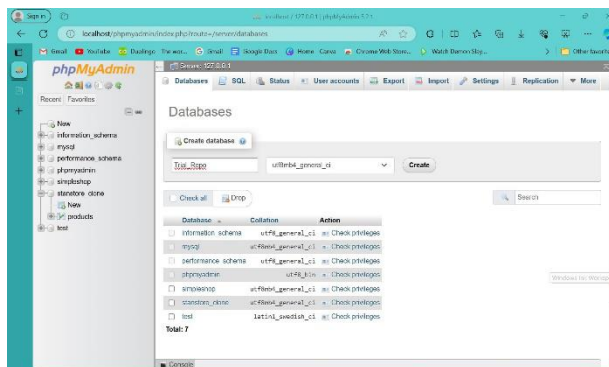
### 3. Accessing phpMyAdmin:

- Open your web browser and go to <http://localhost/phpmyadmin>.
- Use phpMyAdmin to manage your MySQL databases.



#### 4. Creating a Database:

- In phpMyAdmin, click on the "Databases" tab.
- Enter a name for your new database and click "Create".



## 7. Setting Up Development Environments and Virtualization (Optional)

### Install [Docker](#)

#### STEPS:

1. Visit the Docker download page.
2. Download the Docker Desktop installer.
3. Run the installer and follow the on-screen instructions to complete the installation.
4. Verify the installation by running:

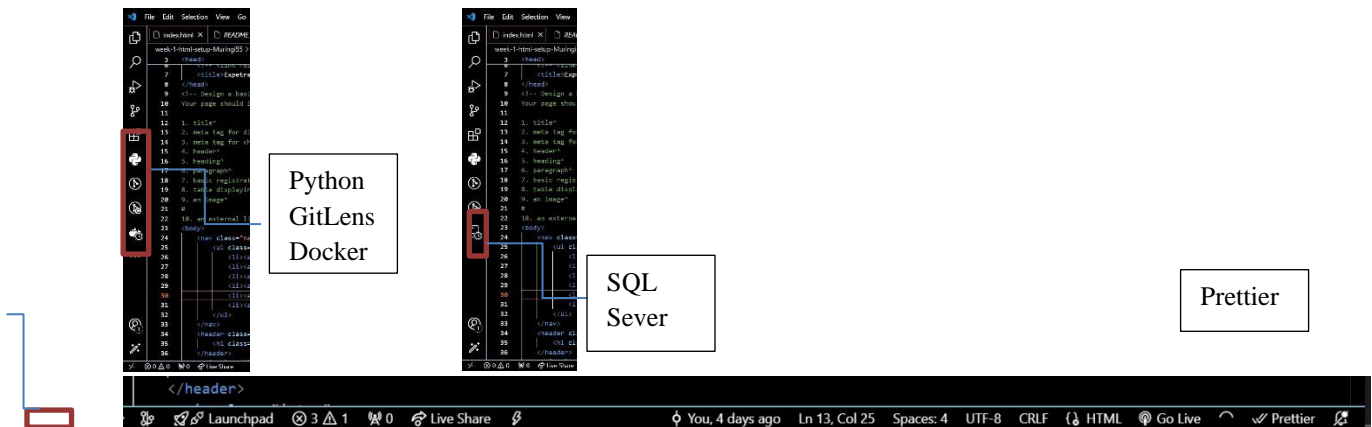
```
```bash
docker --version
```
```

## 8. Exploring Extensions and Plugins

### Enhance VS Code with extensions

## EXTENSIONS:

1. Open VS Code.
2. Go to the Extensions view by clicking the Extensions icon in the Activity Bar.
3. Search for and install the following extensions:



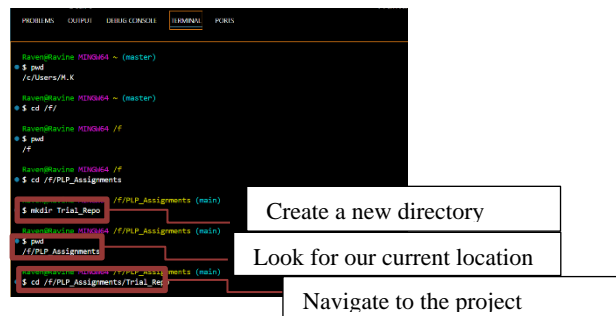
## Sample Project and Reflection

1. Create a sample project and reflect on the setup process

### STEPS:

Create a Sample Project:

- ❖ Create the project folder and navigate to it.



- ❖ Initialize a new Git repository in your project folder:



- ❖ Create new project files and dependent folders.



- ❖ Add your project files and checking the status:

```

$ git add index.html
$ git status
On branch main
nothing to commit, working tree clean

```

Adding the project files.

Checking the status

- ❖ Commit your changes:

```

$ git commit -m "Initial commit"
$ git push -u origin main

```

## 2. Push Your Local Repository to GitHub

- Link your local repository to the GitHub repository:

```

bash

git remote add origin https://github.com/yourusername/dev-setup-documentation.git

```

- Push your changes to GitHub:

```

bash

git push -u origin main

```

## GITHUB REPOSITORY LINKS.

- ❖ [Trial Repo](#) - Sample Project
- ❖ [Refection.md](#) - Reflection document