**Assignment: Dev\_setup**

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Tasks and Steps

1. Select Your Operating System (OS)

Download and Install Windows 11

I visited the Windows 11 download page (https://www.microsoft.com/software-download/windows11) and used the Windows 11 Installation Assistant to upgrade my OS.

2. Install a Text Editor or Integrated Development Environment (IDE)

Download and Install Visual Studio Code

I downloaded Visual Studio Code from the official download page (https://code.visualstudio.com/Download) and followed the setup wizard to install it.

3. Set Up Version Control System

Install Git and Configure it

I installed Git from the [Git download page](https://git-scm.com/download/win) and configured it using Git Bash with:

git config --global user.name "Nyambura002"

git config --global user.email [faithnjuguna2003@gmail.com](mailto:faithnjuguna2003@gmail.com)

-I also created a GitHub account and set up a new repository which is as shown below:

https://github.com/Nyambura002/PLP-SE-Project

I added the README file using the commands below:

git add README.md

git commit -m "Initial commit"

git push origin main

4. Install Necessary Programming Languages and Runtimes

Installing Python:

I downloaded Python from [python.org](https://www.python.org/downloads/), ran the installer, and ensured "Add Python to PATH" was checked.

5. Configure a Database (MySQL)

Download and Install MySQL

I downloaded the MySQL Installer from [the MySQL download page](https://dev.mysql.com/downloads/windows/installer/5.7.html) and followed the setup wizard.

-I was also able to install extensions in Visual Studio Code, such as Python.

**Reflection on Challenges Faced During Setup**

During the process of setting up my developer environment, I encountered a few challenges that required troubleshooting and persistence. One significant issue I faced was with the installation of Dart. The installation process did not proceed as smoothly as expected, causing delays. I am currently working on resolving this issue, exploring different installation methods, and seeking assistance from the Dart community.

Another challenge was configuring the system environment variables. Initially, I had difficulty adding Python to the PATH. The installer did not automatically update the PATH, requiring me to manually add it through the system settings. This process involved navigating to the environment variables section in Windows and correctly entering the path to the Python executable. After some trial and error, I successfully added Python to the PATH and verified it using the command line.

Similarly, I faced a challenge when adding the Git executable to the PATH. While the Git installer provided an option to adjust the PATH, it did not work as expected in my initial attempts. I had to manually configure the PATH to include the Git bin directory. This step was crucial to ensure Git commands could be recognized globally in the command line interface. After carefully following the documentation and verifying the changes, I was able to resolve this issue.

Overall, these challenges enhanced my understanding of system configurations and reinforced the importance of attention to detail in setting up a development environment. By working through these issues, I gained valuable troubleshooting skills that will be beneficial in future projects.