

Assignment

This document outlines the steps to set up an efficient developer environment for software engineering projects. It includes installing an operating system, text editor/IDE, version control system, necessary programming languages and runtimes, package managers, database, and exploring extensions and plugins.

Steps:

1. Select Your Operating System (OS)

Download and Install Windows 11

Go to Windows 11 Download.

Click on "Download Now" under "Create Windows 11 Installation Media".

Follow the instructions to create a bootable USB drive and install Windows 11.

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

Download and Install Visual Studio Code

Go to Visual Studio Code Download.

Select the Windows installer and download it.

Run the installer and follow the installation instructions.

3. Set Up Version Control System

Install Git

Go to Git Downloads.

Select the Windows installer and download it.

Run the installer and follow the installation instructions.

Configure Git

Open a terminal or command prompt.

Configure your Git username and email:

```
git config --global user.name "WayneSafari"
```

```
git config --global user.email "wynesoita@gmail.com"
```

Create a GitHub Account

Go to GitHub and sign up for an account if you don't already have one.

Initialize a Git Repository

Open a terminal or command prompt and navigate to your project directory:

4.Install Necessary Programming Languages and Runtimes

Install Python

Go to Python Downloads.

Download the installer for Windows.

Run the installer and make sure to check the option to add Python to your PATH during the installation.

5. Install Package Managers

Verify Pip Installation

Open a terminal or command prompt.

Verify pip installation:

6. Configure a Database (MySQL)

Download and Install MySQL

Go to MySQL Downloads.

Download the installer for Windows.

Run the installer and follow the instructions to set up and configure the MySQL server.

7. Set Up Development Environments and Virtualization (Optional)

Install Docker

Go to Docker Downloads.

Download and install Docker Desktop for Windows.

8. Explore Extensions and Plugins

Install VS Code Extensions

Open Visual Studio Code.

Navigate to the Extensions view by clicking on the Extensions icon in the Activity Bar on the side of the window.

Search for and install the following essential extensions:

Python

GitLens

Docker

Prettier - Code formatter

9. Document Your Setup

Create a Markdown File (author.md)

Create a new file named author.md.

Reflection

Challenges faced during setup:

- Configuring Git for the first time.
- Setting up MySQL server.
- Strategies employed to overcome challenges:
- Followed official documentation and online tutorials.
- Sought help from online forums and communities.