SETTING UP A DEVELOPER’S ENVIRONMENT

1. Selecting the operating system

My preferred option remains as Windows 10 since my device does not meet the criteria to upgrade to Windows 11.

1. Text Editor or IDE

My IDE of choice was Visual Studio Code. This is because it is beginner friendly hence enabling me to navigate through it with ease.

1. Version Control System

I chose Git as my version control system. I downloaded it from the Git official website. I was also able to create an account on Github for hosting code repositories.

 I initialized a Git repository for each project directory using git init.

 I staged and committed changes to the repository regularly using git add and git commit commands.

1. Programming languages and runtime

The programming language I decided to go with was Python which I downloaded from the www.python.org website. I opened a command prompt and typed python --version to confirm successful installation.

1. Package Managers

I went with pip which came with the python install. I used the example that if my project requires a data analysis library, then I would use ‘**pandas’** whose command to install it is *pip install pandas.*

1. Configuring a database.

I went with MySQL as my database application as that was the one that came referred by our instructors. I downloaded and installed the MySQL Community Server for Windows. I installed the MySQL Connector/Python library using pip install mysql-connector-python to enable Python applications to interact with the MySQL database.

1. Extensions and Plugins

* **Pylance:** Provides intelligent code completion, linting, and debugging for Python development.
* **Python Indent:** Ensures proper code indentation for readability.
* **Docstring Generator:** Automatically generates docstrings for functions and classes, improving code documentation.
* **GitLens:** Visualizes Git history, facilitates code navigation, and simplifies branch management.
* **Bracket Pair Colorizer:** Improves code readability by color-coding matching brackets and parentheses.