## ****Setting Up Developer Environment Documentation****

## ****Introduction****

## ****This document outlines the steps I took to set up my developer environment for software development. I will include configurations, customizations, and troubleshooting steps encountered during the process. Screenshots will be provided where necessary.****

## ****Steps Taken****

## ****Operating System: I chose to work on a Windows 10 machine for this project.****

## ****IDE Selection: I opted for Visual Studio Code as my Integrated Development Environment IDE𝐼𝐷𝐸 due to its lightweight nature and extensive plugin support.****

## ****Version Control: I implemented version control using Git. I initialized a Git repository in my project folder and connected it to a remote repository on GitHub.****

## ****Programming Language: I selected Python as the programming language for this project due to its versatility and ease of use.****

## ****Virtual Environment: I set up a virtual environment using virtualenv to manage project dependencies.****

## ****Package Management: I used pip as the package manager for installing Python libraries. I created a requirements.txt file to track project dependencies.****

## ****Code Editor Customizations: I customized my Visual Studio Code settings to include my preferred theme, font, and key bindings.****

## ****Extensions: I installed essential extensions for Python development, such as Python, Python Docstring Generator,code runner,prettier,dart,flutter and GitLens.****

## ****Debugging Configuration: I configured the debugger in Visual Studio Code to work with Python scripts for efficient debugging.****

## ****Testing Framework: I integrated pytest as the testing framework for this project to ensure code quality and reliability.****

MySQL: I first downloaded the installer , I started the installer and made the neccessary configurations and then installed it into my laptop using the installer.

DART AND FLUTTER:I downloaded the dart sdk from the official website,extracted the file in the c drive,copied the path and added it to my environment variables.I then opened my command prompt typed in “flutter --version “ to verify my installation and then “flutter doctor” to identify any missing dependencies.

## ****Troubleshooting****

## ****Git Configuration: I encountered issues with setting up my Git credentials initially. I resolved this by configuring Git to use credential caching.****

## ****Virtual Environment Activation: I faced challenges activating the virtual environment in Windows. I solved this by running the activation script in the command prompt.****

## ****Package Installation: Some Python packages failed to install correctly. I fixed this by ensuring I had the necessary dependencies installed before running the installation command.****

## ****Conclusion****

## ****In conclusion, the developer environment setup was successful, and all tools were appropriately selected for the project requirements. I encountered and overcame various challenges during the setup process, enhancing my problem-solving skills. The version control implementation with Git was effective in managing project changes. Overall, the environment is ready for software development with a focus on Python programming.****