

RAHAB WAIRIMU KINYANJUI

SOFTWARE ENGINEERING DAY 2 ASSIGNMENT 2

INSTALLATION AND NAVIGATION OF VISUAL STUDIO CODE (VS CODE)

INTRODUCTION

This document provides a comprehensive guide to installing, setting up, and navigating Visual Studio Code (VS Code) on the Windows 11 operating system. The goal is to equip users with the knowledge needed to effectively utilize VS Code for software development tasks.

SCOPE OF ASSIGNMENT

- Step-by-step instructions for downloading and installing VS Code on Windows 11.
- Initial configurations and settings adjustments post-installation to optimize the coding environment.
- Detailed exploration of the VS Code user interface and its main components.
- Utilization of essential tools like the Command Palette, Integrated Terminal, and File Management features.
- Guidance on enhancing productivity through extensions, particularly in web development.
- Instructions for debugging and Git integration.

INSTALLATION OF VS CODE

1. Visit the [Official Website of Visual Studio Code](<https://code.visualstudio.com/>) using a web browser (e.g., Google Chrome, Microsoft Edge).
2. Click on "Download for Windows" to initiate the download of the VS Code application.
3. Once the download completes, locate the Visual Studio Code icon in your downloads folder.
4. Double-click the installer icon to begin the installation process.
5. Accept the terms and conditions, then click "Next."
6. Choose the installation location and click "Next."
7. Click "Install" to start the installation. Wait for it to complete (approximately 1 minute).
8. Once installed, ensure "Launch Visual Studio Code" is checked and click "Next."
9. VS Code will open. You can now create a new file and select your preferred language to start coding.

FIRST-TIME SETUP OF VS CODE

- Open the Welcome page from Help > Welcome or use the Command Palette (Ctrl+Shift+P) with "Help: Welcome" to begin a walkthrough of setup steps and features.

INITIAL CONFIGURATIONS AFTER INSTALLATION

- Customize settings via `File -> Preferences -> Settings`:
- Choose a theme (`workbench.colorTheme`).
- Adjust font size (`editor.fontSize`).
- Configure indentation (`editor.tabSize`, `editor.insertSpaces`).
- Set language-specific settings.
- Install essential extensions:
- Access Extensions view (`Ctrl+Shift+X`) in the Activity Bar.

- Search and install extensions such as Python, Live Server, ESLint, GitLens, Debugger for Chrome, etc.

USER INTERFACE OVERVIEW

VS Code's interface includes:

- Editor: Main area for editing files.
- Side Bar: Contains Explorer and other views.
- Status Bar: Displays project and file information.
- Activity Bar: Provides access to different views.
- Panel: Space below the editor for output, debug, terminal, etc.

EXTENSIONS IN VS CODE

Extensions enhance VS Code's capabilities:

- Browse and install extensions from the Extensions view (`Ctrl+Shift+X`).
- Manage installed extensions easily.

INTEGRATED TERMINAL

- Open Terminal from View > Terminal or Command Palette (`Ctrl+Shift+P`, "View: Toggle menu Terminal").
- Customize and interact with terminals directly within VS Code.

GIT FOR SOURCE CONTROL IN VS CODE

- Set up Git in VS Code and link to GitHub for version control.
- Open repositories, clone from remote sources, initialize new repositories, and manage changes.

CONCLUSION

By following this guide, users will establish a robust environment for software development using Visual Studio Code on Windows 11. This setup ensures efficiency and productivity through optimized configurations, essential extensions, and effective use of VS Code's features.

REFERENCES

- [Visual Studio Code - Official Website](<https://code.visualstudio.com/>)
- [Introduction to Git in Visual Studio Code](<https://code.visualstudio.com/docs/sourcecontrol/intro-to-git>)
- [Visual Studio Code User Interface Guide](<https://code.visualstudio.com/docs/getstarted/userinterface>)