

## SE-ASSIGNMENT-5

1.

1. Download Visual Studio:
2. Visit the [Visual Studio website](#) and click on "Download Visual Studio."
3. Follow the on-screen instructions to download the installer.
4. . Run the Installer:
5. Run the downloaded installer.
6. Choose the "Visual Studio" workload during installation, which includes the necessary components for general development.
7. . Select Workloads and Components:
8. In the Visual Studio Installer, select the workloads and components you need based on your development requirements. Common workloads include ".NET Desktop Development" or "Web Development."
9. Modify Installation (Optional):
10. If needed, you can customize the installation by clicking on the "Individual components" tab in the installer and selecting or deselecting specific components.
11. Install:
12. Click the "Install" button to start the installation process.
13. This may take some time, as it involves downloading and installing the selected components.
14. Launch Visual Studio:
15. Once the installation is complete, launch Visual Studio.
16. Sign in with your Microsoft account or create one if prompted.
17. Choose Development Environment:
18. On the welcome screen, select your development environment. For example, you can choose "Development Settings" based on your preferred coding style.
19. Start Coding:
20. You're now ready to start coding! Create a new project or open an existing one to begin your development work.

Common prerequisites include:

\* having 64-bit windows 11 system, with at least 1GB of RAM and 200 MB of free disk space for installation.

\* 1.6 GHz or faster processor

\* Good internet connection.

2. After installing Visual Studio Code, I would recommend starting by enabling auto-save in settings to reduce the risk of losing work. You can also customize or set the preferred color theme and configure font size for readability. Installing essential extensions like Prettier Code-formatter to enjoy auto formatting, Live server for launching a development local server with live

reload feature, and depending on what you want to work on you can also install python extension or whichever you prefer for better version control integration

3.

- \*Activity Bar - Located on the far left-hand side. Lets you switch between views like Explorer, Search, and Source Control. It also gives you additional context-specific indicators, like the number of outgoing changes when Git is enabled.

- \*Side Bar - Shows detailed panels for the currently selected activity, such as a list of files or search results.

- \*Editor Group - It is where you write and edit your code, and it supports multiple tabs for easy navigation between files.

- \*Status Bar - Provides information and insights like errors, warnings about the opened project and the files you edit.

4. The Command Palette allows you to quickly access and execute various commands and features without navigating through menus. The Command Palette can be accessed by pressing Ctrl+Shift+P or F1. It is useful to perform tasks like running code, opening files, or managing extensions. E.g

- \*Type open file to find and open a specific file in your project.

- \*Type Terminal: Create New Integrated Terminal to open a new terminal instance within Visual Studio Code.

- \*Use Format Document to automatically format the entire file according to your coding standards.

5. Extensions play a crucial role by adding functionality tailored to specific languages or workflows, enhancing productivity and customizing the development environment. Extensions can be found by clicking on the Extensions view in the Activity Bar or by pressing Ctrl+Shift+X, where you search for, install, and manage extensions. Extensions can be enabled and disabled according to preference. For web development, some essential extensions needed would include Prettier for auto code formatting, ESLint for identifying and fixing Javascript code issues, Live Server for a quick local development server, and Emmet for faster HTML and CSS workflow.

6. To open the integrated terminal, you can go to the View menu option and select Terminal. This opens a terminal pane at the bottom of the editor where you can run command-line tasks without leaving the IDE.

The integrated terminal is convenient because it operates within the context of your current workspace, allows quick switching between code and terminal, and supports multiple instances. It maintains your environment and provides seamless interaction with your project files and version control.

Unlike using an external terminal, switching between VS Code and an external terminal can disrupt workflow and slow down productivity, especially when frequent interaction between code

and terminal is required. it maintains your environment and provides seamless interaction with your project files and version control.

7. To create, open, and manage files and folders in VS Code, you need to start by navigating to the Explorer view in the Activity Bar on the left side in the Explorer pane and selecting “New file” or “New folder”. To open a file simply double-click on it in the Explorer and open files by name. As a user you can efficiently navigate between different files and directories using several methods: Ctrl+Tab to switch between recently opened files, Ctrl+P to quickly open files by name and Ctrl+Click on file paths in the editor jump directly to their location in the Explorer.

8. As a user you can find and customize settings in VS Code by navigating to the Settings view accessed through the gear icon in the lower-left corner. To change the theme, you can search for ‘Color Theme’ in the search bar at the top of the settings and select your preferred theme from the options given.

Adjusting the font size can be done by searching for ‘Font Size’ in the settings and adjusting the value under ‘Editor Font Size’ to your desired size.

For modifying ‘Keybindings’, search for ‘Keybindings’ in the settings and click on ‘Edit in settings.json’ to customize bindings directly in the JSON file, such as adding custom shortcuts or modifying existing ones to suit your personal preference.

9. To set up and start debugging a simple program in VS Code, first ensure you have installed any language-specific extensions for debugging, such as Python or JavaScript. Open your project folder in VS Code and navigate to the file containing the code you want to debug. Set breakpoints by clicking in the gutter next to the line numbers where you want execution to pause. Next, press F5 or go to the Run menu and select Start Debugging. VS Code will launch the debugger configured for your language and pause execution at the breakpoints. You can then use debugging features like stepping through code, inspecting variables in the Debug Console, evaluating expressions, and viewing call stacks to identify and fix issues in your code effectively.

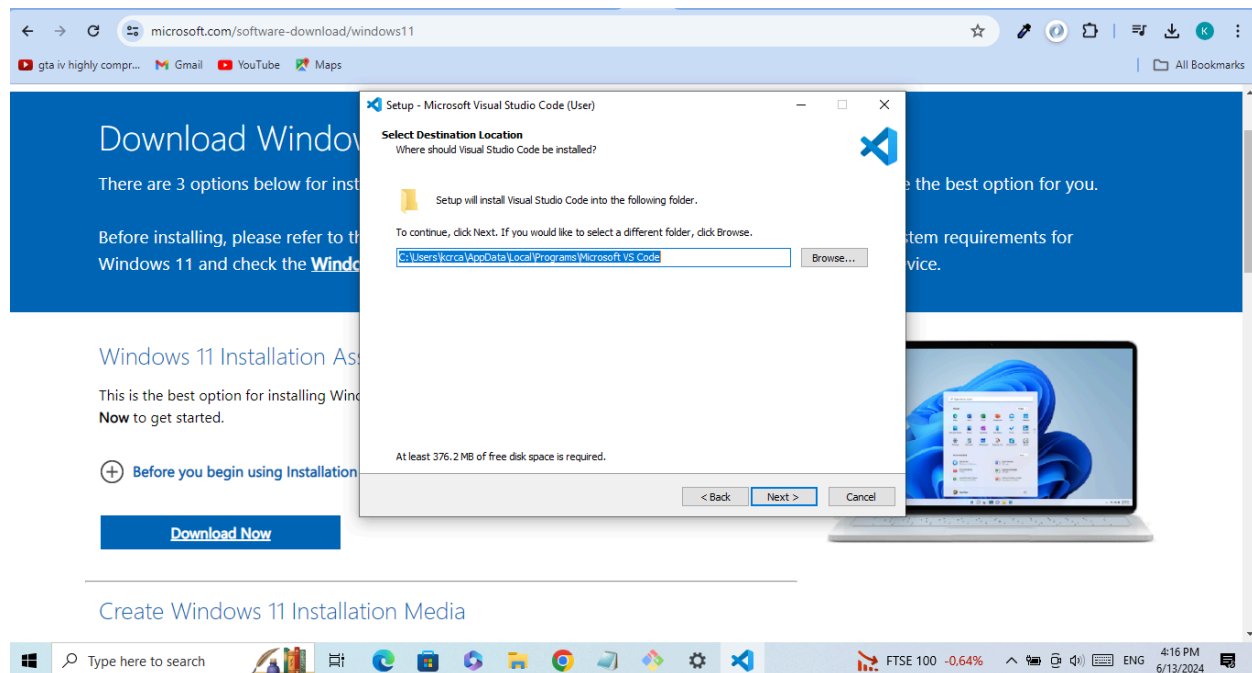
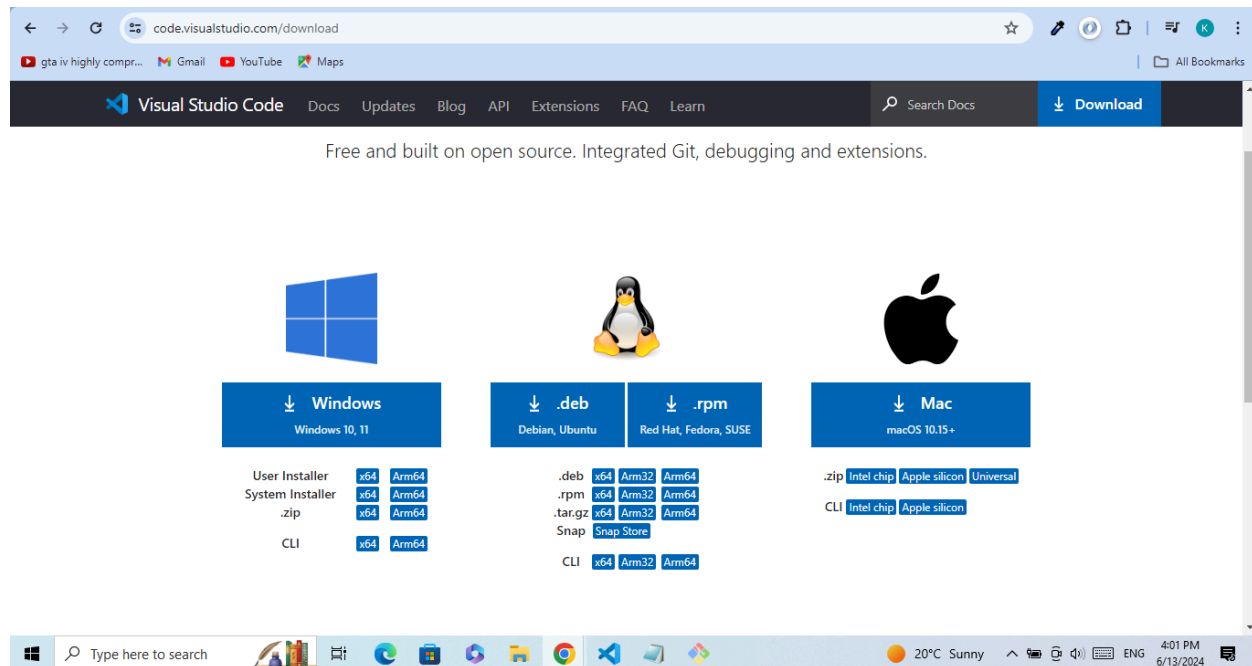
10. To integrate Git with VS Code for version control, start by opening your project folder in VS Code. If the folder is not already a Git repository, initialize it by clicking the Source Control icon in the Activity Bar on the left and selecting ‘initialize Repository’. Stage changes by clicking the + button next to the files in the Source control view, then enter commit messages and click the check mark to commit them. To push changes to a GitHub repository, ensure you have added a remote repository link using git remote add origin followed by the repository link via the integrated terminal or directly within VS Code’s Source Control view. Then click the three dots(...) next to the branch name in the bottom-left corner, select ‘Push’, and choose the branch to push to GitHub. Enter your GitHub credentials if prompted, and your changes will be successfully pushed to the remote repository.

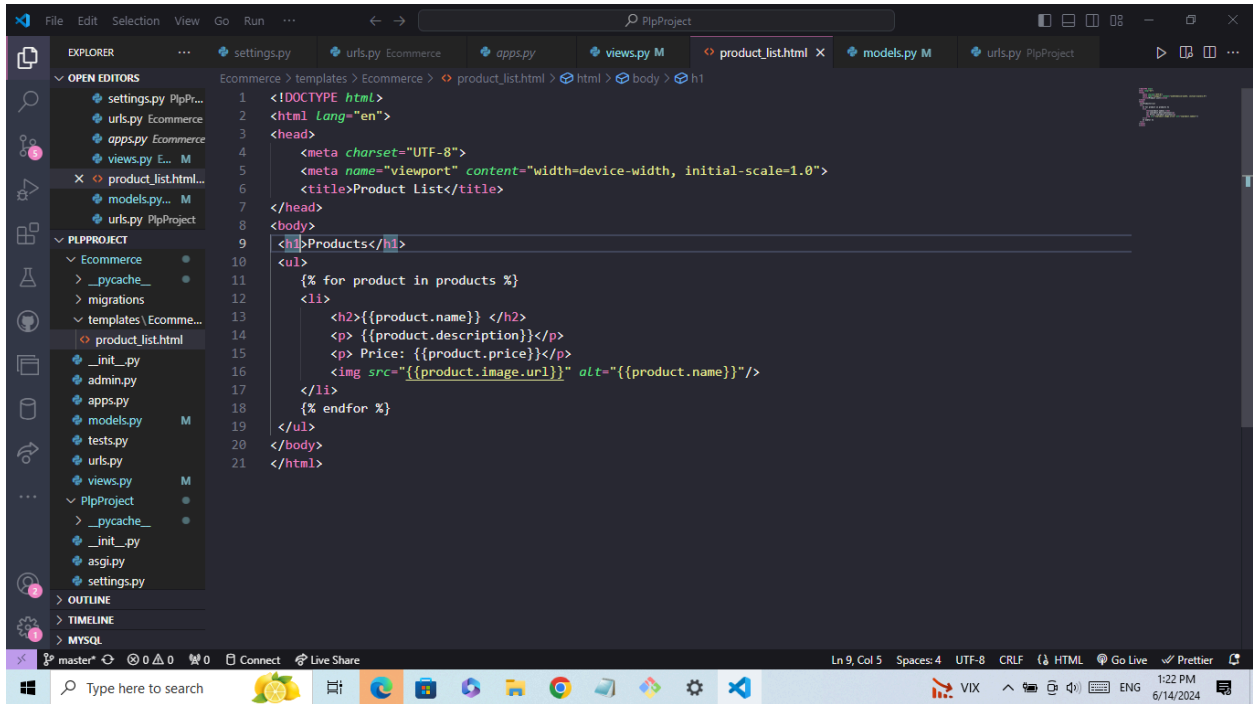
## SOURCES/REFERENCES

- <https://code.visualstudio.com> > docs

- Power Learn Project TOPIC: How to set up Visual Studio Code
- <https://medium.com>
- OpenAI

## IMAGES





File Edit Selection View

EXTENSIONS

▼ INSTALLED 33

**.NET Install ...** ⌚ 9613ms

This extension installs ...

Microsoft

**C/C++**

C/C++ IntelliSense, de...

Microsoft

**Code Runner** ⌚ 2454ms

Run C, C++, Java, JS, P...

Jun Han

**Dart**

Dart language support ...

Dart Code

**Data Workspace**

Additional common fu...

Microsoft

**Database Client JDBC**

JDBC Adapter For Data...

▼ RECOMMENDED 8

**Docker** ⬇ 34.5M

Makes it easy to create...

Microsoft

**GitHub Cop...** ⬇ 17.2M

Your AI pair programmer

GitHub

master\* 0 0

Type here to search

