Installation and Navigation of Visual Studio Code (VS Code)

Steps to Download and Install Visual Studio Code on Windows 11:

1. **Requirements:**
   - ➢ A computer running Windows 11.
   - ➢ Internet connection to download the installer.
   - ➢ Administrator privileges to install the software.
2. **Download VS Code:**
   - ➢ Go to the [Visual Studio Code download page](#).
   - ➢ Click on the Windows download button to download the VS Code installer.
3. **Install VS Code:**
   - ➢ Open the downloaded VS Code installer (VSCodeUserSetup-{version}.exe).
   - ➢ Follow the installation prompts:
     - ▪ Accept the license agreement.
     - ▪ Choose the installation location (default is recommended).
     - ▪ Select additional tasks (e.g., creating a desktop icon, adding to PATH).
   - ➢ Click "Install" and wait for the installation to complete.
   - ➢ Launch VS Code by clicking "Finish" with the option "Launch Visual Studio Code" checked.

Initial Configurations and Settings:

1. **Theme and Appearance:**
   - ➢ Open VS Code and go to File > Preferences > Color Theme to choose a theme.
   - ➢ Popular themes include "Dark+", "Light+", and third-party themes like "Dracula".
2. **Font and Editor Settings:**
   - ➢ Go to File > Preferences > Settings.
   - ➢ Adjust font size and family under Text Editor > Font.
   - ➢ Enable/disable word wrap under Text Editor > Word Wrap.
3. **Install Extensions:**
   - ➢ Click on the Extensions icon in the Activity Bar or press Ctrl+Shift+X.
   - ➢ Install recommended extensions like "Python", "Prettier - Code formatter", "ESLint", and "GitLens".

User Interface Overview:

Main Components of the VS Code User Interface:

1. **Activity Bar:**
   - ➢ Located on the far left of the interface.
   - ➢ Provides icons for navigating between different views like Explorer, Search, Source Control, Run and Debug, and Extensions.
2. **Side Bar:**
   - ➢ Displays the selected view from the Activity Bar.
   - ➢ Commonly shows the Explorer view with a file/folder structure of your project.
3. **Editor Group:**

> ➢ The central area where you open and edit files.
> ➢ Supports multiple tabs and split views for working on multiple files simultaneously.

4. **Status Bar:**
> ➢ Located at the bottom of the window.
> ➢ Displays information about the open file and the project, such as line/column number, file encoding, and branch name.

The Command Palette and How to Access it:

- The Command Palette allows you to access all available commands in VS Code.
- Access it by pressing Ctrl+Shift+P or F1.

Common Tasks using the Command Palette:

- Opening files: File: Open File...
- Searching for symbols: Go to Symbol in Workspace...
- Running tasks: Tasks: Run Task
- Installing extensions: Extensions: Install Extensions

Extensions in VS Code:

Role of Extensions and How to Manage Them:

- Extensions add functionality and support for different languages, tools, and frameworks.
- **Finding and Installing Extensions:**
  - Click the Extensions icon in the Activity Bar or press Ctrl+Shift+X.
  - Search for desired extensions and click "Install".

Essential Extensions for Web Development:

- **"HTML Snippets"**: Provides HTML code snippets.
- **"JavaScript (ES6) code snippets"**: Adds ES6 code snippets.
- **"Live Server"**: Launches a development local server with a live reload feature.
- **"Prettier"**: Code formatter.

Integrated Terminal:

How to Open and Use the Integrated Terminal:

- Open the integrated terminal by pressing Ctrl+` or navigating to View > Terminal.
- Use the terminal for running command-line tasks without leaving VS Code.

Advantages Compared to an External Terminal:

- Direct access within the editor.
- Easier to switch between code and terminal.
- Supports multiple terminal instances and tabs.

File and Folder Management:

Creating, Opening, and Managing Files and Folders:

- **Creating Files/Folders:**
  - Right-click in the Explorer view and select New File or New Folder.
- **Opening Files:**
  - Double-click a file in the Explorer view.