Week 2

1. Installation of VS Code

* Visit the VS Code website and download the Windows version
* Once the download is complete, open the file and accept the user agreement
* Select the drive location you need to install the VS code.
* Select the folder name for the VS Code setup files
* Check all the settings and click on install
* After installation, click on finish

1. Important selections

* Select color theme after opening vs code
* Sync with Github or Microsoft
* Sync data across all devices

1. Main components of VS Code UI

* **Editor** - The main area to edit your files. You can open as many editors as you like side by side vertically and horizontally.
* **Primary Side Bar** - Contains different views like the Explorer to assist you while working on your project.
* **Status Bar** - Information about the opened project and the files you edit.
* **Activity Bar** - Located on the far left-hand side. Lets you switch between views and gives you additional context-specific indicators, like the number of outgoing changes when Git is enabled. You can change the position of the Activity Bar.
* **Panel** - An additional space for views below the editor region. By default, it contains output, debug information, errors and warnings, and an integrated terminal. The Panel can also be moved to the left or right for more vertical space.

1. Command Palette

The Command Palette is where all Commands are found. It's important that your command names are labeled appropriately so users can easily find them.

1. Extensions

These are features like languages, debuggers and tools that VS Code lets you add to enhance development work flow.

* Bring up the Extensions view by clicking on the Extensions icon in the Activity Bar on the side of VS Code or the View: Extensions command (⇧⌘X) for Mac.

This will show you a list of the most popular VS Code extensions on the VS Code Marketplace.

* To install an extension, select the Install button. Once the installation is complete, the Install button will change to the Manage gear button.
* VS Code simplifies the process of managing your extensions. The Extensions view, the Command Palette (commands with the Extensions: prefix), or command-line switches can all be used to install, deactivate, update, and remove extensions.  
    
  Enumerate installed add-ons  
  The extensions you currently have installed and all of the extensions that are suggested for you will be displayed by default in the Extensions view. Using the Extensions is possible. To delete all text in the search box and display a list of all installed extensions, including those that have been disabled, focus on the Installed View command, which can be found in the Command Palette (⇧⌘P) or in the More Actions (...) dropdown menu > Views > Installed.
* To uninstall an extension, select the Manage gear button at the right of an extension entry and then choose Uninstall from the dropdown menu. This will uninstall the extension and prompt you to restart the extension host (Restart Extensions).

1. Integrated Terminal

* You can open a terminal as follows:
* From the menu, use the Terminal > New Terminal or View > Terminal menu commands.
* From the Command Palette (⇧⌘P), use the View: Toggle Terminal command.
* In the Explorer, you can use the Open in Integrated Terminal context menu command to open a new terminal from a folder.
* To toggle the terminal panel, use the ⌃` keyboard shortcut.
* To create a new terminal, use the ⌃⇧` keyboard shortcut.

1. File and Folder Management

A Visual Studio Code workspace is the collection of one or more folders that are opened in a VS Code window (instance). In most cases, you will have a single folder opened as the workspace. However, depending on your development workflow, you can include more than one folder, using an advanced configuration called Multi-root workspaces.

Working with Folders

Drag a folder onto VS Code to view it in the sidebar. You can also choose File > Open Folder and select a folder you want to open.

Quickly open/switch to a file in the current folder:

Choose Go > Go to File or hit Cmd–P (Mac) or Ctrl–P (Windows).

Start typing the name of a file (use the Down/Up Arrow keys to move the selection up or down).

Hit Return (Mac) or Enter (Windows) to open the selected file.

Search within the current folder: Hit Cmd–Shift–F (Mac) or Ctrl–Shift–F (Windows) or choose Edit > Find in Files.

1. Settings and Preferences

VS Code has various settings scopes:  
User settings are those that are global to all instances of Visual Studio Code that you launch.  
Workspace settings are saved within your workspace and are only activated when it is opened.

Settings editor

Use the Settings editor to review and change VS Code settings. To open the Settings editor, navigate to Code > Preferences > Settings. Alternately, open the Settings editor from the Command Palette (⇧⌘P) with Preferences: Open Settings or use the keyboard shortcut (⌘,).

When you open the Settings editor, you can search and discover the settings you are looking for. When you search using the search bar, it not only shows and highlights the settings matching your criteria, but also filter out those which are not matching. This makes finding settings quick and easy.

1. Debugging in VS Code

To bring up the Run and Debug view, select the Run and Debug icon in the Activity Bar on the side of VS Code. You can also use the keyboard shortcut ⇧⌘D.

The Run and Debug view displays all information related to running and debugging and has a top bar with debugging commands and configuration settings.

If running and debugging is not yet configured (no launch.json has been created), VS Code shows the Run start view.

1. Using Source Control

The Source Control icon in the Activity Bar on the left will always indicate an overview of how many changes you currently have in your repository. Selecting the icon will show you the details of your current repository changes: CHANGES, STAGED CHANGES and MERGE CHANGES.

Clicking each item will show you in detail the textual changes within each file. Note that for unstaged changes, the editor on the right still lets you edit the file: feel free to use it!

You can also find indicators of the status of your repository in the bottom-left corner of VS Code: the current branch, dirty indicators, and the number of incoming and outgoing commits of the current branch.

* Repository cloning  
  The Source Control view will provide you with the option to Open Folder from your local system or Clone Repository if you haven't opened a folder yet. If you select Clone Repository, you will be asked for the URL of the remote repository (for example on GitHub) and the parent directory under which to put the local repository. For a GitHub repository, you would find the URL from the GitHub Code dialog.
* Commit

Staging (git add) and unstaging (git reset) can be done via contextual actions in the files or by drag-and-drop. You can type a commit message above the changes and press Ctrl+Enter (macOS: ⌘+Enter) to commit them. If there are any staged changes, only those changes will be committed. Otherwise, you'll get a prompt asking you to select what changes you'd like to commit and get the option to change your commit settings.

REFERENCES

1. <https://code.visualstudio.com/api/ux-guidelines/command-palette>
2. <https://www.c-sharpcorner.com/article/how-to-install-visual-studio-code-on-windows-11/>