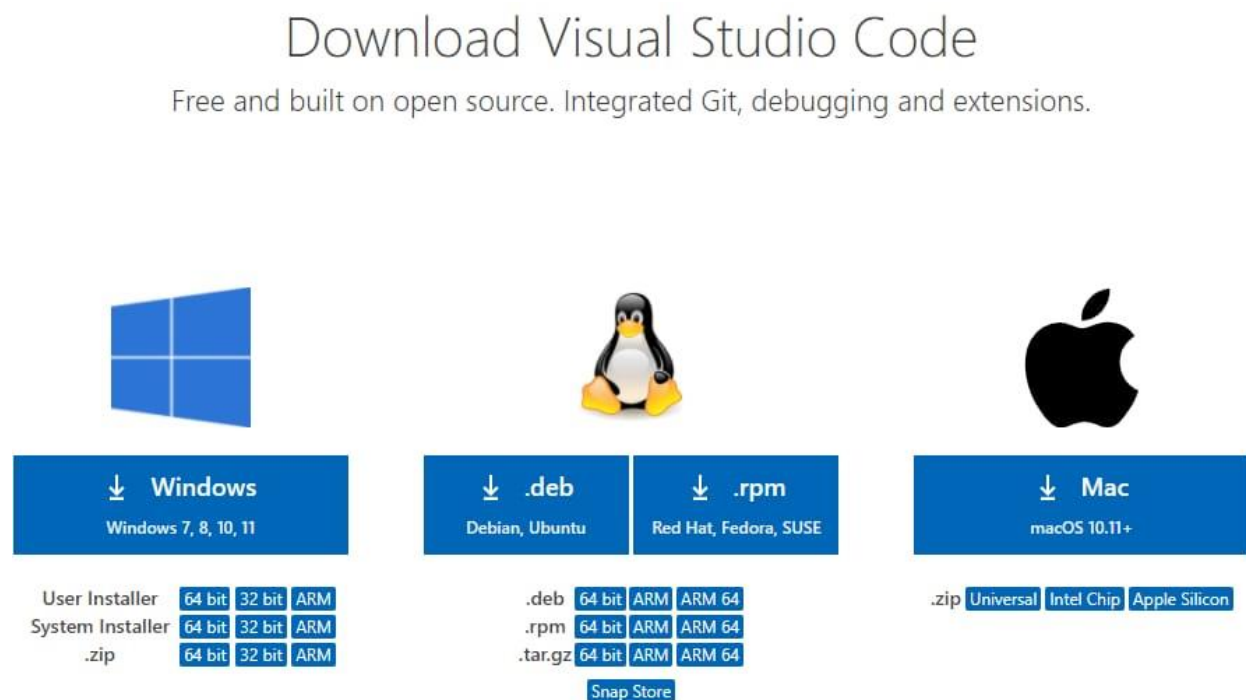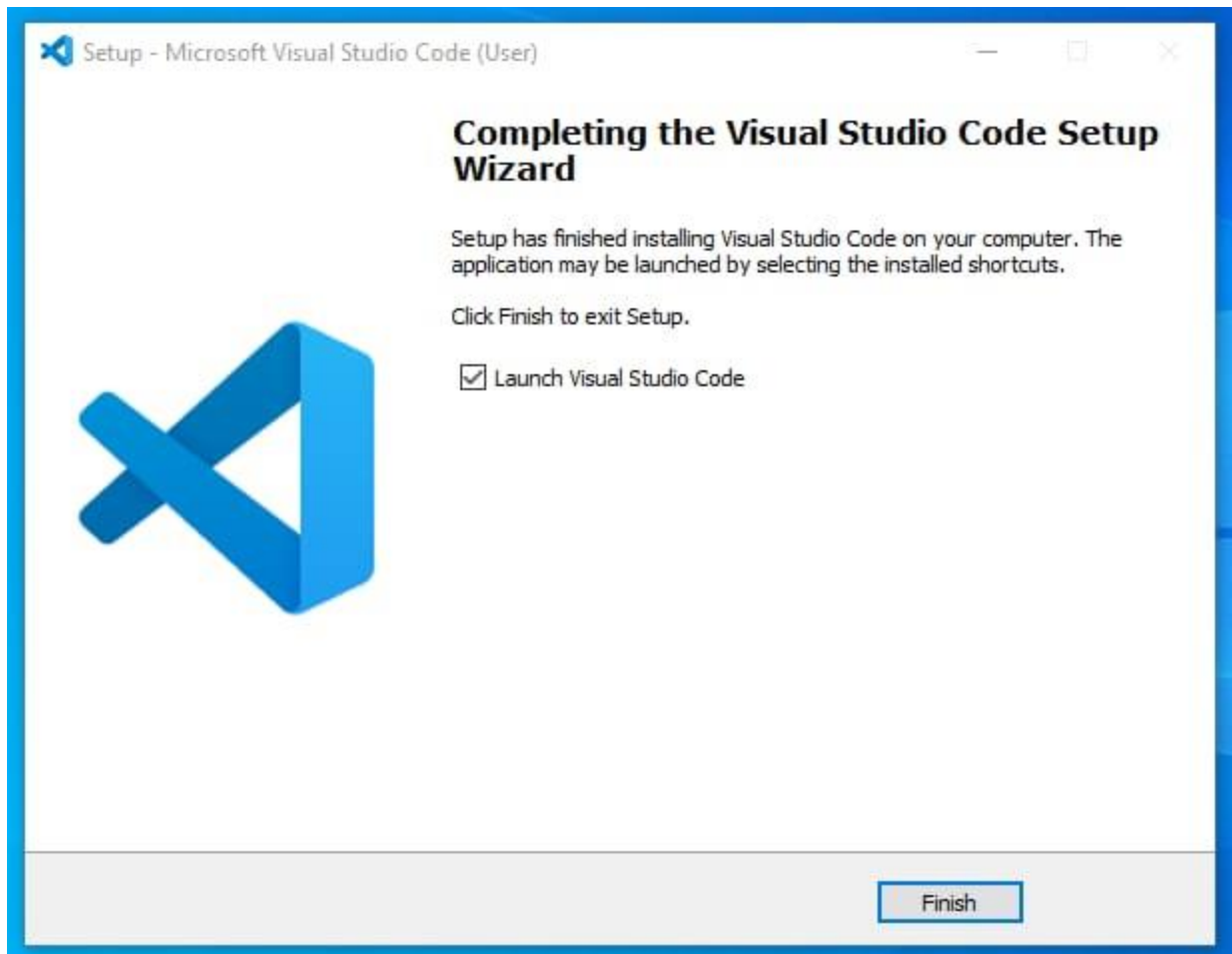**Dickson Siele**

Assignment week 2

Installation of VS Code on Windows 11

  - Visit the official [Visual Studio Code website](https://code.visualstudio.com/Download).

  - Click the download button for Windows.

  - Run the downloaded installer (e.g., VSCodeSetup-{version}.exe).

  - Accept the license agreement, choose the installation location, and install.

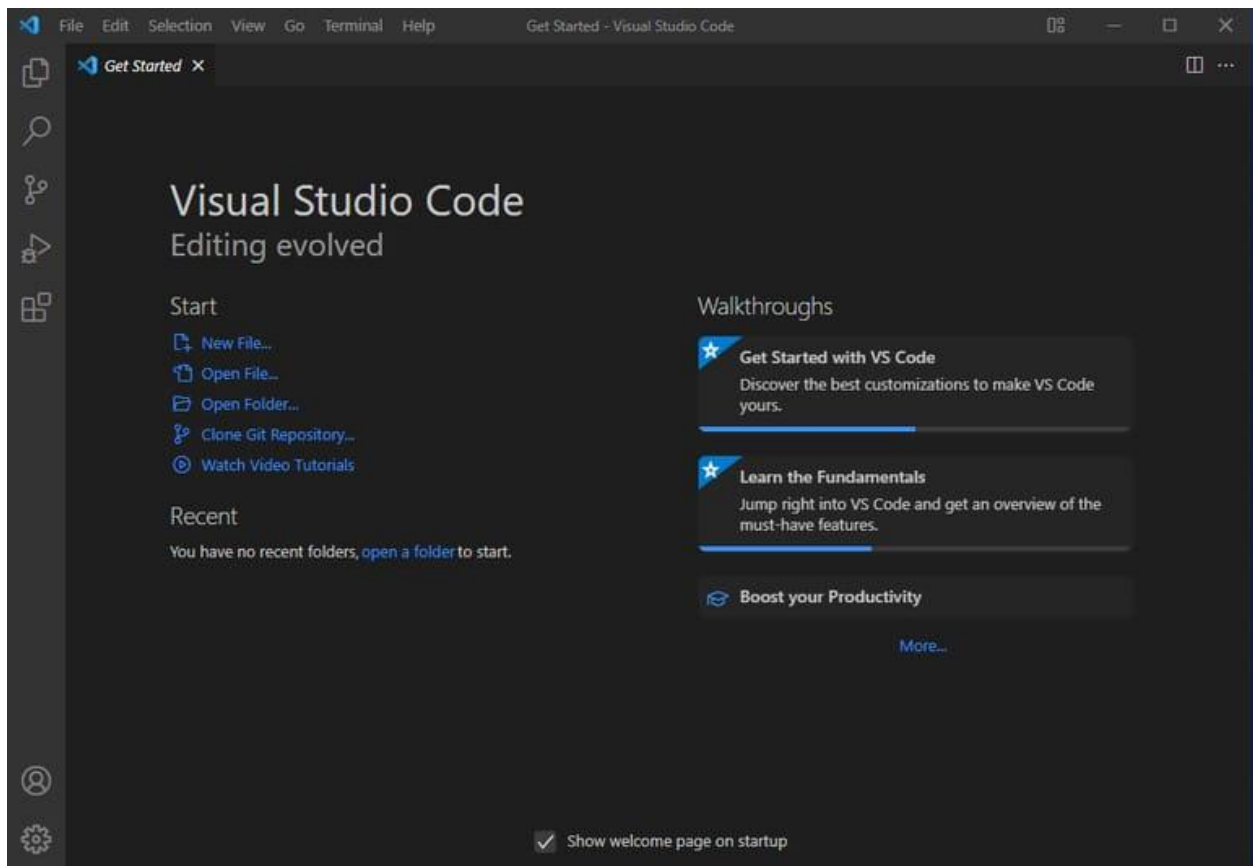 - Launch VS Code from the Start Menu or desktop icon.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

↓ Windows	↓ .deb	↓ .rpm	↓ Mac
Windows 7, 8, 10, 11	Debian, Ubuntu	Red Hat, Fedora, SUSE	macOS 10.11+

User Installer	64 bit	32 bit	ARM
System Installer	64 bit	32 bit	ARM
.zip	64 bit	32 bit	ARM

.deb	64 bit	ARM	ARM 64
.rpm	64 bit	ARM	ARM 64
.tar.gz	64 bit	ARM	ARM 64
Snap Store

| .zip | Universal | Intel Chip | Apple Silicon |

First-time Setup

  - Customize your settings for an optimal coding environment:

  - Install essential extensions (e.g., Python, GitLens, Live Server).

  - Set up keybindings, themes, and font size.

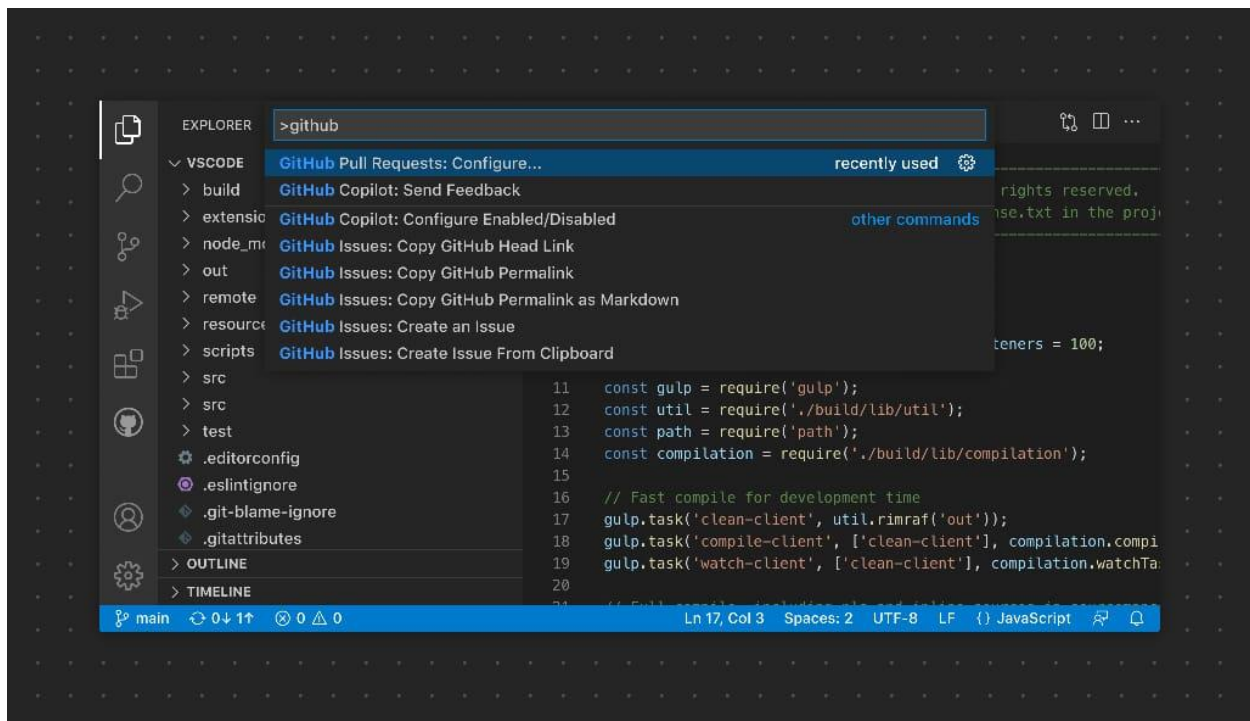 - Configure workspace-specific settings.

User Interface Overview

- *Editor*: Main area for editing files.

- *Primary Side Bar*: Contains views like the Explorer (file navigation).

- *Status Bar*: Displays project information and file details.

- *Activity Bar*: On the left, switches between views (e.g., Explorer, Git).

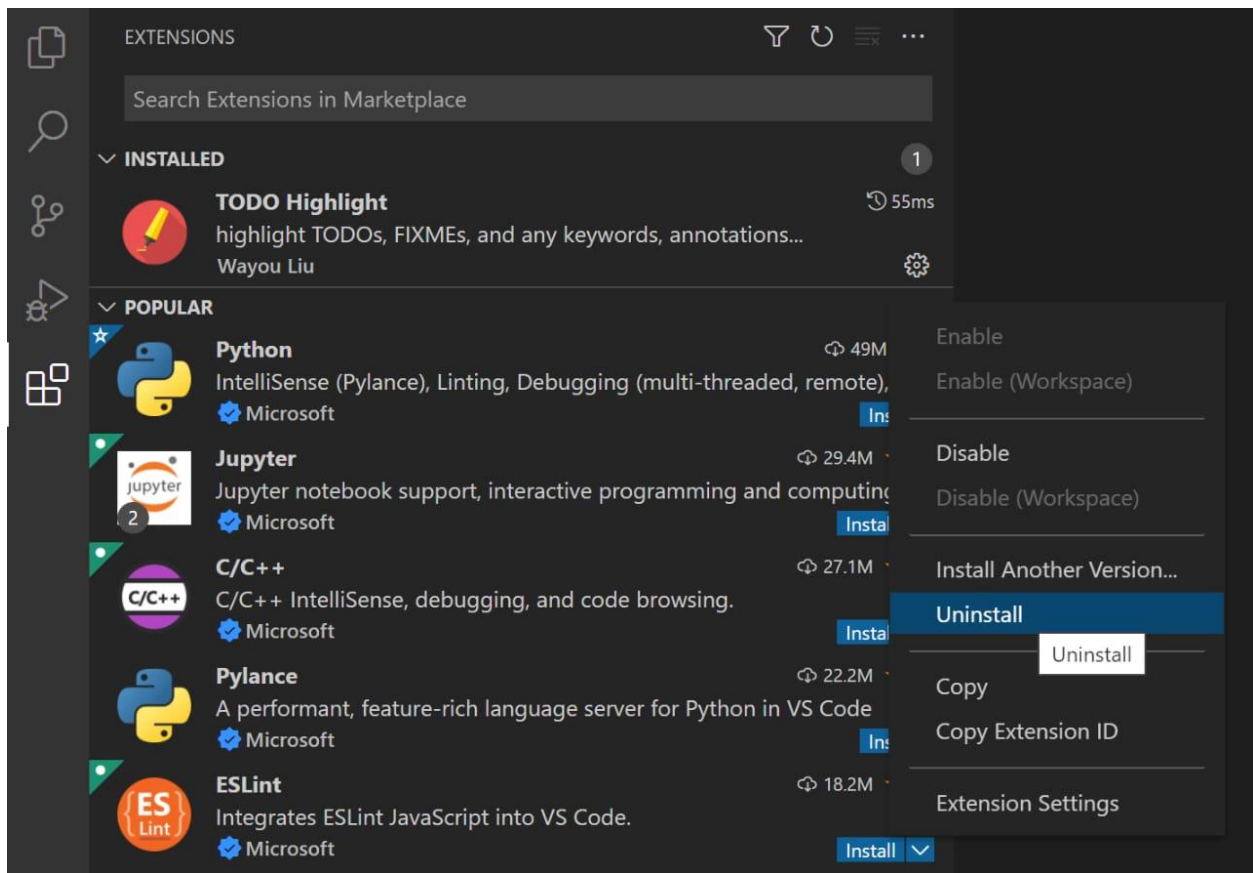- *Panel*: Below the editor, shows output, debug info, and an integrated terminal.

Command Palette

  - The Command Palette lets you access commands, settings, and extensions.

  - Open it with Ctrl+Shift+P (Windows/Linux) or Cmd+Shift+P (Mac).

  - Examples: Install extensions, change themes, run tasks.

Extensions in VS Code

- Extensions enhance functionality (e.g., language support, debugging tools).

- Find and install extensions from the [VS Code Marketplace](https://marketplace.visualstudio.com/).

- Essential extensions for web development: "Live Server," "ESLint," "Prettier."

Integrated Terminal

  - Open the integrated terminal with Ctrl+Backtick (Windows/Linux) or Cmd+Backtick (Mac).

  - Advantages: Seamless integration, no need for an external terminal.

```
TERMINAL                                    bash - hello-world  + ∨  ⊓  🗑  ∧  ✕

   ~ took 508ms
● 〉 mkdir hello-world && cd hello-world

   ~/hello-world
● 〉 git init
   Initialized empty Git repository in /Users/daimms/hello-world/.git/

   ~/hello-world ⌥ main
● 〉 echo "test" > test_file

   ~/hello-world ⌥ main [?]
● 〉 git add . && git commit -m "Hello world!"
   [main (root-commit) c1c1283] Hello world!
    1 file changed, 1 insertion(+)
    create mode 100644 test_file

   ~/hello-world ⌥ main
○ 〉
```
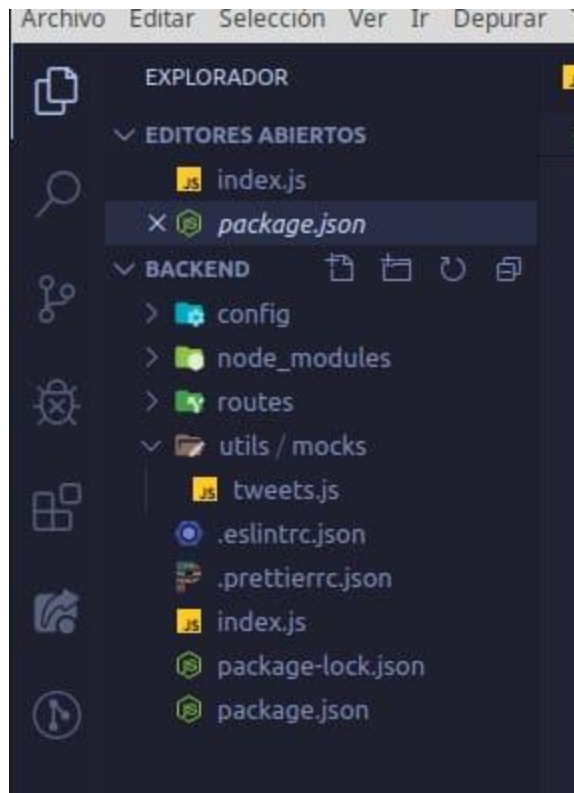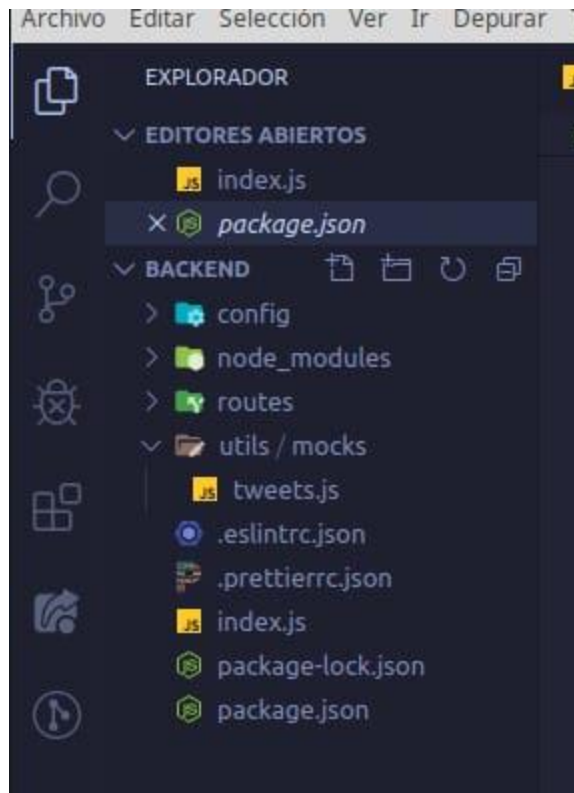
File and Folder Management

  - Create files/folders in Explorer (Side Bar).

  - Navigate efficiently using the Explorer view.

  - Use tabs for open files (Tabs).

Settings and Preferences

- Customize settings in settings.json (accessible via the gear icon in the Status Bar).

- Examples:

  - Change theme: "workbench.colorTheme"

  - Adjust font size: "editor.fontSize"

  - Modify keybindings: "keybindings.json"

Debugging in VS Code

 - Set up debugging:

   - Create a launch configuration (e.g., for Node.js, Python).

   - Add breakpoints in your code.

 - Debug features: Inspect variables, step through code, watch expressions.

```
DEBUG CONSOLE
node --debug-brk=43743 --nolazy fib.js
Debugger listening on port 43743
89

enabled
false
7 + 8
15
range
◢ Object ⓘ
  ▷ child: Object
    endLineNumber: 8
    startColumn: 123
    startLineNumber: 7
    te: "11"
    te6: "11"
    text: "lineContext.getTokenEndIndex(tokenIndex) + 1"
  fib(15)
  987
```

Using Source Control (Git):

   - Initialize a Git repository:

     - Open a folder in VS Code.

     - Click the Git icon in the Activity Bar.

     - Initialize repository.

   - Make commits, push changes to GitHub.

References

https://code.visualstudio.com/docs/getstarted/userinterface

https://microsoft.github.io/vscode-essentials/en/02-basics.html