

Welcome to the Vibe Coding Workshop! Follow the instructions below to transform your laptop into a professional-grade AI development station. Get ready for our upcoming building sessions.

## Phase 1: Core Tool Setup

Before we can build AI apps, we need to install the essential software. Follow the specific instructions for your operating system.

### **Step 1:** Visual Studio Code (The Coding Hub)

VS Code is the primary application where you will write and manage your code.

- \* Download: [code.visualstudio.com](https://code.visualstudio.com)
- \* Windows Setup: Open the .exe, follow the prompts, and keep default settings.
- \* Mac Setup: Open the .zip file, drag the application to your Applications folder, and open it.
- \* Verification: Open VS Code. If it launches and asks you to "Pick a Look," choose Dark Mode for the best developer experience.

### **Step 2:** Python (The Engine)

Python is the programming language that will power our AI logic.

- \* Download: [python.org/downloads](https://python.org/downloads)
- \* Windows Critical Step: During installation, you MUST check the box that says "Add Python to PATH."
- \* Verification: Open a new terminal in VS Code and type `python --version` (Windows) or `python3 --version` (Mac). You should see a version like 3.12.x.

### **Step 3:** Git (The Connection)

Git allows your computer to interact with GitHub to save and share your work.

- \* Windows: Download from [git-scm.com](https://git-scm.com) and install using default "Next" settings.
- \* Mac: Run `git --version` in your terminal. If it's not found, install via the website or run `xcode-select --install`.

## Phase 2: AI & Cloud Integration

Now we will connect your environment to the cloud services that make "Vibe Coding" possible.

#### **Step 4:** GitHub Account & VS Code Sync

- \* Create Account: Sign up at [github.com/join](https://github.com/join).
- \* Connect: In the bottom-left of VS Code, click the Accounts icon and select Sign in with GitHub.

#### **Step 5:** GitHub Copilot (Your AI Partner)

Copilot is an AI that suggests code as you type.

- \* Installation: Search for the GitHub Copilot extension in the VS Code Extensions menu and install it.
- \* Student Pro Tip: Students can get the Pro version for free by verifying their status at [education.github.com/pack](https://education.github.com/pack).

#### **Step 6:** OpenAI API Access

This gives your code access to powerful models like GPT-4.

- \* Generate Key: Go to [platform.openai.com](https://platform.openai.com), navigate to API Keys, and create a new secret key named "Vibe Workshop."
- \* Secure Your Key: \* Windows: Run `setx OPENAI_API_KEY "YOUR_KEY_HERE"` in the terminal.
- \* Mac: Run `export OPENAI_API_KEY="YOUR_KEY_HERE"` in the terminal.

### **Phase 3: The Final Test**

Let's ensure everything is working together perfectly.

- \* Create a Folder: Use File -> Open Folder to create a new folder named vibe-workshop.
- \* Create a File: Create a new file called test.py.
- \* Add Code: Paste the following line: `print("My coding station is ready 🚀")`.
- \* Run: Click the Run button.

If you see the message "My coding station is ready 🚀" in your terminal, you have successfully completed the setup!

### **Troubleshooting & Support**

Troubleshooting is an essential skill. If you hit a roadblock:

- \* Search the Error: Copy the error message and search for it on Google.
- \* Ask AI: Use ChatGPT or an LLM tool to explain the error and suggest a fix.
- \* Reach Out: If you are still stuck after trying steps 1 and 2, please email the workshop facilitator for assistance.