Setting Up Your Python Environment with VS Code, GitHub, and Copilot

This tutorial will guide you through:

- 1. Installing Anaconda (Python)
- 2. Installing Visual Studio Code
- 3. Installing Git
- 4. Configuring Python in VS Code
- 5. Creating a GitHub Account
- 6. Activating GitHub Copilot

1. Install Anaconda

1.1 Download Anaconda

- Link: Anaconda3-2024.10-1-Windows-x86_64.exe
- Save the installer to your preferred location.

1.2 Run the Installer

- Double-click the downloaded .exe file.
- Click Yes if prompted by Windows User Account Control.

1.3 Follow the Setup Wizard

- Click **Next** on the welcome screen.
- Accept the license agreement.
- Choose "Just Me" (personal) or "All Users" (system-wide).
- Optional: Check the box to Add Anaconda to my PATH environment variable.
 Note: This makes it easier to use conda and python from any terminal but may lead to PATH conflicts.

1.4 Finish Installation

• After installation completes, you can launch the **Anaconda Prompt** or open your default shell (if you added Anaconda to PATH).

1.5 Verify Installation

Open Anaconda Prompt or Command Prompt:

```
conda --version
python --version
```

You should see the versions for conda and python.

2. Install Visual Studio Code

2.1 Download VS Code

- Link: VS Code (Windows User Installer)
- Save the .exe file.

2.2 Run the Installer

- Double-click the .exe.
- Click **Yes** if prompted by Windows User Account Control.

2.3 Follow the Setup Wizard

- Accept the license agreement.
- Installation location: Use the default unless you have specific needs.
- Select Additional Tasks:
 - Add to PATH (recommended so you can run code from the terminal).
 - Register Code as an editor for supported file types.

2.4 Finish Installation

- Click Install, then Finish.
- Launch VS Code when prompted.

3. Install Git

3.1 Download Git

• Link: Git-2.47.1-64-bit.exe

3.2 Run the Installer

- Double-click the .exe.
- Click Yes for Windows User Account Control.

3.3 Follow the Setup Wizard

- Accept the license agreement.
- Default settings are generally fine:
 - Choose Use Git from the Windows Command Prompt to put Git in your PATH.

3.4 Finish Installation

• Verify by opening a terminal and running:

```
git --version
```

4. Configure Python in VS Code

4.1 Open VS Code

 Launch Visual Studio Code from the Start Menu or by typing code in a terminal (if you added it to PATH).

4.2 Install the Python Extension

- Click on the **Extensions** icon (Ctrl+Shift+X) in VS Code.
- Search "Python" (published by Microsoft).
- Click Install.
- Reload VS Code if prompted.

4.3 Select Your Python Interpreter

- Open the **Command Palette** (Ctrl+Shift+P).
- Type Python: Select Interpreter.
- Pick your **Anaconda** environment (e.g., base: conda).

4.4 Verify the Python Environment

• Create a new file named test.py:

```
print("Hello, Anaconda!")
```

• Press F5 or go to **Run** > **Start Debugging** to confirm everything works.

5. Create a GitHub Account

5.1 Sign Up on GitHub

- Link: https://github.com
- Click **Sign up** in the top-right corner.

5.2 Fill in Details

- Enter your email address, username, and password.
- Solve the CAPTCHA if prompted.

5.3 Choose a Plan

• Pick **GitHub Free** (or another plan if you need advanced features).

5.4 Complete Sign-up

Verify your email if needed.

• Now you have a GitHub account.

6. Activate GitHub Copilot

GitHub Copilot usually requires a subscription or a free trial.

copilot for vs: https://code.visualstudio.com/docs/copilot/setup

Enjoy your new development environment and happy coding!