Tutorial: Setting up Conda Environment and Running Jupyter Notebook

This tutorial guides you through downloading Anaconda, setting up a conda environment called cs5404, and running Jupyter Notebook using a requirements.txt file.

Step 1: Download and Install Anaconda

- 1. Go to the official Anaconda website.
- 2. Choose your operating system (Windows, macOS, Linux).
- 3. Download the installer (preferably the latest **Anaconda Distribution**).
- 4. Run the installer and follow the on-screen instructions.
 - On Windows, check the box to "Add Anaconda to PATH" (recommended).
 - On macOS/Linux, installation will add conda to your shell.

After installation, verify conda is available:

conda --version

Step 2: Create a Conda Environment

- 1. Open **Anaconda Prompt** (Windows) or terminal (macOS/Linux).
- 2. Create a new environment named cs5404 with Python 3.10 (it can be from 3.8-3.11):

conda create -n cs5404 python=3.10 -y

3. Activate the environment:

conda activate cs5404

Step 3: Install Packages from requirements.txt

- 1. Place your requirements.txt file in a known folder (e.g., Downloads).
- 2. Run the following command to install dependencies:

pip install -r requirements.txt

Step 4: Install and Launch Jupyter Notebook

- 1. Install Jupyter inside your environment: conda install jupyter -y
 - 2. Launch Jupyter Notebook:

jupyter notebook

3. This will open Jupyter Notebook in your browser. You can now create and run .ipynb notebooks.

Step 5: Verify Installation

Inside a notebook cell, run:

```
import sys
print(sys.executable)
```

It should show the Python executable path under your cs5404 environment.

Summary

- Installed Anaconda
- Created conda environment cs5404
- Installed dependencies from requirements.txt
- Installed and launched Jupyter Notebook