How to Create a Python Virtual Environment (Step-by-Step)

1. Open Command Prompt (CMD):

Press Win + R, type 'cmd', and hit Enter.

2. Check if Python is installed:

Run: python --version

You should see the version of Python installed.

3. Navigate to your project directory:

Use the cd command to go to your desired folder:

Example: cd F:\Projects\MyApp

4. Create the virtual environment:

Run: python -m venv venv

This creates a folder named 'venv' in your current directory.

5. Activate the virtual environment:

On Windows CMD: venv\Scripts\activate.bat

On PowerShell: .\venv\Scripts\Activate.ps1

You should see (venv) in your command prompt.

6. Install required packages:

Run: pip install <package-name>

Example: pip install flask

7. Freeze dependencies to requirements.txt:

Run: pip freeze > requirements.txt

8. Deactivate the virtual environment when done:

Run: deactivate