

# Creating a Python Virtual Environment for a Project

Here are simple, step-by-step instructions to create a Python virtual environment for your project:

## Using venv (Python's built-in virtual environment module)

1. **Navigate to your project directory** in your terminal:

2. `cd path/to/your/project`

3. **Create the virtual environment:**

4. `python -m venv venv`

This creates a directory called `venv` in your project folder containing the virtual environment.

5. **Activate the virtual environment:**

- On Windows:
  - `venv\Scripts\activate`
- On macOS or Linux:
  - `source venv/bin/activate`

6. **Verify it's activated** - you should see `(venv)` at the beginning of your command prompt.

7. **Update pip** (recommended):

8. `pip install --upgrade pip`

9. **Install your project dependencies:**

10. `pip install package_name`

Or if you have a requirements.txt file:

`pip install -r requirements.txt`

11. **To deactivate** the virtual environment when you're done:

12. `deactivate`

That's it! Your isolated Python environment is ready for development.