

# CREATE FLASK PROJECT

## Step 1: Install Virtual Environment

### Install virtualenv on Windows

1. Open the command line with administrator privileges.
2. Use `pip` to install *virtualenv* on Windows:

```
py -2 -m pip install virtualenv
```

## Step 2: Create an Environment

1. Make a separate directory for your project:

```
Mkdir project
```

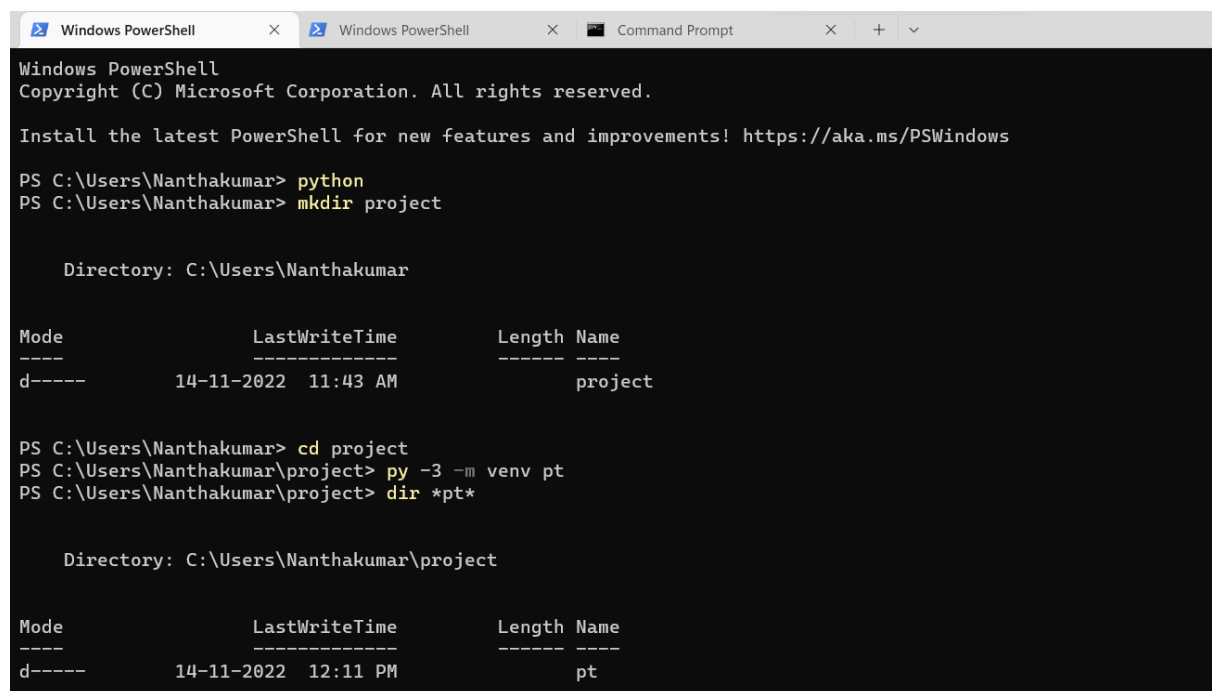
2. Move into the directory:

```
Cd project
```

3. Within the directory, create the virtual environment for Flask. When you create the environment, a new folder appears in your project directory with the environment's name.

Create virtual environment in windows:

```
py -3 -m venv pt
```



```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Nanthakumar> python
PS C:\Users\Nanthakumar> mkdir project

Directory: C:\Users\Nanthakumar

Mode                LastWriteTime         Length Name
----                -
d-----          14-11-2022  11:43 AM             project

PS C:\Users\Nanthakumar> cd project
PS C:\Users\Nanthakumar\project> py -3 -m venv pt
PS C:\Users\Nanthakumar\project> dir *pt*

Directory: C:\Users\Nanthakumar\project

Mode                LastWriteTime         Length Name
----                -
d-----          14-11-2022  12:11 PM             pt
```

## Step 3: Activate the Environment

Activate the virtual environment before installing Flask. The name of the activated environment shows up in the CLI after activation.

## Activate the Environment on Windows

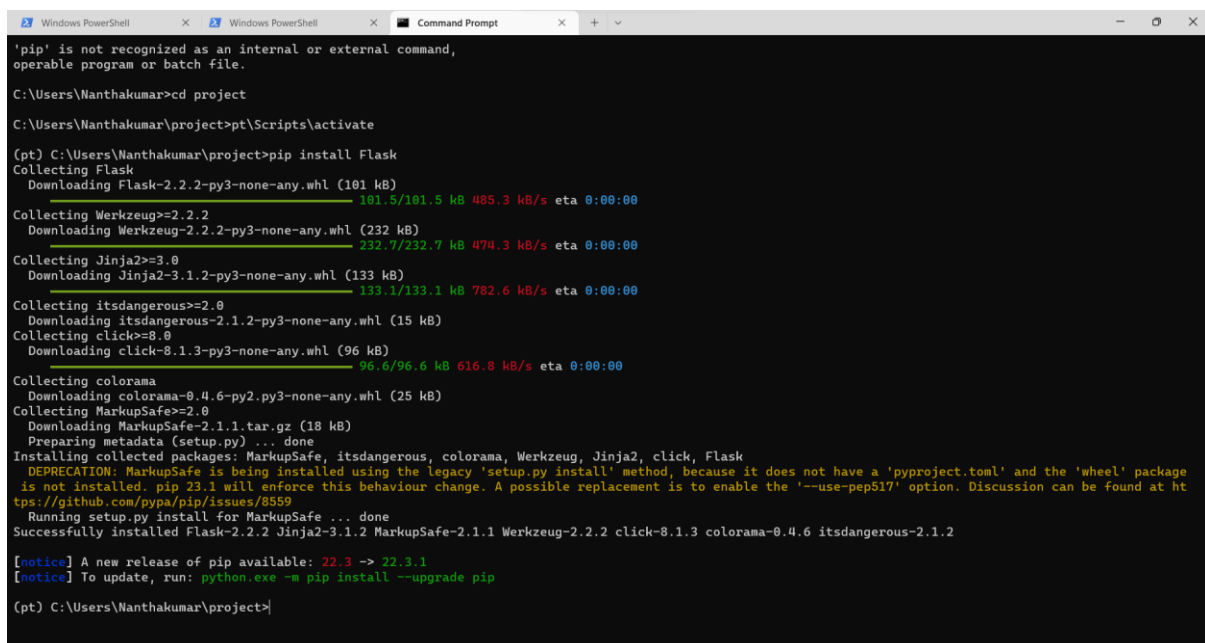
For Windows, activate the virtual environment with:

```
pro\Scripts\activate
```

## Step 4: Install Flask

Install Flask within the activated environment using `pip`:

```
pip install Flask
```



```
Windows PowerShell
'pip' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Nanthakumar>cd project
C:\Users\Nanthakumar\project>pt\Scripts\activate
(pt) C:\Users\Nanthakumar\project>pip install Flask
Collecting Flask
  Downloading Flask-2.2.2-py3-none-any.whl (101 kB)
    101.5/101.5 kB 485.3 kB/s eta 0:00:00
Collecting Werkzeug>=2.2.2
  Downloading Werkzeug-2.2.2-py3-none-any.whl (232 kB)
    232.7/232.7 kB 474.3 kB/s eta 0:00:00
Collecting Jinja2>=3.0
  Downloading Jinja2-3.1.2-py3-none-any.whl (133 kB)
    133.1/133.1 kB 782.6 kB/s eta 0:00:00
Collecting itsdangerous>=2.0
  Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting click>=8.0
  Downloading click-8.1.3-py3-none-any.whl (96 kB)
    96.6/96.6 kB 616.8 kB/s eta 0:00:00
Collecting colorama
  Downloading colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Collecting MarkupSafe>=2.0
  Downloading MarkupSafe-2.1.1.tar.gz (18 kB)
  Preparing metadata (setup.py) ... done
Installing collected packages: MarkupSafe, itsdangerous, colorama, Werkzeug, Jinja2, click, Flask
DEPRECATION: MarkupSafe is being installed using the legacy 'setup.py install' method, because it does not have a 'pyproject.toml' and the 'wheel' package
is not installed. pip 23.1 will enforce this behaviour change. A possible replacement is to enable the '--use-pep517' option. Discussion can be found at ht
tps://github.com/pypa/pip/issues/8559
Running setup.py install for MarkupSafe ... done
Successfully installed Flask-2.2.2 Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.6 itsdangerous-2.1.2

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip

(pt) C:\Users\Nanthakumar\project>
```

## Step 5: Test the Development Environment

1. Create a simple Flask application to test the newly created development environment.
2. Make a file in the Flask project folder called *hello.py*.
3. Edit the file using text editor and add the following code to make an application that prints "*Hello world!*":

```
from flask import Flask
```

```
app = Flask(__name__)
```

```
@app.route('/')
```

```
def hello_world():
```

```
    return 'Hello world!'
```

```
(pt) C:\Users\Nanthakumar\project>set FLASK_APP=hw
(pt) C:\Users\Nanthakumar\project>flask run
* Serving Flask app 'hw'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [14/Nov/2022 12:29:14] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [14/Nov/2022 12:29:14] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [14/Nov/2022 12:29:29] "GET / HTTP/1.1" 200 -
```

