**Plotly with Jupyterlab**

1. Open command prompt and ‘cd’ into your main directory
2. Create directory where you want to develop your project/app, by typing: mkdir foldername
3. cd into the new folder
4. Create a virtual environment, by typing: py -m venv EnvironmentName
5. Activate your new environment, by typing: .\EnvironmentName\Scripts\activate
6. Install required libraries into activated virtual environment:

pip install pandas

pip install plotly==5.0.0

pip install dash==1.20.0

pip install "jupyterlab>=3" "ipywidgets>=7.6"

1. Check the full list of libraries you just installed, by typing: pip list
2. Start Jupyterlab by typing: jupyter lab
3. Run your app

\***Bonus**: you can save your jupyter file (.ipynb) as a python file (.py) and run it in Pycharm or any other IDE. Inside Jupyterlab, use the *File* >*Export* *Notebook As…* > *Executable Script*.

\*\***Bonus**: JupyterLab Github and other Awesome Exntensions- <https://towardsdatascience.com/awesome-jupyterlab-extensions-90c2d64d244>

**Plotly with Jupyter Notebook**

1. Open command prompt and ‘cd’ into your main directory
2. Create directory where you want to develop your project/app, by typing: mkdir foldername
3. cd into the new folder
4. Create a virtual environment, by typing: py -m venv EnvironmentName
5. Activate your new environment, by typing: .\EnvironmentName\Scripts\activate
6. Install required libraries into activated virtual environment:

pip install pandas

pip install plotly==5.0.0

pip install dash==1.20.0

pip install "notebook>=5.3" "ipywidgets>=7.5"

1. Check the full list of libraries you just installed, by typing: pip list
2. Start Jupyterlab by typing: jupyter notebook
3. Run your app

| My goal is to help people build careers in data visualization so they can grow as professionals and develop their communities. If you appreciate my work and are able to support me, I would be grateful to you.  <https://www.patreon.com/charmingdata>  <https://www.youtube.com/channel/UCqBFsuAz41sqWcFjZkqmJqQ/join>  By joining my community, you can get access to members' only posts, my private GitLab repository. Thank you. |
| --- |

**Install Python 3.8, Virtual Environments using Pipenv on MacOS**

This guide is from: <https://www.codingforentrepreneurs.com/blog/install-django-on-mac-or-linux/>

## 1. Install Python 3.8

Installing Python is much like installing any other program: go to their website, download the software, install it.

Below this guide, we have an archived guide using [homebrew](https://brew.sh/) and virtualenv for installation.

1. Go to [python.org/downloads/mac-osx](https://www.python.org/downloads/mac-osx/)

2. Under Stable Releases look for: Python 3.8.X and replace X with the largest number you can find. Under that, click the link to download the macOS 64-bit installer

3. After the installer downloads, open it, and install all the defaults.

4. Verify Installation: - Open up Terminal in (Applications/Utilities/Terminal) - Verify the version from above by typing:

```

python3.8 -V

```

Does the result match the stable release you downloaded? Great. Continue.

## 2. Install Pipenv Globally

1. Open Terminal in (Applications/Utilities/Terminal) and upgrade pip:

```

python3.8 -m pip install pip --upgrade

```

Another option to upgade, is `pip3 install pip --upgrade`

2. Install Pipenv:

```

python3.8 -m pip install pipenv

```

Another option to upgade, is `pip3 install pipenv --upgrade`

3. Verify Pipenv:

```

pipenv

```

If you see `zsh: command not found: pipenv` then you did the wrong installation.

## 3. Create Virtual Environment with Pipenv

1. Open Terminal in (Applications/Utilities/Terminal)

2. Make Dev directory:

```

mkdir Dev

```

You only have to do this 1 time

3. Create an empty directory (aka folder) for your project inside ~/Dev folder:

```

mkdir ~/Dev/cfehome

```

4. Initialize the Virtual Environment:

```

cd ~/Dev/cfehome

pipenv install --python 3.8

```

5. Activate the Virtual Environment:

```

pipenv shell

```

You can use the command `deactivate` to end your virtual environment.