**Jupyterlab**

**Python Virtual Environment:**

1. Open command prompt and ‘cd’ into your main directory, and create folder where you would like to start developing your project/app
2. Create virtual environment:
   1. On macOS and Linux, type: python3 -m venv env
   2. On Windows, type: py -m venv env
3. Activate your new environment:
   1. On macOS and Linux, type: source env/bin/activate
   2. On Windows, type: .\env\Scripts\activate
4. Install required libraries: (make sure you have pip installed with pip help)
   1. pip install numpy==1.18.1
   2. pip install pandas==1.0.0
   3. pip install plotly==4.8.0
   4. pip install dash==1.13.3
   5. pip install Jupyterlab
5. To run Dash inside Jupyter lab:
   1. Type: pip install jupyter-dash
   2. Type: jupyter lab build (this step needs Node.js and NPM installed on your computer. To check whether you have Node and NPM on your computer, just type node -v and npm -v into command prompt. If you need to install these packages, go to <https://nodejs.org/en/>)
6. To run Plotly figures inside jupyter lab:
   1. Type: pip install jupyterlab "ipywidgets>=7.5
   2. Type: jupyter labextension install jupyterlab-plotly@4.8.2 (aslo requires Node.js and NPM)
7. Start Jupyterlab by typing: jupyter lab

\*\***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* menu entry.

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**Helpful links**

<https://medium.com/plotly/introducing-jupyterdash-811f1f57c02e>

<https://github.com/plotly/jupyter-dash>

<https://plotly.com/python/getting-started/#jupyterlab-support-python-35>

<https://plotly.com/python/bar-charts/>