**What is Plotly dash?**

Dash is an open sourced Python framework for building responsive analytical web applications which do not require any JavaScript/HTML/CSS Coding.

Dash is comparable framework in Python which is comparable to shiny in R studio (A R package which is used for several purposes such as graphing/machine learning etc.)

Dash is written on top of **Flask** (Web Framework which provides tools, libraries and technologies to build a web application), **Plotly.js** (A high-level charting library with 20 chart types, including 3D Charts, statistical Graphs & SVG maps) and **React.js** (React.js is a JavaScript library for building user interfaces).

Hence, with Dash, users can build interactive user interfaces (UI) of highly responsive charts/graphs which can then be published/displayed on the internet as an online dashboard that can be shared through URLs. Dash is mobile friendly which means that the charts can be viewed on a mobile device.

Example: <https://dash-gallery.plotly.host/dash-oil-and-gas/>

**Why Plotly instead of other frameworks?**

There are several other python visualizing frameworks out there such as “Matplotlib” or “Seaborn” which are able to come up with nice charts & is relatively easy to learn. However their outputs are not interactive as the charts are rendered as an image file. This means that there will not be any form of tooltips popups if you hover on the charts or sliders/textbox filters for user to have full control with the chart outputs.

With Plotly, the charts are interactive allowing users to have full control & understanding over the charts during visualization.

**Cons**

~Does not work on jupyter notebook. Have to use another environment such as PyCharm..

**Installation**

pip install dash==1.6.0 # The core dash backend

pip install dash-daq==0.2.1 # DAQ components (newly open-sourced!)

**Refer to Plotly Graphing Library to learn chart types:**

<https://plot.ly/python/>