Streamlit and Plotly Tutorial

1. Installation(For Windows, Mac is easier and similar to this)

Streamlit's officially-supported environment manager on Windows is Anaconda Navigator.

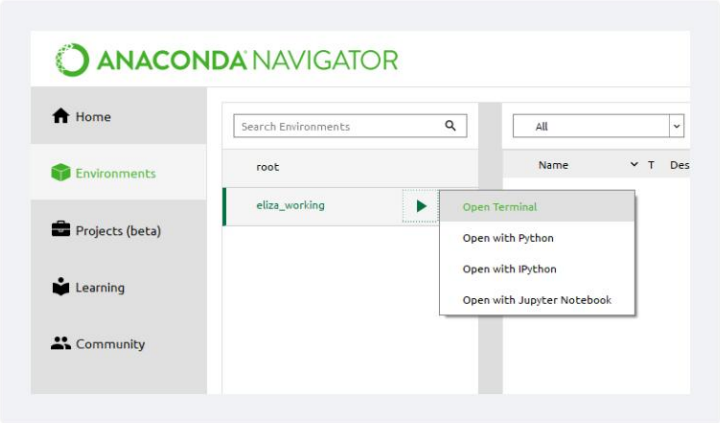
Install Anaconda

If you don't have Anaconda install yet, follow the steps provided on the Anaconda installation page.

Create a new environment with Streamlit

Next you'll need to set up your environment.

1. Follow the steps provided by Anaconda to set up and manage your environment using the Anaconda Navigator.
2. Select the "▶" icon next to your new environment. Then select "Open terminal":



3. In the terminal that appears, type:

```
pip install streamlit
```

4. Test that the installation worked:

```
streamlit hello
```

Streamlit's Hello app should appear in a new tab in your web browser!

Use your new environment

1. In Anaconda Navigator, open a terminal in your environment (see step 2 above).
2. In the terminal that appears, use Streamlit as usual:

```
streamlit run myfile.py
```

Install plotly, pandas and numpy also through pip
Run below code in cmd or console:

pip install plotly
pip install pandas
pip install numpy

2. How to run streamlit file(Result is a pop up local website)

Create a py file called app.py
In the py file, write below code:

```
import streamlit as st
st.write("Hello World!")
```

If the installation is correct, run the py file should pop up some suggestion not errors.
In Anaconda Console, run:

```
python app.py
```

Remember to switch to the folder containing app.py file in console

If above works, try running:

```
streamlit run app.py
```

If everything's correct, a local webpage should be pop up with "Hello World!".

3. Load Data File and Plot Charts using plotly and streamlit

Below is the link to Tutorial Example:
http://github.com/DaG0ng/EsportPlayer-Web-Page

First run test.py in the folder for first step tutorial

```
import pandas as pd
import streamlit as st
import plotly.express as px
import plotly.graph_objects as go
from sklearn.linear_model import LinearRegression
from sklearn.preprocessing import PolynomialFeatures
import numpy as np

# Print the title
st.title("Streamlit Tutorial")
```

```
# Print a line of text
st.write("Hello World!")
```

```
# Load some data in csv and show them
df = pd.read_csv("data/line-chart-data.csv")
```

```
st.write(df)
```

```
# Use plotly to display the line chart of dataframe we loaded
# Create a streamlit selectbox which can narrow down certain data we
need
game = ['All']
game += list(df['Name'].unique())
values = st.selectbox("Select Game",game)
```

```
if values != 'All':
    selected_df = df.where(df['Name']==values)
    selected_df = selected_df.dropna()
else:
    selected_df = df
    selected_df = selected_df.dropna()
```

```
# Now create the chart using plotly
f = px.line(selected_df, x="Year", y="Tournaments#",title='Tournament
per Year',color='Name')
```

```
# Use streamlit to show the plotly chart object n
st.plotly_chart(f)
```

After run below code in console:

```
streamlit run test.py
```

Don’t close the pop up webpage and edit something in the py file like change

```
st.title("Streamlit Tutorial")
```

To

```
st.title("Change for fun")
```

You'll see a few buttons in the upper-right corner of the webpage asking if you'd like to rerun the app. Choose **Always rerun**, and you'll see your changes automatically each time you save.

In this way, you can have the live view of the webpage you are working on.

4. Plot charts using plotly and streamlit

Check the app.py

5. Deploy Streamlit Page to the Internet

Check streamlit cloud below, it can deploy page free

https://streamlit.io/cloud

6. References

Streamlit Tutorial:
https://docs.streamlit.io/library/get-started
Plotly Express Tutorial:
https://plotly.com/python/plotly-express/
Link to the example page:
https://github.com/DaG0ng/EsportPlayer-Web-Page