Exercise Create a Simple Dashboard

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In [1]: import plotly.offline as pyo
         import plotly.graph_objs as go
         from plotly import subplots
         import plotly
         import dash
         import dash_core_components as dcc
         import dash_html_components as html
         import pandas as pd
         versions_of_modules_used = {dash.__name__ : dash.__version__,
                                     dcc.__name__ : dcc.__version__,
                                     plotly.__name__ : plotly.__version__,
                                     html.__name__ : html.__version__,
                                     pd.__name__ : pd.__version__}
         for i, j in versions_of_modules_used.items():
                 print(i, "=", j)
        dash = 1.20.0
        dash_core_components = 1.16.0
        plotly = 5.1.0
        dash_html_components = 1.1.3
        pandas = 1.1.3
                                                                                                               Module Name
                                                                                                                              Module Versions
                                                                                                                                  1.20.0
                                                                                                                   dash
                                                                                                            dash_core_components
                                                                                                                                  1.16.0
                                                                                                                                  5.1.0
                                                                                                                   plotly
                                                                                                            dash_html_components
                                                                                                                                  1.1.3
                                                                                                                  pandas
                                                                                                                                  1.1.3
In [2]: old_faithful_data_csv = pd.read_csv("OldFaithful.csv", usecols = ['Y', 'X'])
         old_faithful_data_csv
Out[2]:
             Y X
          0 78 4.4
          1 74 3.9
          2 68 4.0
          3 76 4.0
          4 80 3.5
        217 61 2.1
        218 81 4.2
        219 48 2.1
        220 84 5.2
        221 63 2.0
        222 rows × 2 columns
In [3]: data = [go.Scatter(x = old_faithful_data_csv['X'],
                            y = old_faithful_data_csv['Y'],
                            mode = 'markers',
                            hovertemplate='Duration of eruption (minutes): %{x}<br/>br>Interval to next eruption (minutes): %{y}',
                             name='A Dash<br>App<br>Exercise',
                             marker = dict(size = 10,
                                          color = "#0099ff"))]
In [4]: layout = go.Layout(title = 'Old Faithful Eruption Intervals v Durations',
                            xaxis = {'title': 'Duration of eruption (minutes)'},
                            yaxis = {'title': 'Interval to next eruption (minutes)'},
                            hovermode='closest',
                            title_x = 0.5
In [5]: fig = go.Figure(data, layout)
In [6]: fig.show()
        \odot
        Q+ $\text{$\varphi$}
        iiii
                90
                80
                70
                60
                50
                 40
                  1.5
                                                 2.5
                                                                                 3.5
                                                                                                                                 5
In [7]: pyo.plot(data, filename="tutorial_1 (Exercise Create a Simple Dashboard){Graph}.html")
Out[7]: 'tutorial_1 (Exercise Create a Simple Dashboard){Graph}.html'
In [8]: heading_style = {'font-size' : '50px',
         'line-height' : '40px',
```

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'margin' : '1em 0 .6em 0',
           'font-weight' : 'normal',
           'color' : 'white',
           'font-family' : 'Hammersmith One',
           'text-shadow' : '0 1px 0 rgba(0,0,0,0.4)',
           'position' : 'relative',
           'color' : '#6Cf',
           'text-align' : 'center',}
In [9]: app = dash.Dash()
          app.layout = html.Div(children = [html.H1("Exercise Create a Simple Dashboard", style = heading_style),
                                                  dcc.Graph(id = "ScatterPlots for Exercise",
                                                             figure = fig)])
          app.run_server()
         Dash is running on http://127.0.0.1:8050/
           * Serving Flask app "__main__" (lazy loading)
           * Environment: production
             WARNING: This is a development server. Do not use it in a production deployment.
             Use a production WSGI server instead.
           * Debug mode: off
          * Running on http://127.0.0.1:8050/ (Press CTRL+C to quit)
         127.0.0.1 - - [07/Jul/2021 17:37:23] "GET / HTTP/1.1" 200 - 127.0.0.1 - - [07/Jul/2021 17:37:23] "GET /_dash-layout HTTP/1.1" 200 - 127.0.0.1 - - [07/Jul/2021 17:37:23] "GET /_dash-dependencies HTTP/1.1" 200 -
```