SUPER DATASCIENCE
MAKING THE COMPLEX SIMPLE

CASE STUDY 034
[Python]
Interactive Visualizations with Plot.ly

Here are some clues in case you are stuck with the case study:

1. To install plot.ly, from Anaconda command prompt, run:
```
pip install plotly
```

2. You will need to import these libraries:
```
import plotly as py

import plotly.graph_objs as go

import ipywidgets as widgets

import pandas as pd
```

3. To set plot.ly to work offline, the code is:
```
py.offline.init_notebook_mode(connected=True)
```

4. You can get / set all the column names of a dataframe at once using:
```
df.columns
```

5. To make a plot using plot.ly, you have to create a figure with data and layout. Then you need to plot. The code is:
```
layout = go.Layout(title = '', yaxis = dict(title = ''), xaxis =
dict(title = ''))

data = go.Scatter (x = df['iu_2000'], y = df['pc_2000'],
mode='markers', text = df['Country Name'], marker=dict(size = 10,
opacity = 0.7, color=df['Continent Color']))

fig = go.Figure(data = [data] , layout = layout)

py.offline.iplot(fig)
```

6. To create a select widget, the code is:
```
year = widgets.Select(options=list_years, description ='Years')
```

7. To make the widget interactive, you have to specify the function name and the parameters:
```
widgets.interactive(update_year, year = year)
```