Bokeh Tutorial

(http://bokeh.pydata.org/)

07. Exporting and Embedding

Some Setup

In [ ]:
```
import pandas as pd

from bokeh.plotting import figure
from bokeh.sampledata.stocks import AAPL

df = pd.DataFrame(AAPL)
df['date'] = pd.to_datetime(df['date'])
```

Displaying in the Notebook

In [3]:
```
from bokeh.io import output_notebook, show
output_notebook()
```

(https://bokeh.pydata.org)

BokehJS 0.12.14 successfully loaded.

In [ ]:
```
p = figure(plot_width=800, plot_height=250, x_axis_type="datetime")
p.line(df['date'], df['close'], color='navy', alpha=0.5)

show(p)
```

Saving to an HTML File

In [5]:
```
from bokeh.io import output_file, show
```

In [6]:
```
output_file("plot.html")
```

In [ ]:
```
p = figure(plot_width=800, plot_height=250, x_axis_type="datetime")
p.line(df['date'], df['close'], color='navy', alpha=0.5)

show(p)   # save(p) will save without opening a new browser tab
```

In [7]:
```
from bokeh.io import reset_output
reset_output()
```

Templating in HTML Documents

In [8]:
```
import jinja2
from bokeh.embed import components
```

In [9]:
```
# IMPORTANT NOTE!! The version of BokehJS loaded in the template should match
# the version of Bokeh installed locally.

template = jinja2.Template("""
<!DOCTYPE html>
<html lang="en-US">

<link
    href="http://cdn.pydata.org/bokeh/dev/bokeh-0.12.7rc3.min.css"
    rel="stylesheet" type="text/css"
>
<script
    src="http://cdn.pydata.org/bokeh/dev/bokeh-0.12.7rc3.min.js"
></script>

<body>

    <h1>Hello Bokeh!</h1>

    <p> Below is a simple plot of stock closing prices </p>

    {{ script }}

    {{ div }}

</body>

</html>
""")
```

In [10]:
```
p = figure(plot_width=800, plot_height=250, x_axis_type="datetime")
p.line(df['date'], df['close'], color='navy', alpha=0.5)

script, div = components(p)
```

In [11]:
```
from IPython.display import HTML
HTML(template.render(script=script, div=div))
```

Out[11]:

Hello Bokeh!

Below is a simple plot of stock closing prices

In [12]:
```
from flask import Flask
app = Flask(__name__)

@app.route('/')
def hello_bokeh():
   return template.render(script=script, div=div)
```

In [13]:
```
# Uncomment to run the Flask Server. Use Kernel -> Interrupt from Notebook menubar to stop
#app.run(port=5050)
```

In [14]:
```
# EXERCISE: Create your own template (or modify the one above)
```

In [15]:
```
from bokeh.io import export_png

p = figure(plot_width=800, plot_height=250, x_axis_type="datetime")
p.line(df['date'], df['close'], color='navy', alpha=0.5)

export_png(p, filename="plot.png")
```

Out[15]:
```
'/Users/bryan/work/bokeh-notebooks/tutorial/plot.png'
```

In [16]:
```
from IPython.display import Image
Image('plot.png')
```

Out[16]:

In [17]:
```
# EXERCISE: Save a layout of plots (e.g. row or column) as SVG and see what happens
```

In [18]:
```
from bokeh.io import export_svgs

p = figure(plot_width=800, plot_height=250, x_axis_type="datetime", output_backend='svg')
p.line(df['date'], df['close'], color='navy', alpha=0.5)

export_svgs(p, filename="plot.svg")
```

Out[18]:
```
['plot.svg']
```

In [19]:
```
from IPython.display import SVG
SVG('plot.svg')
```

Out[19]:
```
<IPython.core.display.SVG object>
```

In [20]:
```
# EXERCISE: Save a layout of plots (e.g. row or column) as SVG and see what happens
```