

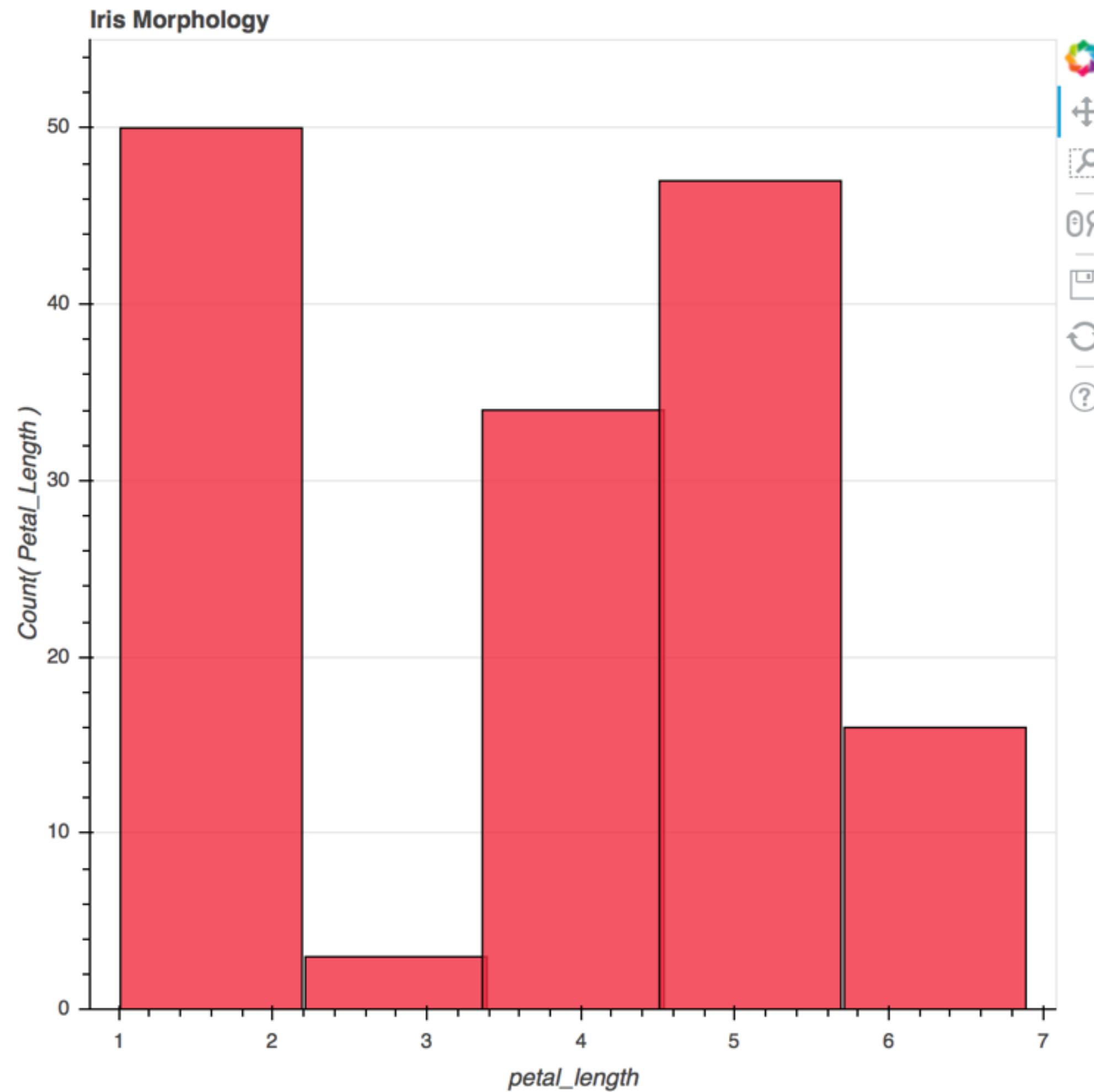


INTERACTIVE DATA VISUALIZATION WITH BOKEH

Histograms

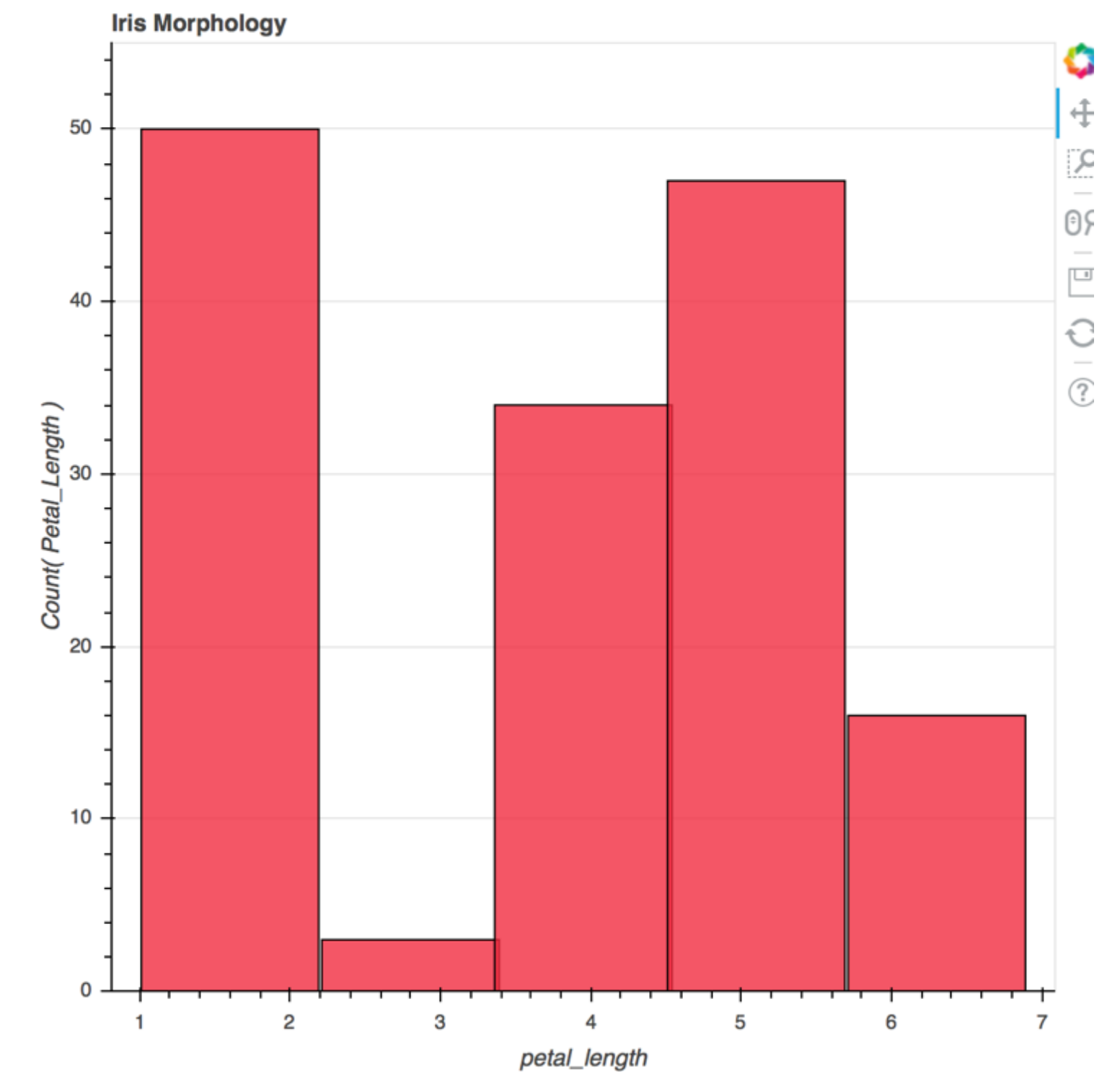


Histograms



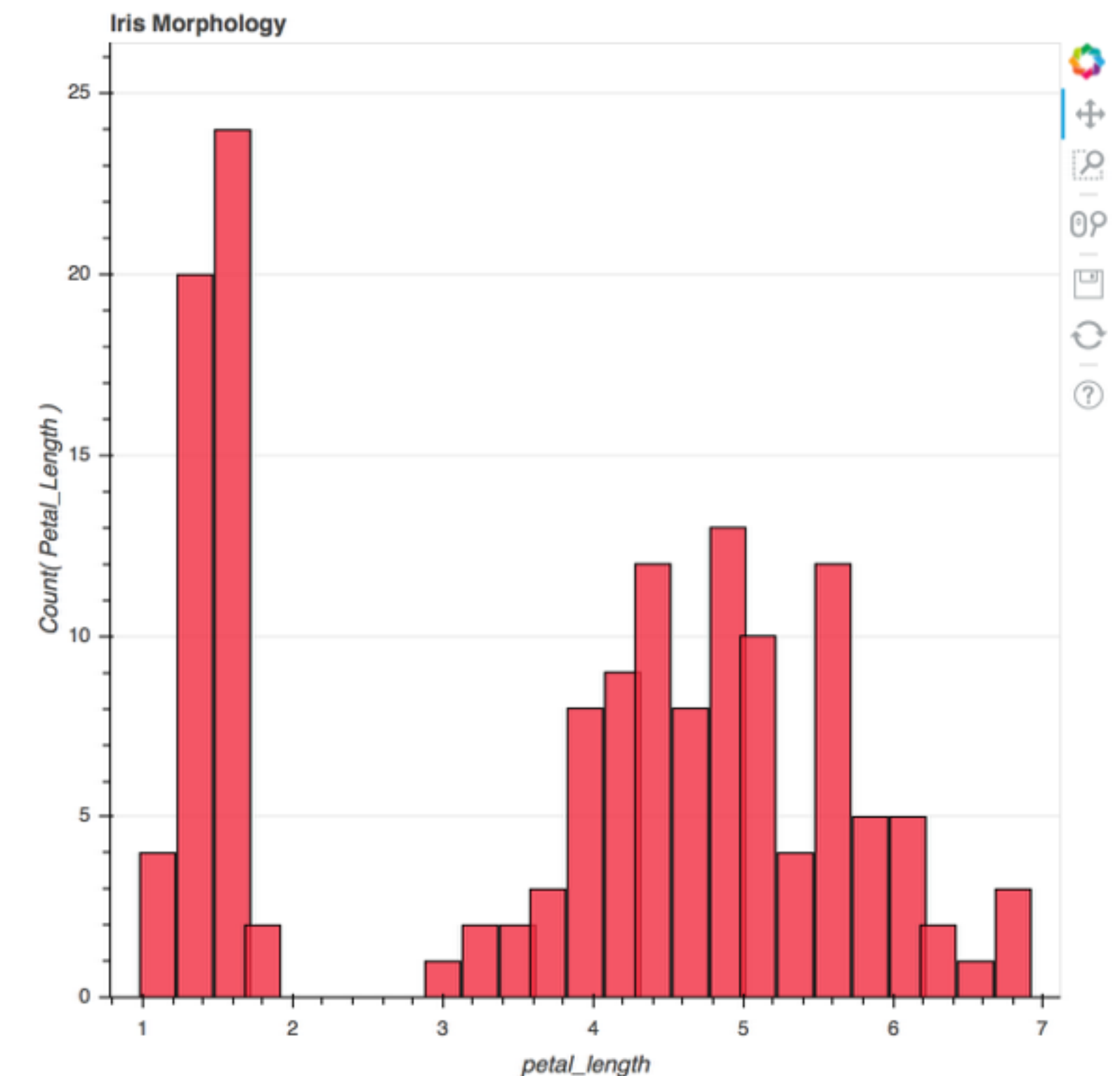
Histograms

```
In [1]: from bokeh.charts import Histogram  
  
In [2]: from bokeh.sampledata.iris import flowers as df  
  
In [3]: p = Histogram(df, 'petal_length',  
....:                  title='Iris Morphology')  
  
In [4]: output_file('histogram.html')  
  
In [5]: show(p)
```



Controlling the number of bins

```
In [1]: from bokeh.charts import Histogram  
  
In [2]: from bokeh.sampledata.iris import flowers as df  
  
In [3]: p = Histogram(df, 'petal_length', bins=25,  
....:                  title='Iris Morphology')  
  
In [4]: output_file('histogram.html')  
  
In [5]: show(p)
```



Multiple Histograms

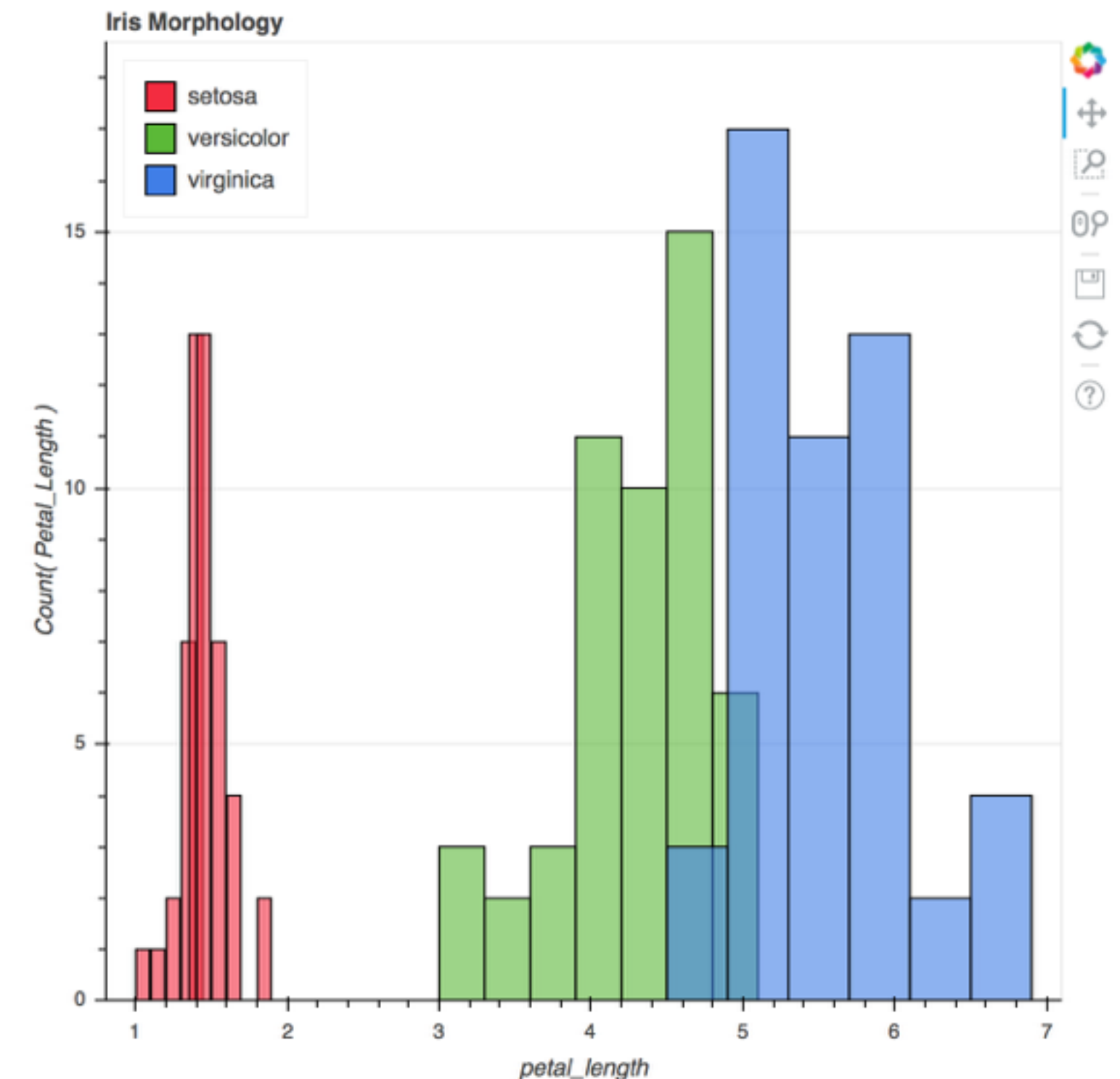
```
In [1]: from bokeh.charts import Histogram

In [2]: from bokeh.sampledata.iris import flowers as df

In [3]: p = Histogram(df, 'petal_length',
...:                  color='species',
...:                  title='Iris Morphology')

In [4]: output_file('histogram.html')

In [5]: show(p)
```





INTERACTIVE DATA VISUALIZATION WITH BOKEH

Let's practice!

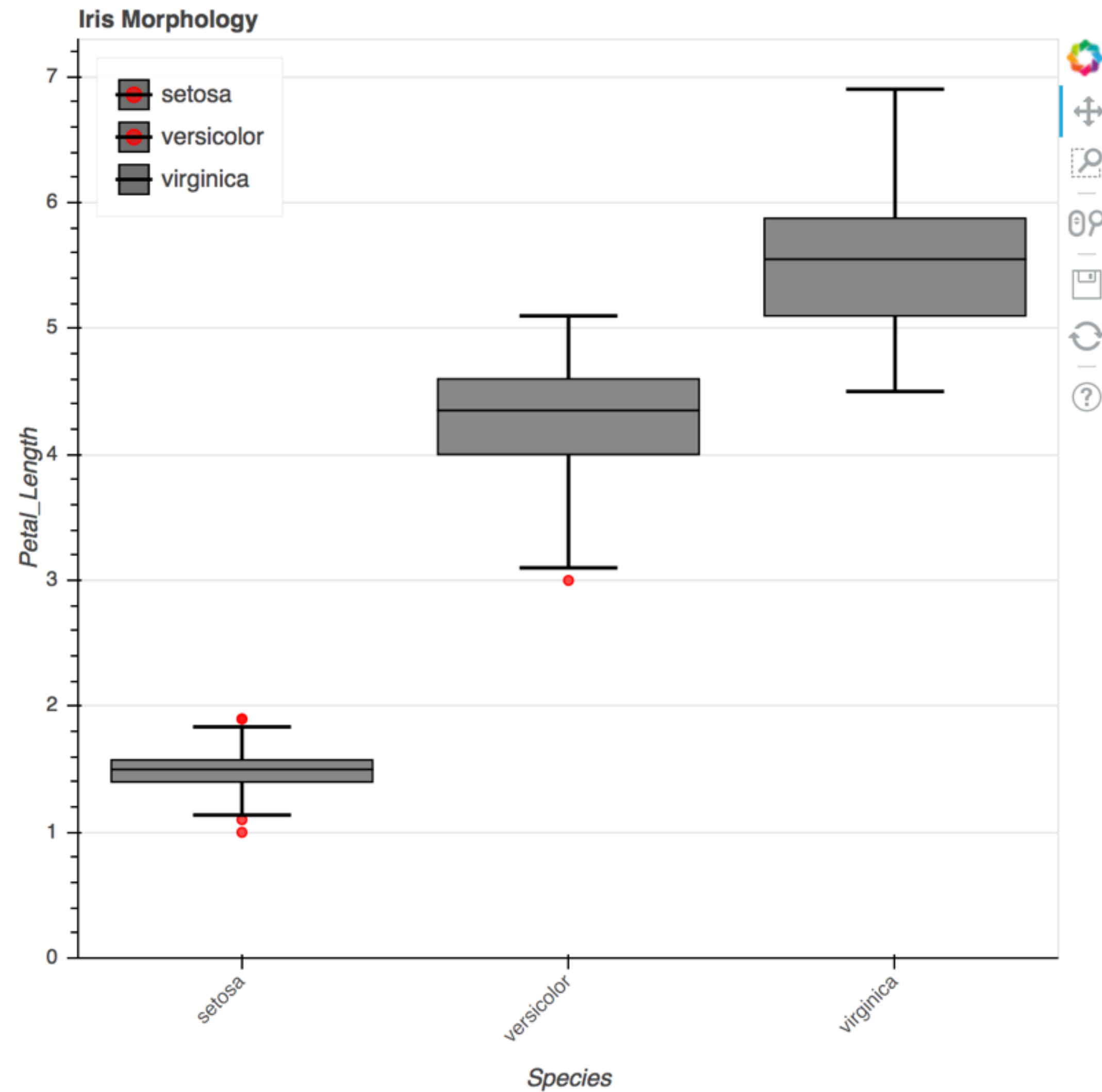


INTERACTIVE DATA VISUALIZATION WITH BOKEH

Box Plots



Box Plots



Box Plots

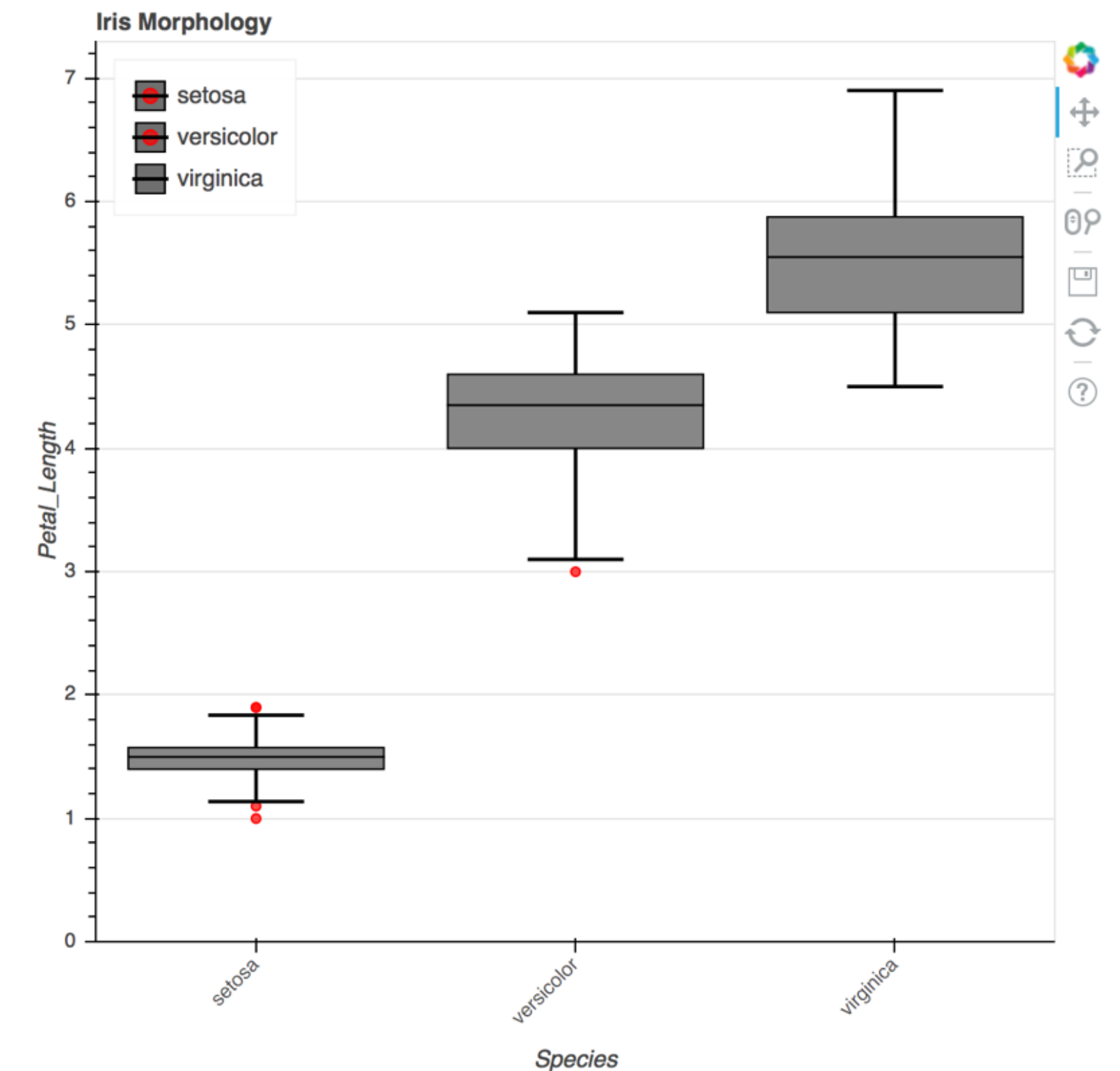
```
In [1]: from bokeh.charts import BoxPlot

In [2]: from bokeh.sampledata.iris import flowers as df

In [3]: p = BoxPlot(df, values='petal_length',
...:               label='species',
...:               title='Iris Morphology')

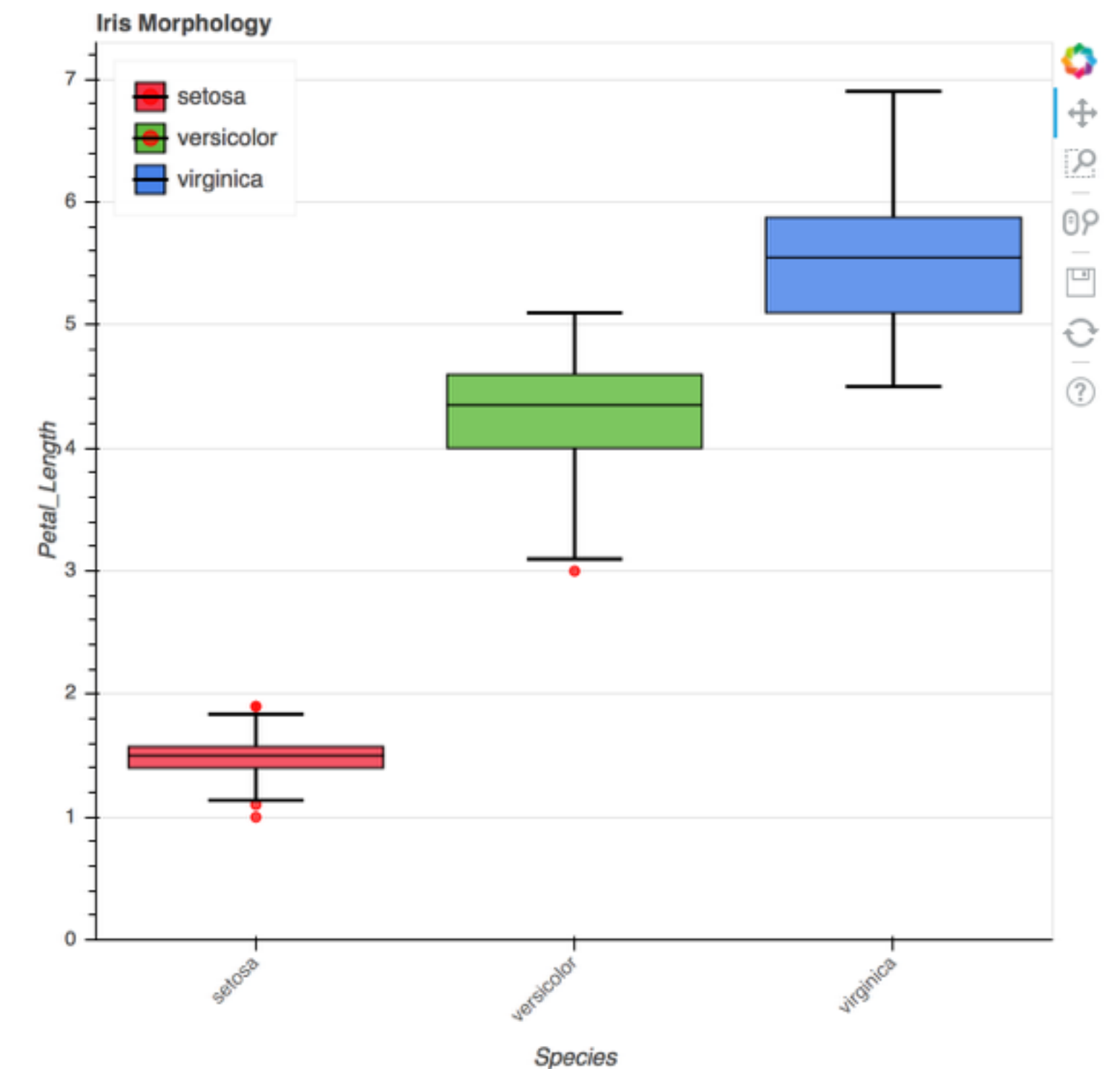
In [4]: output_file('boxplot.html')

In [5]: show(p)
```



Box Plot Shading

```
In [1]: from bokeh.charts import BoxPlot  
  
In [2]: from bokeh.sampledata.iris import flowers as df  
  
In [3]: p = BoxPlot(df, values='petal_length',  
...:               label='species', color='species',  
...:               title='Iris Morphology')  
  
In [4]: output_file('boxplot.html')  
  
In [5]: show(p)
```





INTERACTIVE DATA VISUALIZATION WITH BOKEH

Let's practice!



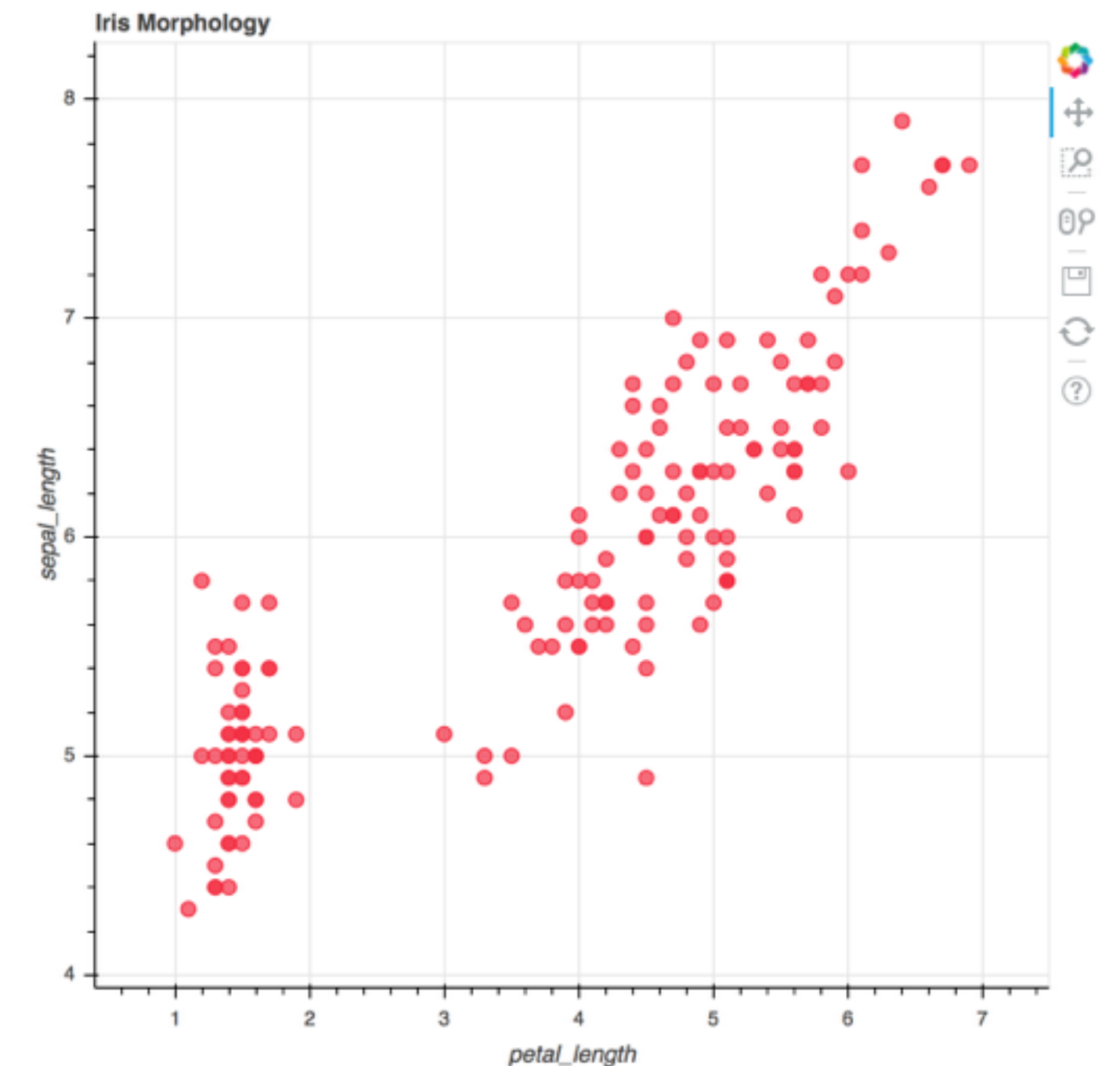
INTERACTIVE DATA VISUALIZATION WITH BOKEH

Scatter



Scatter

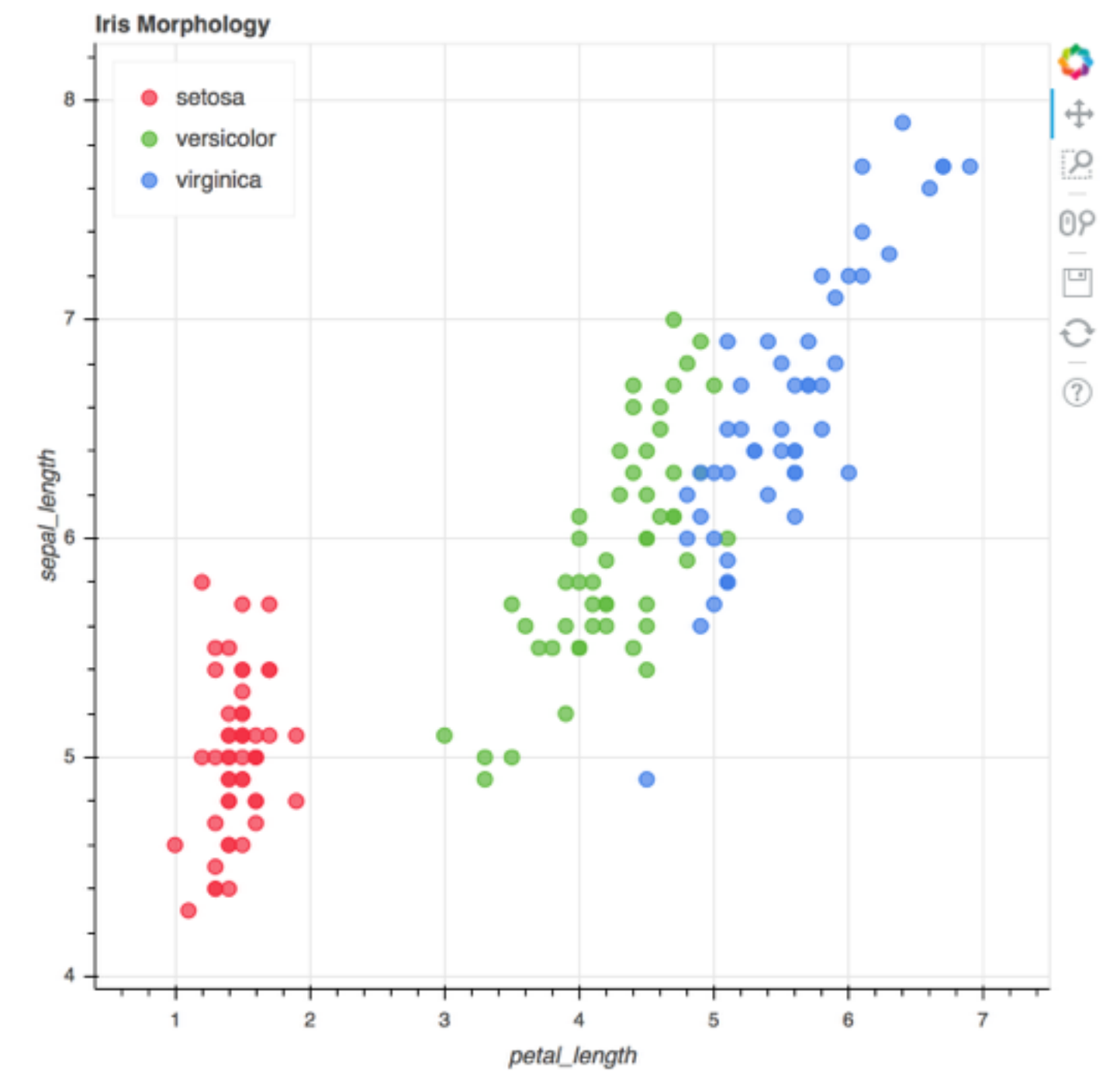
```
In [1]: from bokeh.charts import Scatter  
  
In [2]: from bokeh.sampledata.iris import flowers as df  
  
In [3]: p = Scatter(df, x='petal_length',  
...:               y='sepal_length',  
...:               title='Iris Morphology')  
  
In [4]: output_file('scatter.html')  
  
In [5]: show(p)
```





Scatter shading

```
In [1]: from bokeh.charts import Scatter  
  
In [2]: from bokeh.sampledata.iris import flowers as df  
  
In [3]: p = Scatter(df, x='petal_length',  
...:               y='sepal_length', color='species',  
...:               title='Iris Morphology')  
  
In [4]: output_file('scatter.html')  
  
In [5]: show(p)
```



Scatter markers

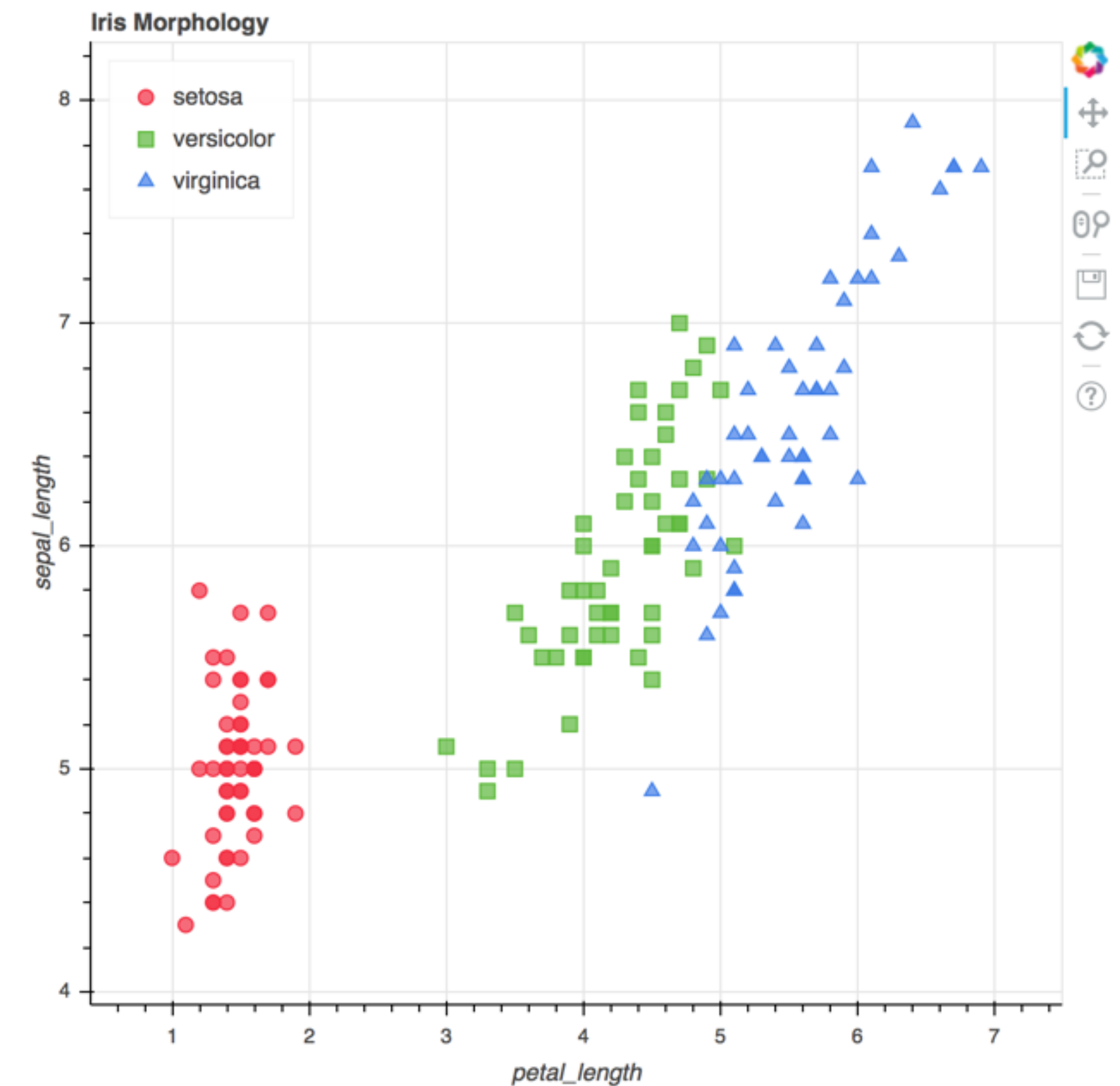
```
In [1]: from bokeh.charts import Scatter

In [2]: from bokeh.sampledata.iris import flowers as df

In [3]: p = Scatter(df, x='petal_length',
...:                y='sepal_length', marker='species',
...:                color='species',
...:                title='Iris Morphology')

In [4]: output_file('scatter.html')

In [5]: show(p)
```





INTERACTIVE DATA VISUALIZATION WITH BOKEH

Let's practice!