

Interactive graphs with Jupyter and R

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1 Interactive graphs with Jupyter and R

This small sample will give you an impression of what you can do with Jupyter and R. There is a lot more stuff to play around like:

- Download files
- Connecting to databases (it is a 1-Liner)
- Large datasets
- ...

First: Lets import the needed libraries:

```
In [5]: library(dplyr)
        library(ggplot2)
        library(reshape2)
        library(plotly)
```

Second: Lets prepare a sample data set with dummy data.

```
In [30]: data=data.frame(cbind(a=runif(min=1, max=10, n=4), b=runif(min=1, max=10, n=4), c=runif(min=1,
rownames(data)=seq_len(nrow(data))
str(data)
```

```
'data.frame':      4 obs. of  5 variables:
 $ a      : num  8.18 4.44 2.43 6.96
 $ b      : num  5.27 1.29 5.74 8.14
 $ c      : num  7.54 7.41 6.2  1.97
 $ d      : num  6.1  1.73 4.68 6.91
 $ observation: num  1 2 3 4
```

Third: Lets plot the data as an interactive bar chart.

```
In [35]: molten=melt(data, id.vars="observation")
p=ggplot(molten, aes(x = variable, y = value,fill=observation)) +
  geom_bar(stat='identity')+
  theme(plot.margin = unit(c(1,1,1,1), "cm"))+
  theme(aspect.ratio=3/4)
p
```

