Data Visualisation Assignment 2 :

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Lab 2 :

1. Bar Chart :

Data : First.csv

For 1,2,3 see the gif in the folder.

Change values in the csv to show better transitions if not much change is obtained.

10 places' names and value for variable X,Y,R for 3 years 2011,2012,2013

1. Create bar chart either vertical or horizontal for names vs. X - provide axes and labels
2.Add hover/click events to bars showing name and X value
3.Provide a slider / radio buttons/ drop down for user to choose one of the 3 years - display the bar chart for the selected year.
4.Display only the top 5 places with the highest value for X of the given 10.
5. On hover over the bars - for the bars with value/height above T the highlight cover should be different than those with height lesser or equal to T - display this T .

2. Scatter Plot :

1.Plot scatter for the 10 places in First.csv - X,Y are the centres and R the radius of the circles
2.On hover color change and centre ,radius display
3.Provide slider / buttons for choosing the year

3. Linking bar and scatter chart :

1.Both scatter plot and bar graph should be controlled by the same slider/buttons for the year - both display same year's data.
2.When mouse hover on a bar the corresponding circle for the place also changes color - if bar is on the bar graph - top five bars for X value being displayed .
3.If mouse hovers over a circle and the corresponding bar is not on the bar graph - color change to "orange" .Else both change color to some other color.
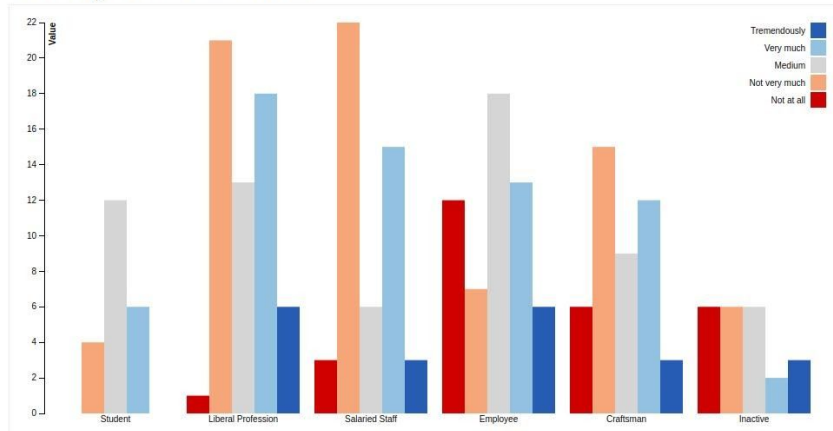
4. Grouped bar graph and stacked bar graph :

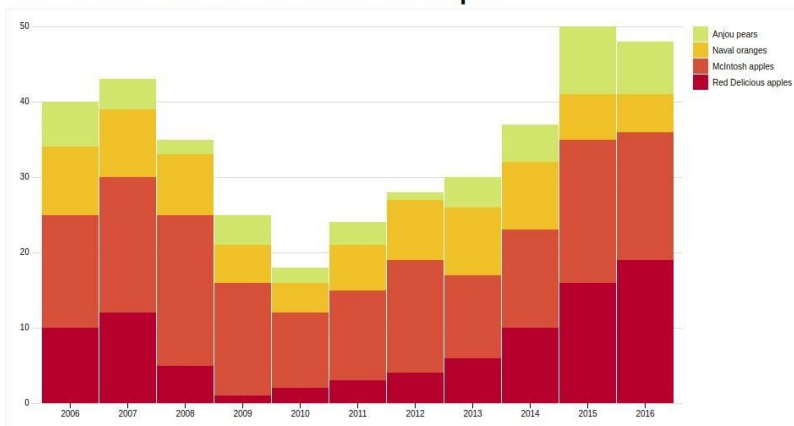1.Plot grouped bar chart for two charts similar to below , include the legend/label.

2.Stacked bar graph for names vs X and Y when mouse over a bar display the name , value of the variable (of either X or Y) and name of variable (X or Y).

:

Grouped bar chart

Stacked bar chart with tooltips

Code for 1,2,3 will be tested on other data as well.

Extra Credits :

Code divided into functions.

Js css and html scripts separated.

1.6.During the transitions show the old bars being removed move along the names' axes before disappearing.

1.7 Increase the height of a bar on click to +5/+10.

3.4 Link another chart , for example, Pie chart with either the bar or scatter - (say a rotating pie chart such that the place hovered on in bar is on top.) .

4. Given the line chart code convert it using time api such that the line grows from zero to its final value over some time .
Data file : linechart.html

Line chart : unemployment_2005_2015.csv

5.Create area chart for the same data as 4.

6.Get a brushed version for the line/area chart above.Can also add zooming . See this :
https://bl.ocks.org/EfratVil/92f894ac0ba265192411e73f633a3e2f

Resources :
Bl.ocks.org
Tutorials point G4G etc.