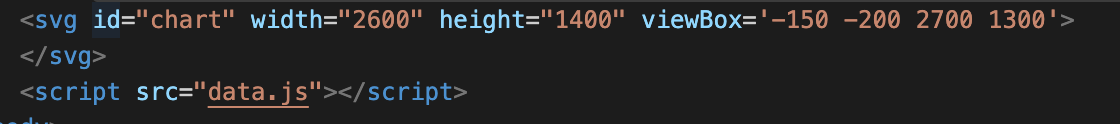
# CS405 – Assignment 1 Report – Onur Sezen 29527

For the data I chose number of suicides and crude suicide rate. I took the appropriate data and created a more basic csv file so that it is easier to read in Javascript.



Here I created an svg in html and gave it an id so that I can reach it from my javascript file.

metin, ekran görüntüsü, yazılım, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

In the beginning of my Javascript file I created an empty array then filled it with the data in the csv file with a library called PapaParse. Then I created the ‘svg’ variable to add components to my svg.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

Here I defined the scales for the bars and the line in the graph. I used these scales to adjust the appearance of the bars and lines. For scales first I get the maximum data from the relevant data. Then I scale it with a number that makes my graph look good. I also have the barWidth and gap variables so that I can adjust the display.

metin, ekran görüntüsü, yazı tipi, yazılım içeren bir resim

Açıklama otomatik olarak oluşturuldu

This loop iterates over my data array. I created ‘rect’ object for my bars. Adjusted x-coordinate according to barWidth, gap and the index of the data. I adjusted my y-coordinates according to corresponding data and my yScale. I gave it a color. Then added to my svg.

After that I created a text element for the texts inside my bars. Y-coordinate is constant for those because they have to be aligned. I made the writing-mode top to bottom in order to give it a vertical look. Then rotated it 180 degrees so that they face right. That’s why my x and y coordinates are negativemetin, ekran görüntüsü içeren bir resim

Açıklama otomatik olarak oluşturuldu

Here I have the year\_text variable for showing the year below the bars. Again the y-coordinate is constant. Text-anchor is middle in order it to look well aligned.

After that I have my 3 lines: left, bottom and the right. I gave them a start and end points.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

I created a circle element for my crude\_suicide\_rate data. Their x-coordinates are calculated via barwidth. In order to calculate y-coordinate I parsed the string into float then scaled it. I gave it a radius then added to my svg.

metin, ekran görüntüsü içeren bir resim

Açıklama otomatik olarak oluşturulduFor the text I used a similar approach.

For the path of the line that goes through circles. I started by moving the pen to the location where the first circle is. That is what ‘M’ stands for. Then I drew the line to other circles. ‘L’ stands for draw. Then added this path to my svg.

metin, ekran görüntüsü, yazı tipi, yazılım içeren bir resim

Açıklama otomatik olarak oluşturuldu

These are my rectangle and text for my legend that represents bars. I created a small blue rectangle and text. Then put it in my plane where I think it looks good.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturulduI used similar approach for my right legend. This has circle and a line instead of rectangle.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

These are my texts for my graph headers. This was relatively easier than the other parts. I wrote the text and put them into my svg.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

These are the numbers that are on the right and on the left. I have 9 numbers written starting from 0. Here I adjust the y coordinates according to index in the loop. X-coordinates are constant. For the left one I aligned it to right so that it looks near the graph. For the right one I did the visa-verse. After each iteration I adjusted the text.

metin, ekran görüntüsü, yazı tipi içeren bir resim

Açıklama otomatik olarak oluşturuldu

In my css file I have only a little bit style. This is only for display. I centered my svg object.