CS 405 Assignment 1 Report

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Lines 0-19:

Firstly, I created a 800x600 viewbox for the svg chart to be put in similar to the ones in the lab sessions. I've created two arrays with the year information on the first array and the corresponding value obtained by the dataset on the second array. I've created a for loop to visualize each entry in the array with a certain gap I found to be the best after some testing which was 12px.

Lines 20-45:

The most tricky part was rotating the bars for the chart since when used regularly, the charts were upside down meaning when placed at a point with given height, the height would be towads the -y axis meaning the chart would be upside down. I've researched and found transform attribute with rotate() functionality to be a way to fix the bar issue. The first bar was located at x "gap*i" meaning "12*1" resulting in 12, with each i(each entry in the arrays) the bar would be 12 pixels away from the last one using this method. To have a reasonable height for the data, I've shrinked the data to inbetween 0 and 99 pixels meaning I had to apply a division by 100 since all data were around 1000s. I've used the same method for the two texts corresponding to each entry one being the year and the other being the value which was also rotated 90 degrees using the attribute from before.

Lines 46-104:

Rest of the code was to make the chart around the already present bars. I've used this approach of plotting the bars before the chart itself due to elements placed later getting in front of the elements placed later visually. Text information and number indicators on yaxis were placed; to ensure the correctness of the indicator points, initial point was picked and each point of the text were placed with the same formula of dividing by 100.

