## CS 405 Assignment 1 Report

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## **Data Selection**

For the assignment, a data set entitled "Death Rates by Age Group and Gender" is downloaded from TUIK website. Afterwards, a subset which contains the total amount of deats of men and women is selected for the visualization process.

## Coding

To begin with, the settings for the viewbox are set, and the objects that a bar chart contains such as rectangles and lines are determined.

- Lines are used for creating X-Y axes and X-Y ticks.
- Rectangles are used for creating the bars of the chart and the legend element.
- Texts are used for creating the chart title, X-Y axis labels, X-Y tick values and the values on the bars.

Afterwards, the values for the death rates and years are extracted from the dataset, and they are put in separate JavaScript arrays. Iterating over the

values, rectangle objects (bars of the bar chart) and X-Y tick values are created as SVG elements, and they are appended to an existing SVG.

Similarly, title, coordinate axes and their labels, and legend element are created and added to SVG.

At the same time, attributes of the objects are put in corresponding class selectors in another .css file to make the objects more organized and independent.

GitHub Link: https://github.com/Exion007/CS405