Task B1

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1 Dataset

1.1 Overview

This dataset consists of the population breakdown of Singapore from 2000 to 2020. The data fields that are of interest here are:

Field	Description	Data Type
Year	Year	Integer
Group	Denoting the residents that are included in the group	String
Age Group	Age group	String
Value	Number of residents belonging to the particular group	Integer

1.2 Data origin

 $\label{locs:com/spreadsheets/d/1a2uZKydzbP-vTdrXrdcGmfxTFnZSXdDS65X0pjWY0SE/edit\#gid=1367742117$

1.3 Github Repository

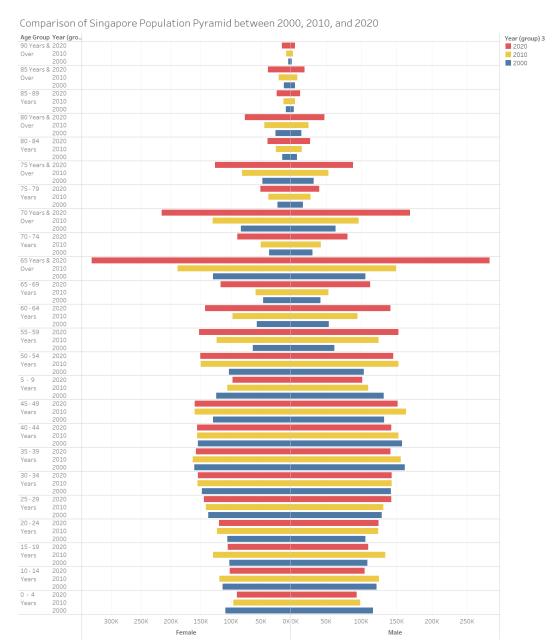
https://github.com/bryanljx/visualisation

2 Purpose of Visualisation

For this dataset, the query of interest is: "How fast is Singapore's population ageing? Is ageing population really a huge issue?"

3 Visualisation

3.1 Comparison of Population Pyramid across 2000, 2010, and 2020



Sum of Female and sum of Male for each Year (group) 3 broken down by Age Group. Color shows details about Year (group) 3. The data is filtered on Group, which keeps Total Female Residents and Total Male Residents. The view is filtered on Age Group and Year (group) 3. The Age Group filter excludes Population. The Year (group) 3 filter keeps 2000, 2010 and 2020.

• Visual encoding here includes:

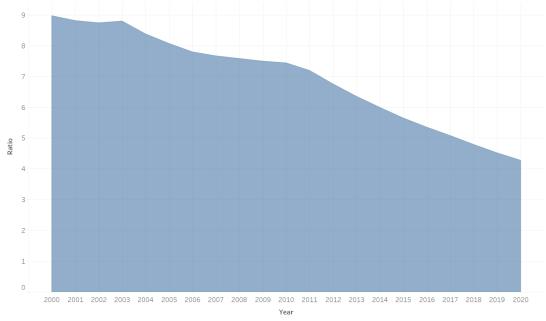
- Length Denoting the amount of residents (male/female) for each age group
- Color Differentiating the year 2000/2010/2020
- Position Denoting the age group

• Insights

 Clearly, the number of elderly are increasing rather substantially across the decades whereas the converse is not true for young adults

3.2 Old Age Support Ratio





The plot of Ratio for Year. The data is filtered on Age Group, which keeps 25 of 25 members.

- As the name implies, old age support ratio is the ratio of working adults to elderly
- An area chart was chosen to emphasise the decreasing pattern across time.
- Visual encoding here includes:
 - Position Denoting the ratio
- Insights
 - From the chart, it is evident how this is decreasing over time at a very steady pace

3.3 Percentage of elderly amongst the population across time

- An area chart was chosen to emphasise the increasing percentage across time.
- Visual encoding here includes:
 - Position Denoting the percentage of elderly amongst the population
- Insights
 - The rate of increase seems to be picking up in recent years which is concerning