

Name: Dillon Frawley
Student ID: 29540933
Studio Number: 6
Tutor Name: Clair Pan

URL - <https://dfra0004.github.io/FIT3179/>

Visualisation 1:

- Domain Of Visualisation:
 - Average Life Expectancy by Country & Region in 2019
- Attribute types
 - Country: Categorical
 - Average Life Expectancy: Quantitative
- Data transformation that you applied (if any), such as normalisation by area or population. A justification for the type of map idiom used. For example, explain why you chose to create a proportional symbol map instead of a choropleth map or a dot map:
 - A choropleth map was used in this visualisation, it is appropriate due from the dataset we have geographical region/country data and one attribute per region/country in this case is average life expectancy.
 - The raw average life expectancy value of each country was scaled using a quantized scale which grouped all values within the domain into 5 steps to assist readers to distinguish between countries on a larger scale rather than a continuous scale.
 - Colour encoding – sequential gold-red scale again broken into 5 steps.
 - Tooltip – Displays Country & Region name and raw average life expectancy.
- Source:
 - CSV File:
<https://drive.google.com/file/d/1PAcQ0sRy5ew1v2DtWYpHrNNESFIKR9uC/view?usp=sharing>
 - URL: https://en.wikipedia.org/wiki/List_of_countries_by_life_expectancy
(Table 4, data published by [United Nations Development Programme](#) in 2019.)

Visualisation 2:

- Domain Of Visualisation:
 - Male vs Female Life Expectancy by Continent And their Countries
- Attribute types
 - X: Male Life Expectancy, Quantitative
 - Y: Female Life Expectancy, Quantitative
 - Colour: Continent
 - Reference Line: Male = Female, i.e. $X=Y$.
- A justification for the type of visualisation idiom used (that is, why are you creating a bubble plot, stacked bar chart, etc.)?

The idiom used in this visualisation is a scatterplot, using 2 quantitative attributes namely female and male average life expectancy. As a scatterplot can visualise hundreds of values and in this case there are 197 countries in the world it is appropriate to use a scatter plot.

The domain in this visualisation is limited to life expectancy of 50 – 90 as to improve readability and reader interpretation. The values were chosen from the min and max countries female and male life expectancy.

The interactivity in this visualisation is to filter by continent which filters the data to only include the selected continent. The filtering and interactivity are implemented through selection on the legend. This visualisation also can be panned and zoomed through user mouse interaction.

The tooltip in this visualisation contains the information of the value on the visualisations continent name, country name, male life expectancy and finally female life expectancy.

- Source:
 - CSV File:
<https://drive.google.com/file/d/1PAcQ0sRy5ew1v2DtWYpHrNNESFIKR9uC/view?usp=sharing>
 - URL: https://en.wikipedia.org/wiki/List_of_countries_by_life_expectancy
(Table 4, data published by [United Nations Development Programme](#) in 2019.)

Figure 1 – Map Visualisation & Line Chart Visualisation

