A brief description of the domain.

This is an interactive visualisation on Olympics history from 1896 to 2016.

Olympics games are taken seriously by many countries and athletes put in so much effort to win the Olympics. Along with the preparation of Olympics participants, it is also important to understand the trend in the number of medals won in each country as well as in each sport. Additional information such as gender, height and weight can also be taken into account when analysing the winning probability. Getting hold of this massive amount of information gives the country a competitive edge when it comes to maximising their chances of winning.

A brief description of the narrative (story telling approach and story told).

The visualisation is a narrative of a poster. Giving a brief introduction about Olympics as well as explaining the motive behind this visualisation. There is a GIS map after that which gives a broader context on the number of medals received by each country depending on the season. As we scroll down, the scope of the visualisation gets narrower which allows users to evaluate the factors leading to the performance of the country. Moreover, it has been made interactive to facilitate the analysis of a selected number of factors preferred by the users.

What: A brief description of the data (sources, authors, relevance, creation process, etc.)

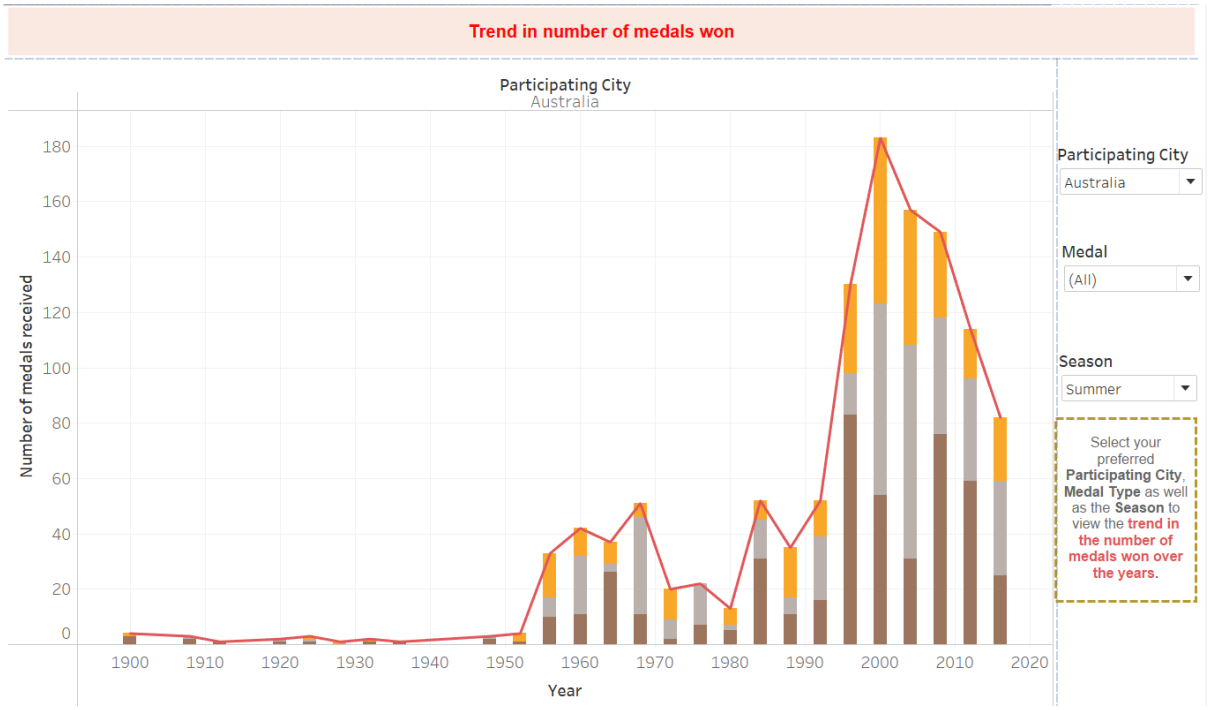
A single dataset on the history of Olympics which contains the type and number of medals won by each country in different years and also the average height and weight of the Olympics participants. Given that my visualisation is focused on the number of medals won, I have disregarded years where countries did not receive medals. All of these pre-processing has been performed using R and the final dataset has been used in tableau for visualisation.

I used Mollweide projection using QGIS to create a map. The map was then imported to tableau and then blended the Olympics dataset file in tableau as well to create the final visualisation.

How: Give a rationale for choosing the specific idioms, and explain how they help the users to achieve their tasks. Include at least one screen capture of your entire visualisation, and a description of features that are special to your visualisation.

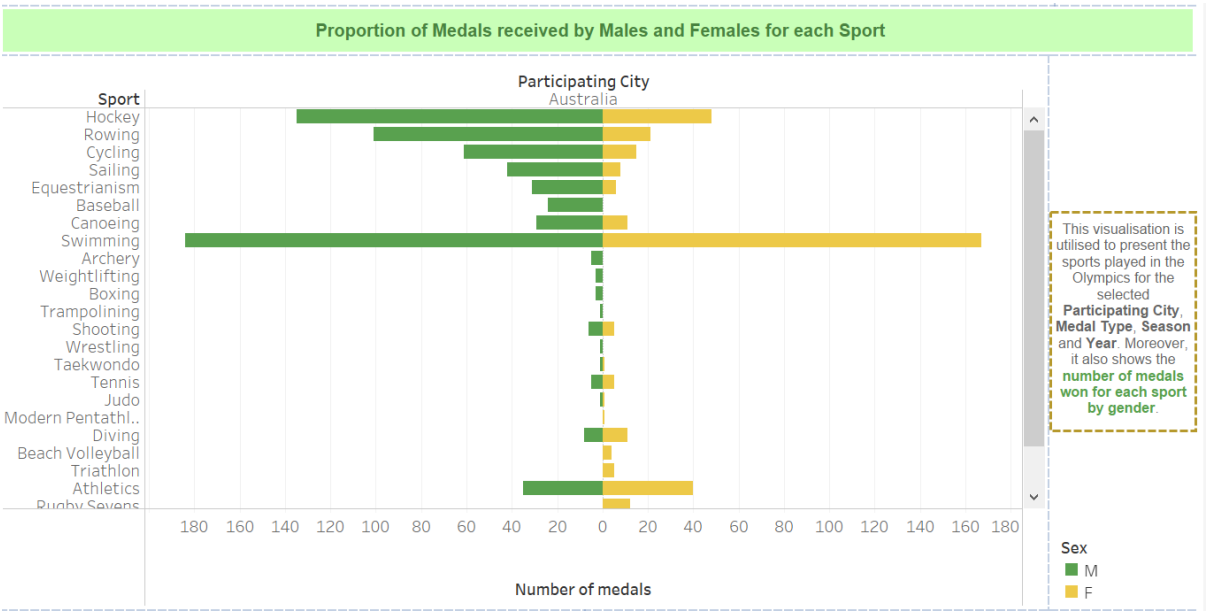
Idiom: Mollweide map

It gives a general overview on the number of medals in each country by season.



Idiom: Line and Bar chart

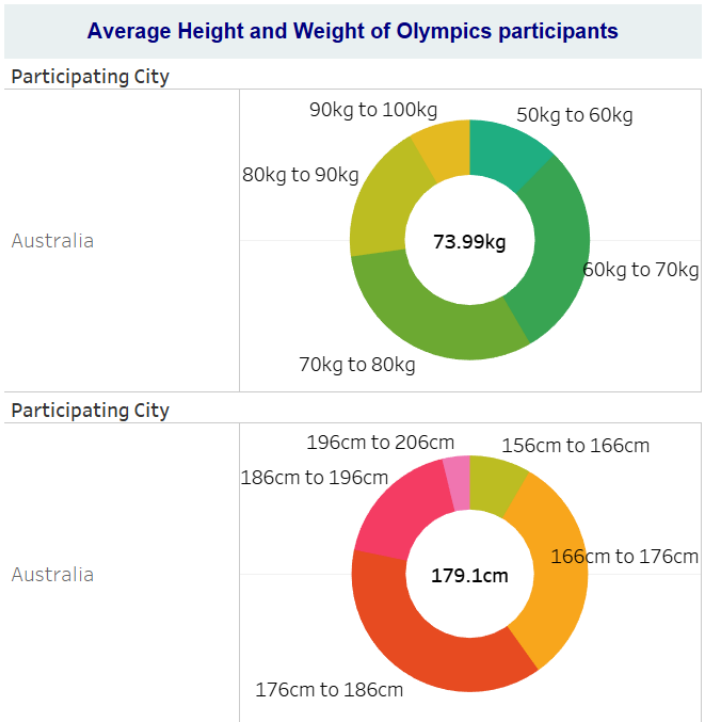
This is the main feature of my visualisation since it shows the trend in number of medals won over the years as well as the proportion of Gold, Silver and Bronze medals won which provides a basic understanding on how a particular country is performing in a particular season. It is made interactive, so that users will be able to see the impact of the various factors on the performance of the country in a particular season.



Idiom: Diverging Bar chart

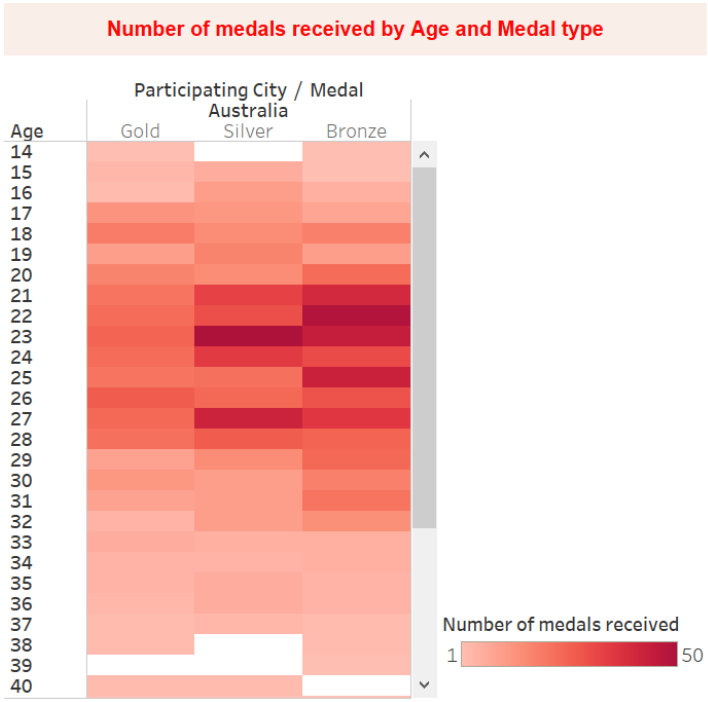
This visualisation is utilised to present the sports played in the Olympics for the selected country, medal type and season. Moreover, it shows the number of medals won for each sport by gender. It is also made interactive so that users can understand the average height and weight of Olympics

participants based on the selected sport and also the number of medals received by age and medal type.



Idiom: Donut Chart

This visualisation shows the average height and weight of the Olympics participants and also the top five height and weight groups. Users will be able to understand the correlation between the height and weight of the Olympics participants and their performance in Olympics.



Idiom: Heat map

This visualisation provides details on the number of Gold, Silver and Bronze medals won for each age group. It allows the users to see the correlation between the age of the participants and their performance in Olympics.

The data ink ratio is moderately low because a lot of colour has been used to distinguish between different categories in the chart.

The background colour white is used as a design element and it also gives a clean look. The sub headings are off-white background colour so that it stands out. The typeface used for this visualisation is Sans serif (Arial font) as it is easier to read. Key information has been bolded as well.

In terms of layout, the visualisation follows the path from upper left to lower right. I have placed the interactive chart at the visual centre of the visualisation because it is the most important chart when it comes to understanding the performance of a particular country in a particular season. The visualisation is well guided such that it will aid users in acquiring profound understanding on the history of Olympics and allows them to make well informed decisions that benefits their country.

Bibliography:

https://www.kaggle.com/heesoo37/120-years-of-olympic-history-athletes-and-resultshttps://www.freelogodesign.org/blog/2018/02/16/the-olympics-logo-story