**Domain, Why and Who:**

The **domain** of this visualisation project is the demographic insights of Australia, which will cover key factors such as population, age distribution, migration as well as birth and death rates of Australia.

In terms of the **why**, this visualisation intends to communicate demographic patterns and trends to decision-makers, policymakers as well as the public through a more accessible and engaging interactive webpage. Demographic changes do affect everything from healthcare services to housing, job markets as well as education.

The **who:** This visualisation is targeted towards policymakers, urban planners, responsible for resource allocation, as well as members of the public, who are interested in understanding how migration, aging, and population growth intertwine and impact their home city or country.

**What: ABS data**

The data for this project is sourced from the Australian Bureau of Statistics (ABS). This is relevant in understanding how Australia’s demographic trends evolve. For example, the aging population in cities like Adelaide and the increasing migration into New South Wales and Victoria carry significant weight and implications for policymakers to consider their resource allocation, funding and service provision.

**How: Rationale for the visual idioms**

The webpage contains visualisations such as the **choropleth map** for the median age, **bar charts** for the birth and deaths as well as the **radial and bar diagrams** for the migration insights.

The following **choropleth map** was used because it provides an intuitive way to compare the age distribution across the different capital cities of states. By shading the capital cities based on their median age, stakeholders can easily see which cities have the older or younger populations, which can help for decision-making for age-related services such as healthcare and retirement planning.

A **pyramid plot** was used to help compare the birth and death rates across the different regions. The use of these bar charts helps visualize the scale of these numbers of time, providing a straightforward way for individuals to assess population changes and trends.

The **bar chart** provides a simple way for individuals to see the migration flows across different states, whilst the radial diagram highlights the top countries of origin for the different migrants. These idioms are ideal to accentuate the relative size of Australia’s migrant intake.

In terms of **special features**, each visualisation includes the hover-over tooltips, which allow the users to explore the dataset in greater detail, for instance, to see the sex ratio of each capital city in Australia through the map tooltips. The use of elements such as the colour scales in the choropleth map, further enhances the user engagement by making the key trends more vivid. Additionally, the combination of bar charts and the radial diagrams provide both a numerical and unique way to show the link between Australia and its top contributor countries of migrants.