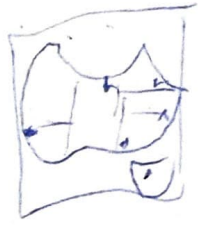


Exploring demographics (age, gender, countries of birth for each Australian state.

COMPILING EACH STATE

Net overseas migration per state.

Medium age  
choropleth map  
state by state change



Births & Deaths  
per state  
Line graph  
Pyramid plot

Top 10 countries of Migration per state

Pie chart



stacked bar chart

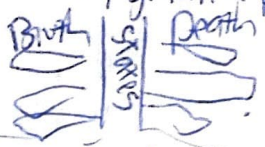
horizontal/vertical bar chart  
Line graphs  
Sankey diagram

flow between

countries states countries states  
series

COMBINE & REFINES

FILTER



CATEGORIZE

Datasets → graph

Median Age → choropleth map.

TOP 10 Migration countries → pie chart

Net overseas migration no. → Bar chart

Birth & Deaths → Pyramid plot.

Section 1: Median Age by state (choropleth map) (Population)



Population Median age



Highest median  
lowest median

Section 2: Migration:

- Top 10 countries  
- Net overseas migration trends



Migration

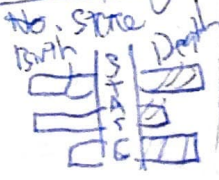


state w/ highest, lowest



Section 3: Vital stats

- Births  
- Deaths



Vital stats Births Deaths



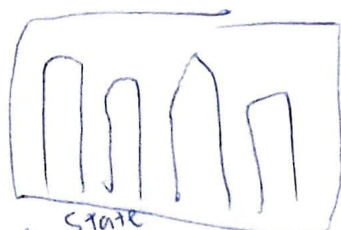
Highest b:  
Highest d:  
lowest b:  
lowest d:

# LAYOUT

## Exploring Demographic Insights

- Highest median

- Lowest median



No. migrants



State Births State Deaths



State w/ highest birth/death

State w/ lowest birth/death

⊕ Add filters

FOCUS

Highlight areas w/ highest and lowest median age

Zoomed in map of AUS



lowest median age

annotate the states w/

elderly people (high median age)

## DISCUSSION

① What trends in median age can be observed across states?

↳ e.g. older population in certain places?

② oldest/youngest states?

↳ what factors  
↳ retirement?

③ How would this affect policies e.g. health care, education, infrastructure

## Operations

• Tooltips for each state

- Median age  
- State full name

• On clicking a particular state:

- Zoom in / highlight it:

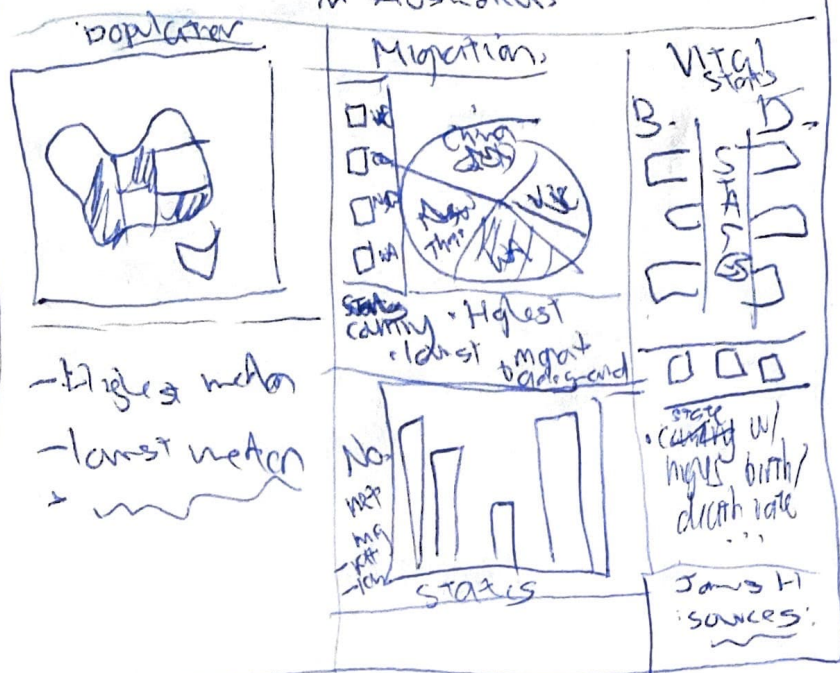
↳



# 3) Internal Design 2.

Avatar

## Exploring Demographic Insights in Australia



James  
Exploring demographic insights  
of Australia.

James H.

Sheet 2, 20/09/22

Flt3179 Ash 2.

OPERATIONS  
Pie chart:

→ filter → can choose certain countries to filter out

→ tooltips  
→ highlight % no. of migrants

→ Can control the year

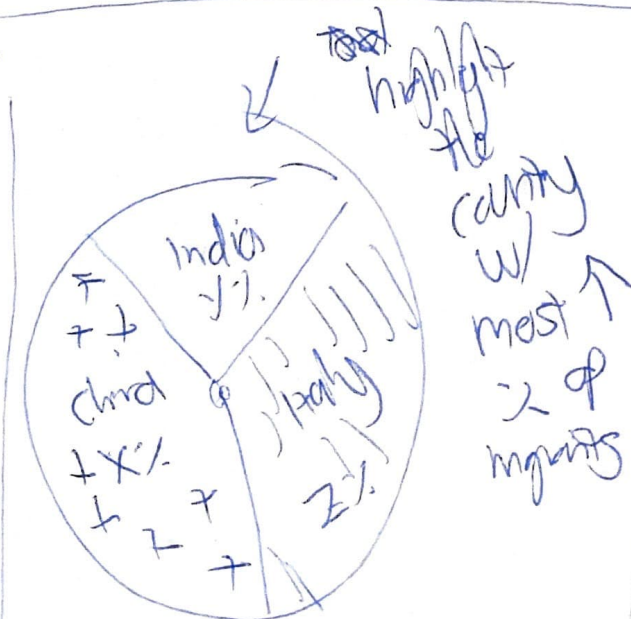
Focus

China

India

Japan

Italy



Top 10 countries of migrants to Australia

2010 2015 2020  
(year)

Discussion

• questions for food of thought:

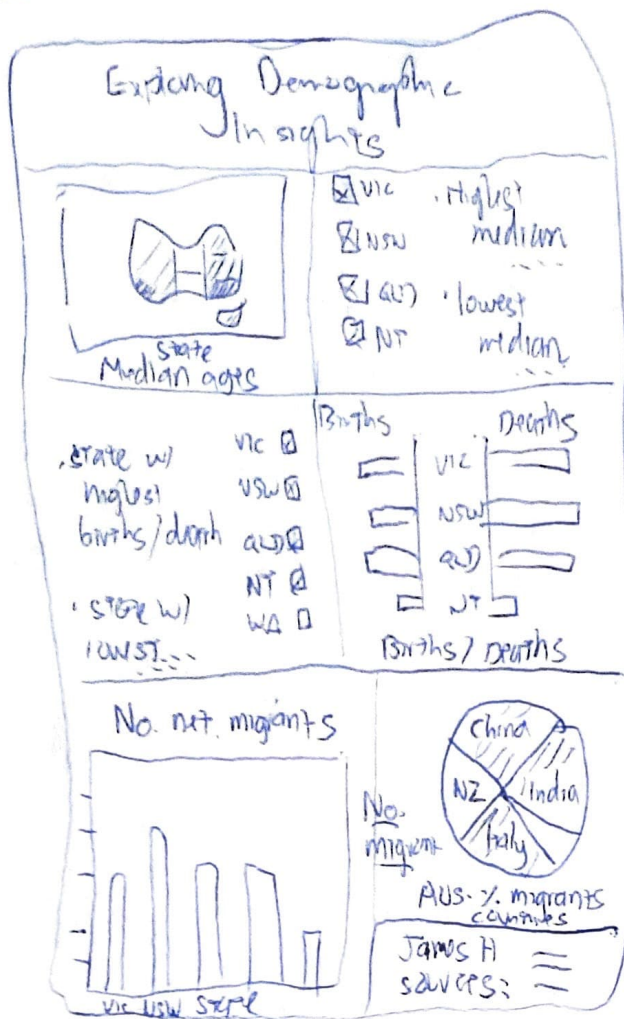
→ which countries longest contributor to Aus  
→ what cultural/economic impacts?

• Reasons behind dominance of certain countries

• Use uniform colours.  
e.g. max 3 top 3 countries, (colorblind)

# Sheet 4 - Initial Design 3

## LAYOUT



Exploring Demographic Insights in Australia

James H.

Sheet 3, 20/01/24

FIT3179, Assn 2.

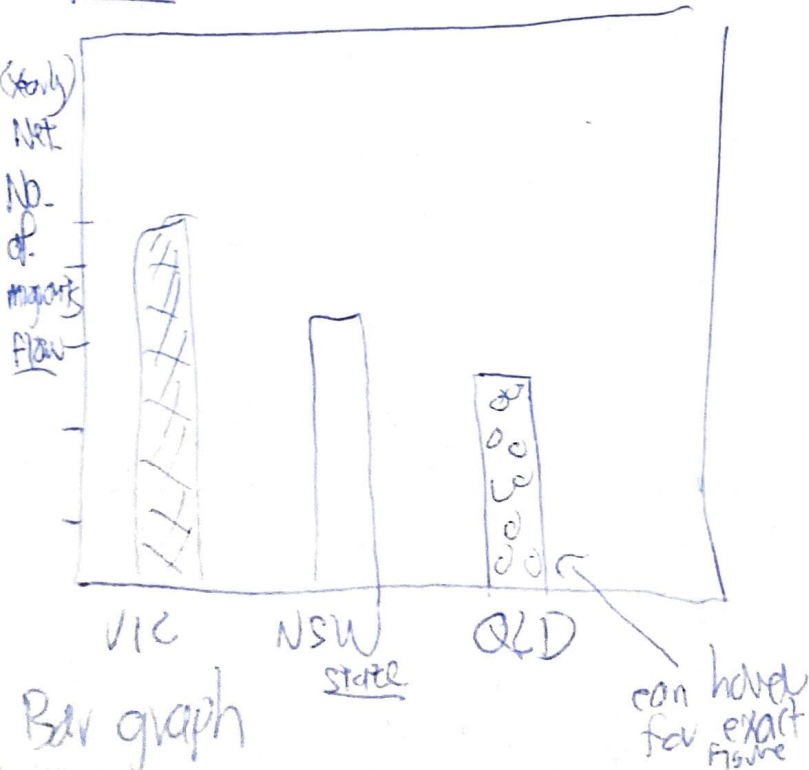
## OPERATIONS

Tool tips

→ shows exact no. of net overseas migration

Can filter to states  
→ checkboxes

## FOCUS



## DISCUSSION

Does ordering of bars matter?

Color scheme for the chart?

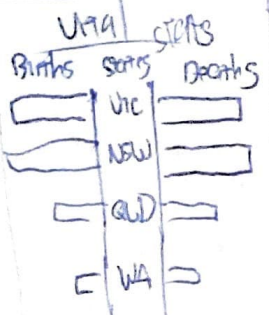
Add annotation to highlight the net noteworthy info  
→ also color



# 5-Visual Design 4

Project

## Exploring Demographic Insights in Australia



• We can see that the median age is just 'lower' median age is...

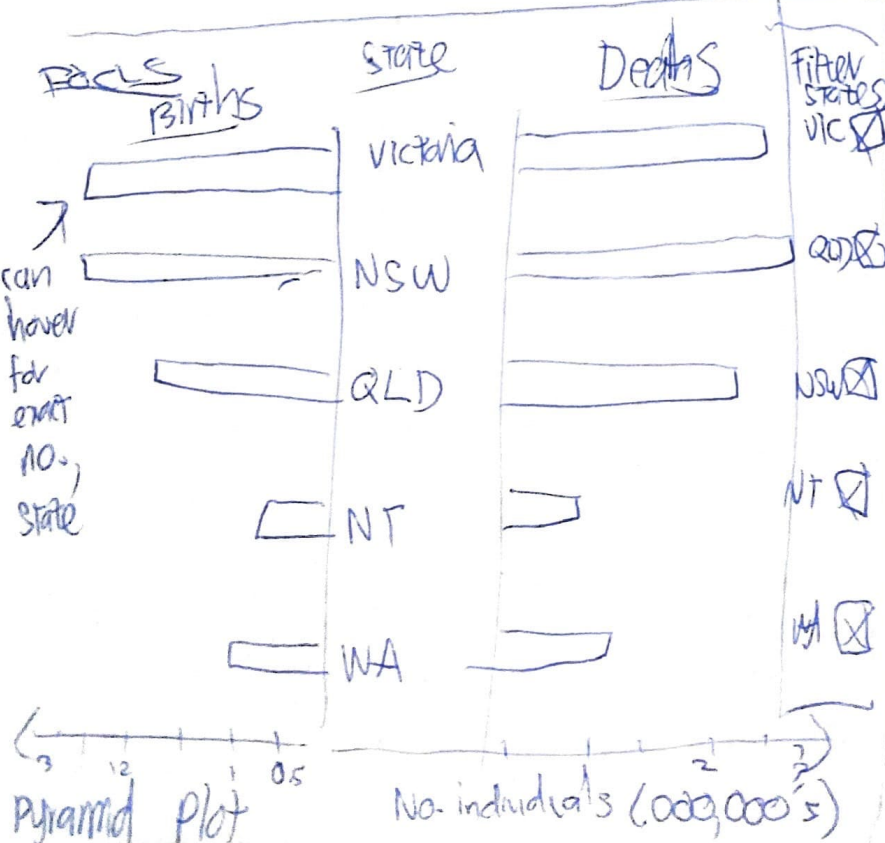
• state w/ highest birth/deaths...  
• state w/ lowest birth/deaths...

country of migration in AUS.  
Source: H. S. S. S. S.

Exploring Demographic Insights in Australia  
Jen-H  
Sheet 5, 20/09/24  
FIT3179, 20/09/24

## OPERATIONS

- Pyramid plot:
  - tooltips/hover:
  - exact figure
  - full name of state
- can filter the states
- perhaps can just focus on births or deaths?



## Discussion

- How to utilise colour, size in the plot? e.g. births, deaths?
- colour gradients?
- Pros/cons of showing opposing categories for each state.