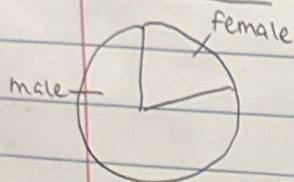


IDEAS

Categorical by
state / crime / gender

Pie chart



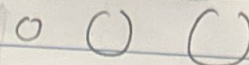
• by gender

• by crime
each state



Quantitative

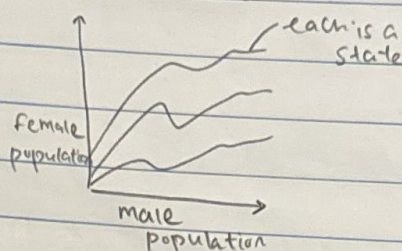
Bubbles



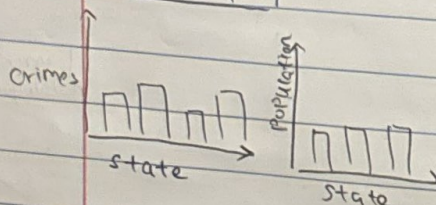
size: population

colour: crime

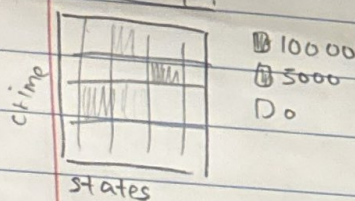
Line chart



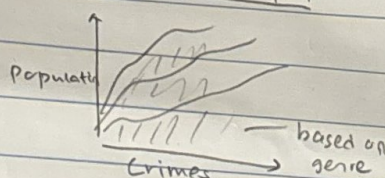
Bar Graph



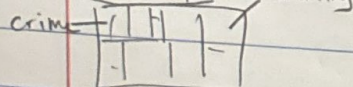
Heatmap



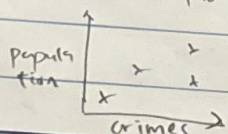
Shaded Graph



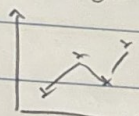
Treemap



Scatter plot

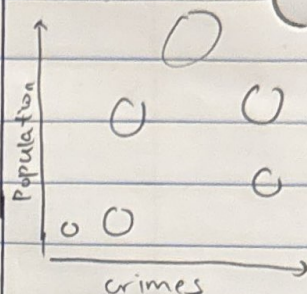


Scatter line chart



COMBINE

Bubbles + Scatter plot

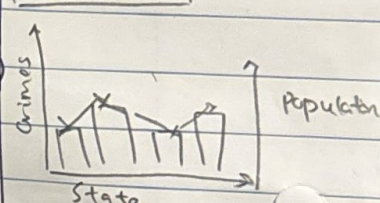


• size: population

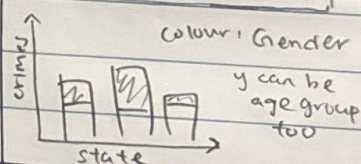
• colour: density ^{crime population}

• Each bubble is a state

Bar + line



Sliced bar + bar chart



FILTER

Remove

line chart → not really relevant for this due to having more quantitative values

CATEGORIZE

quantitative

States → Population

categorical → num of crimes

→ male

→ female

categorical

categorical

gender

age group (ordinal)

Crime type → States

categorical

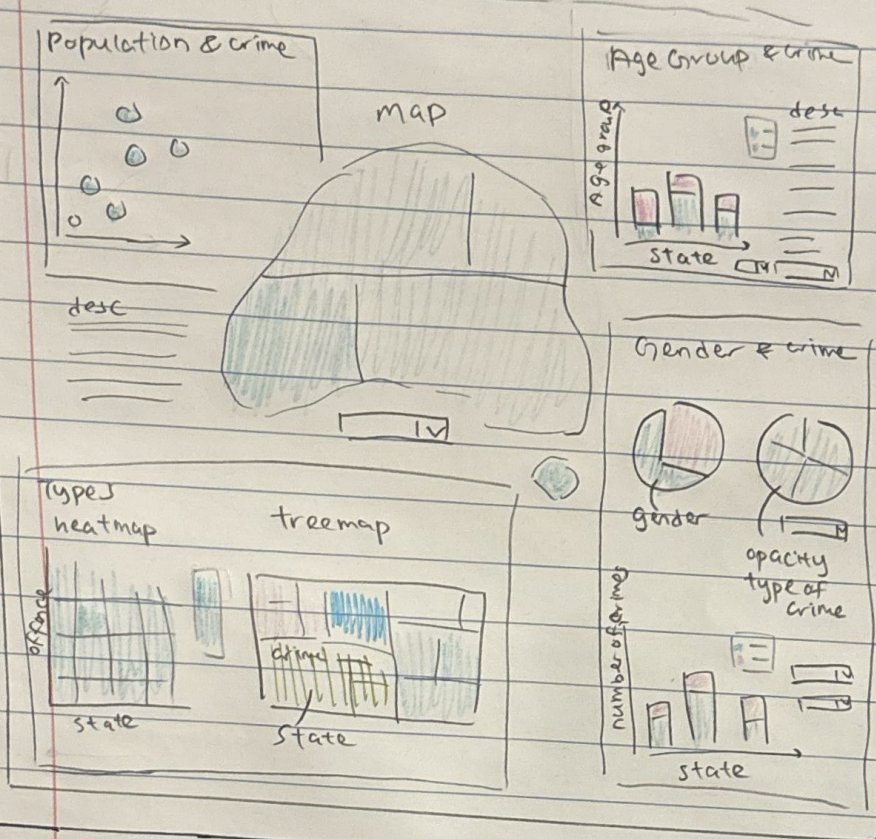
QUESTIONS

- There is a lot to explore and visualise. Will this clump the dashboard layout?
- Will users be able to correlate state crime with population, age group and gender?
- Will users be able to also compare state crime type with the mentioned?
- Will there be a lot of data to clean?

LAYOUT

CRIMES IN AUSTRALIA

Desc



FOCUS

- Main feature is the map as it is centered in the dashboard.
- Story telling direction : map → population & crime → Age group & crime → types → gender & crime.
- minimal word annotations to encourage users to interact with graphs (another focus)
- One page dashboard (not scrollable) to make everything viewed in one page, don't need to scroll.
- less emphasis on descriptions.

Title: Crimes in Australia
(2024)

Author: Madelyn Ovi

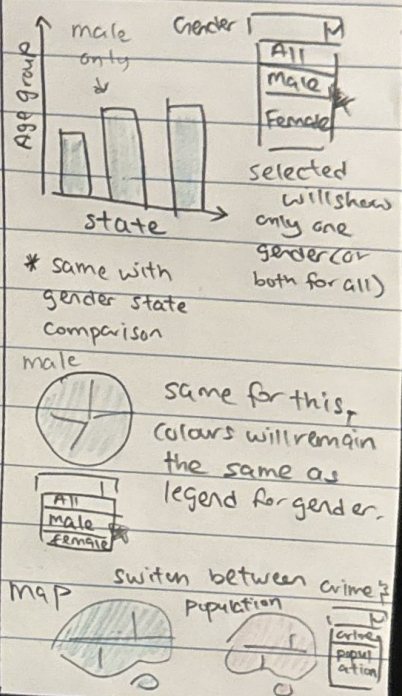
Sheet: 2

Task: FIT 3179 Assignment 2

OPERATIONS

- tool tips in all visualisations

Filters



DISCUSSION

Prus

- All in one page for easy comparison
- less annotations, less clumping → focus on interactivity

cons

- lack of proper layout, may be hard to code in

html

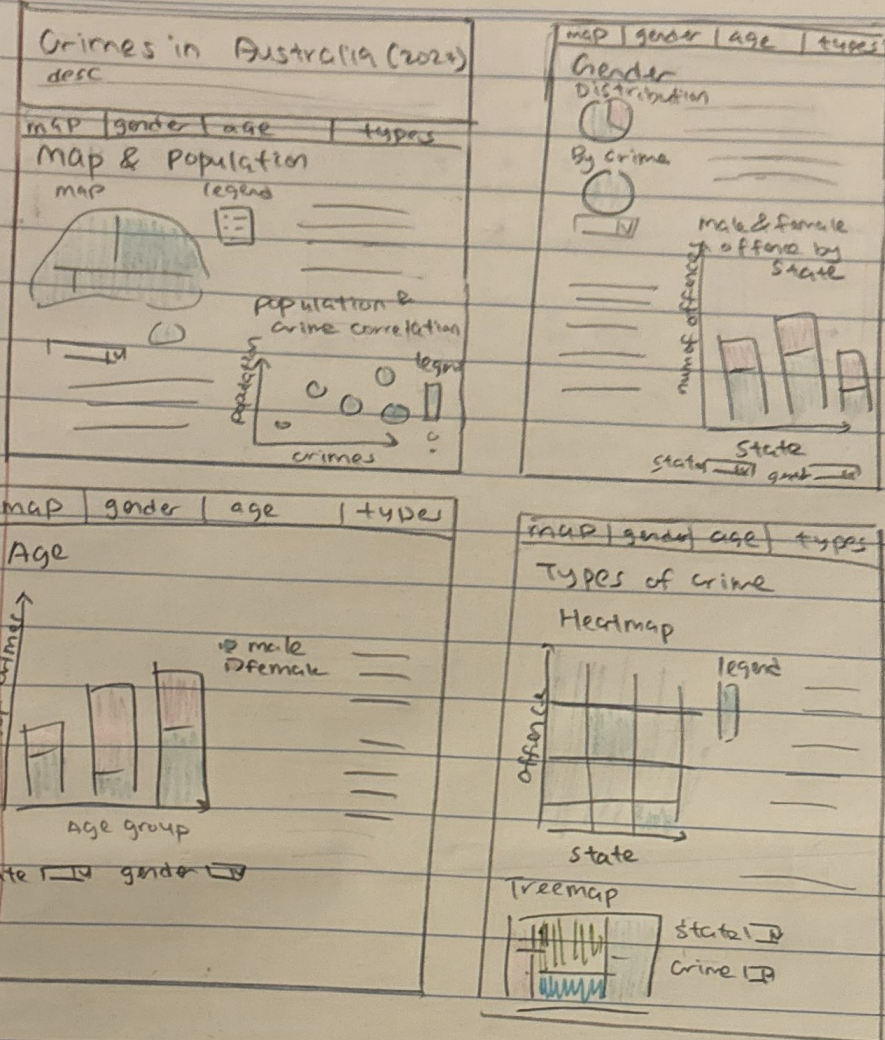
more

- descriptions may be needed to guide users for interactivity
- too many in a page could cause visualisations to be too tiny to read

Summary

Summary | Centralised map focus but lack of clear layout which may cause the dashboard to look overcrowded

LAYOUT



OPERATIONS

- Tool tips in all visualisations.

Filter

- same gender filter as prev sheet

- By state dropdown

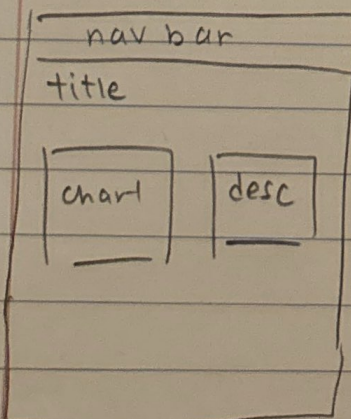
- same function-ality as gender, just filter by state.

- Both filters can be viewed at once for specific state and gender.

- Navigation bar that leads to each section with its visualisations

Focus

- Multiple html pages, allows user to view whichever visualisation by navigation bar.
- Main focus of each page is their visualisation along with descriptions for all visualisation insights.



← main layout for each page.

Each graph has its legend next to it.

- visualisations are big to take up space

- Similar colour scheme

DISCUSSION

Pros

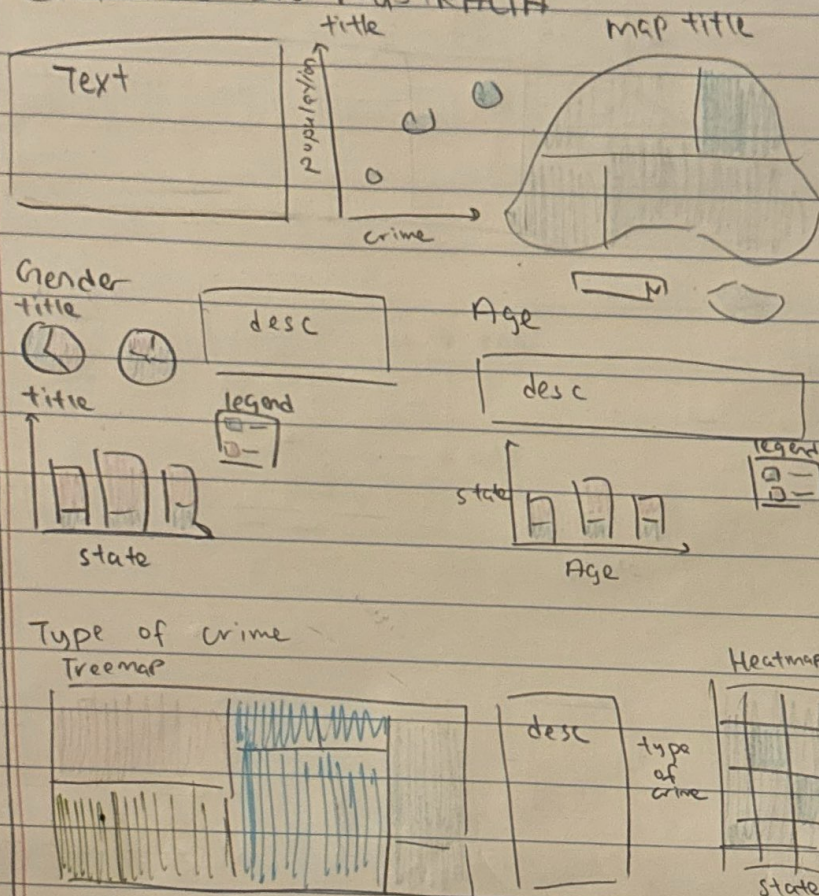
- multiple pages mean all visualisations can be viewed clearly.
- Ease of navigation with navigation bar
- consistent and clear layout

Cons

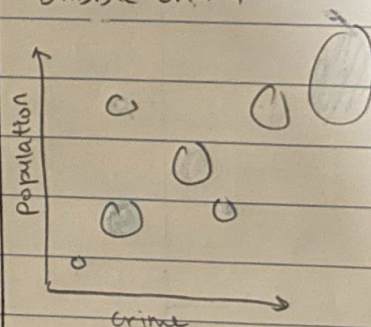
- Too many html pages, too many files to make
- could cause too many white space if not enough visualisation/description for each section.

summary Has navigation feature, giving room for more content and clear layoutting.

CRIMES IN AUSTRALIA



- Zoom in and out bubble chart



- view smaller values
- resets on double click

- no main focus, all charts are around the same size
- more description, reducing the need for annotations
- balance between description and visualisation
- individual gender and state can be viewed with drop down filter
- bubble chart zoom in to view smaller values clearly
- similar colour scheme

Pros

- Clear layout, less clump
- balance between description & graphs

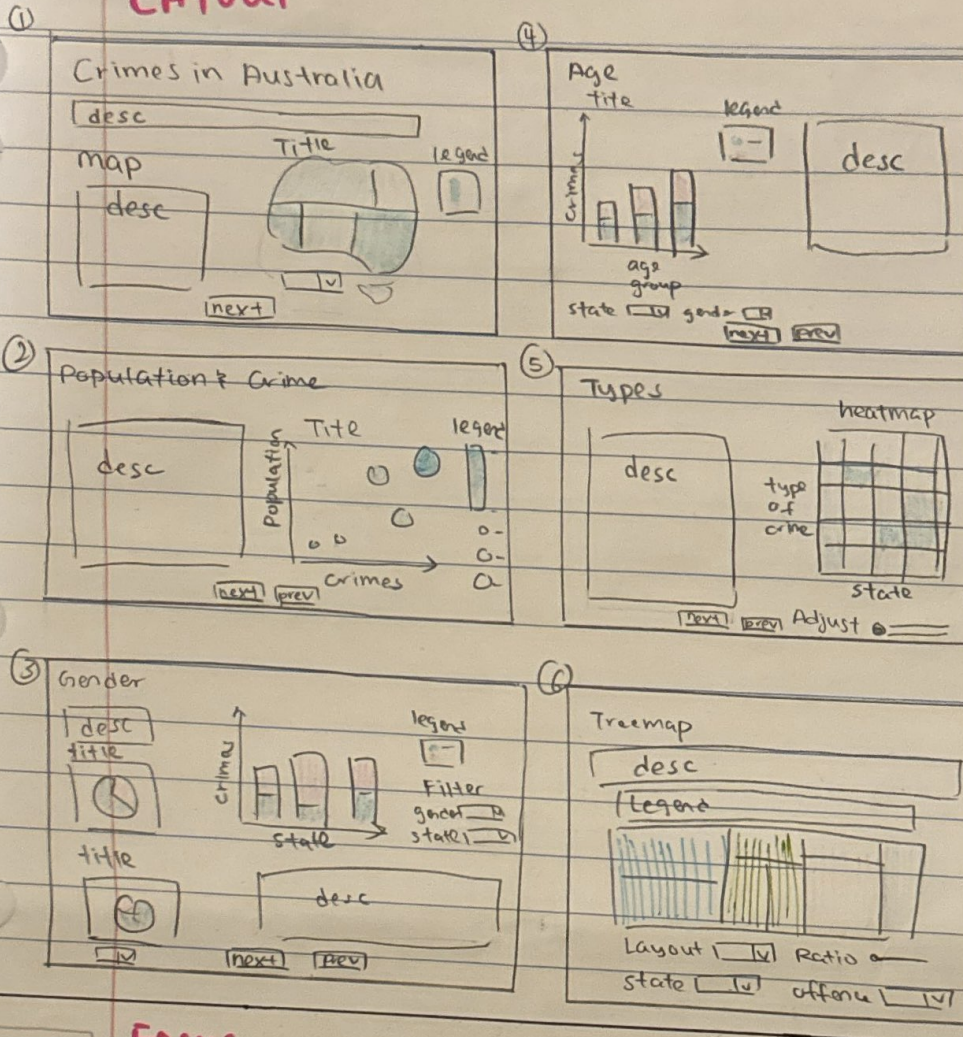
1000

- impossible to fit in a single screen
- too many words may be overwhelming

Summary

- most organised but might be overwhelming due to the amount of content in a screen.

LAYOUT



OPERATION

- All charts have tooltips
- Example:

state:

number of crimes:

population:
- Dropdown filter for stacked bar chart
- State Gender
- Treemap dropdown
- State offence
- Slider for heatmap changes darkness value
- Adjust 0
- Slider for treemap
- Aspect Ratio 1
- Ratio of height and width of category
- Zoom in/out bubble chart
- Treemap view
- ↳ squarify / binary / sliced

Focus

- The format is one singular scrollable html page with all the visualisations. But they are sectioned appropriately.
- Previous** and **Next** are navigation buttons. (supposed to be in operations but no space) This is to have minimal scrolling. This also makes it faster to view sections. The buttons instantly scrolls to the section. Users can scroll if they want to.
- Focus on each page is fairly balanced between visualisations and descriptions. Except for treemap which has more emphasis on the map than the descriptions.
- Follow a similar colour scheme for all legends unless there are too many categories (treemap)

DETAILS

- Dataset: CSV files
- Visualisation: Vega lite
- Deploy: Grit
- Site styling: HTML & CSS & Javascript
- Excel: data cleaning

Estimated time:

- ↳ 3 days → a week
- ↳ data cleaning: 1-2 days
- ↳ Vega lite: 1 → 3 days
- ↳ HTML & CSS: 1 → 2 days
- specific requirements: scrollable page, portrait