FIVE DESIGNS SHEET

EMPLOYMENT IN AREAS OF AUSTRALIA

1A
→ Proportion of the state employed

✓ number of jobs normalised by area/population ✗

1C
Number of people employed
states

1B
→ number of people employed

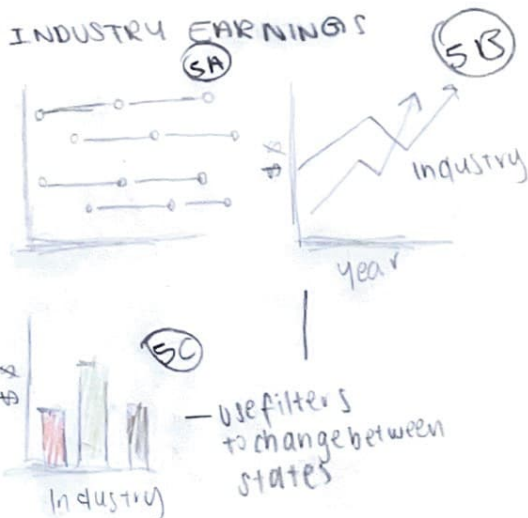✗ number of jobs in each area
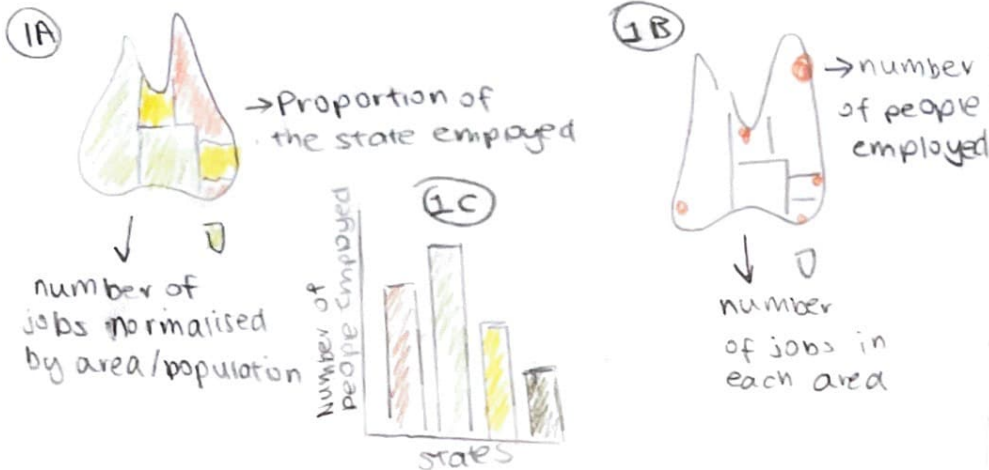
GROWTH WITHIN EMPLOYMENT
(split into growth in industry and growth amongst genders)

2A
→ industry/gender

2B
→ industry/gender

GENDER TREATMENT REGARDING EMPLOYMENT

PROPORTION OF GENDER EMPLOYED

3A
☐ employment status

Number of employed
☐ Gender

3I

Employment status

3C

% **3D**
Age group

GENDER PAY GAP

☐ gender

4A
state

4B

INDUSTRY EARNINGS

5A

5B
$ / industry
year

5C
$
Industry
— use filters to change between states

MOVEMENT

6A

6B
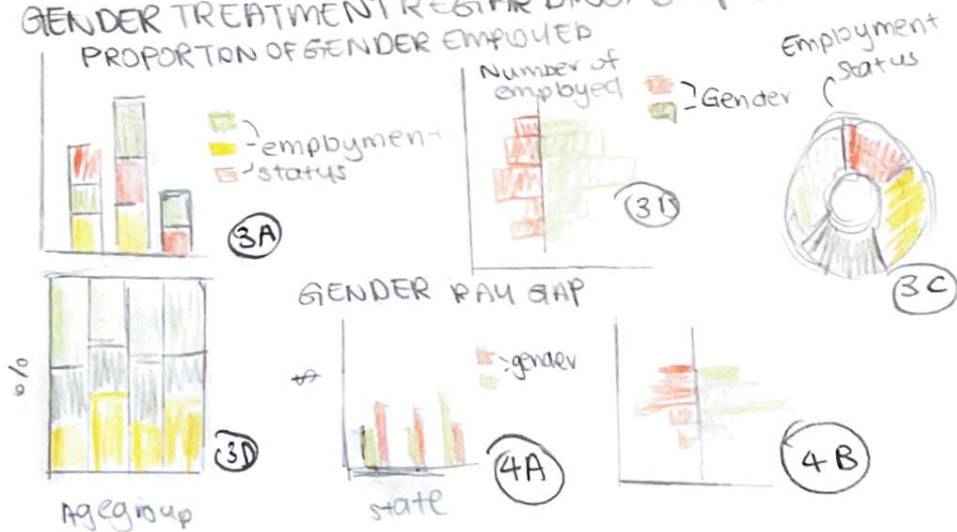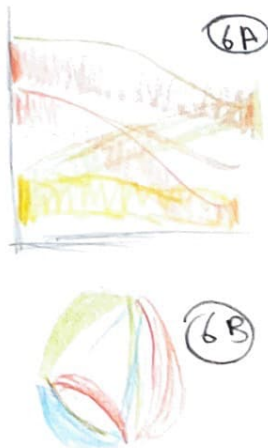
FILTER
1C doesn't visualise information as well as the maps

3C does not account for age groups like other charts can

QUESTIONS
> Do I want to display proportions with area chart **2B** or simply growth over time?

CATEGORISE
EMPLOYMENT IN AREAS OF AUSTRALIA
↓
GROWTH IN EMPLOYMENT
↓
INDUSTRY EARNINGS
↓
GENDER EFFECTS ON EMPLOYMENT
↓
MOVEMENT IN EMPLOYMENT STATUS

REFINE
3D and **3A** can be chosen over **3B** as they seperate fields into employment status

4A can be chosen over **6B** as it is less messy

5A and **5B** can be chosen as they are more clean and can better show differences in earnings and growth in earnings overtime

EMPLOYMENT IN AUSTRALIA
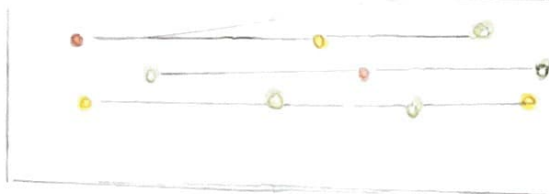
Number of ppl employed | Number of jobs

GROWTH IN EMPLOYMENT

MEDIAN EARNINGS PER Industry

↳ year slider

TREATMENTS OF GENDER

↳gender pay gap

MOVEMENT OF EMPLOYMENT STATUS

proportion of people included
↗ of people employed

operations

Time sliders
↳ select years to show on maps and median earnings of industry

TOOLTIPS
↳ Details and measurements of graphical elements

DISCUSSION

Advantages
> well segmented into clear sections

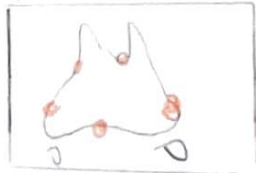> can switch graphs without affecting layout or balance too much

Disadvantages
> Growth in employment section has heavy text, info overload
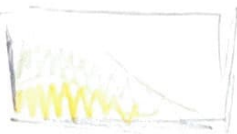> Not as much interactivity

MOVEMENTS
> choid to showcase movements between employment status

FOCUS
- All sections equally important

Employment in Australia
↳2 maps depicting number of jobs and number of people employed in each area

GROWTH IN EMPLOYMENT
2 line charts to show growth in industry and gender employment

MEDIAN EARNINGS PER INDUSTRY
- cleveland dot plot to showcase difference in earnings

TREATMENT OF GENDER
2 butterfly charts to showcase difference in amount employed and earnings

EMPLOUMENT IN AUSTRALIA

GROWTH IN EMPLOUMENT

Brushing

TREATMENT OF GENDER

male

Femae

year filter

→g.

MEDIAN EARNINGS

MOVEMENT OF EMPLOUMENT

year filter

TITLE : AUSTRALIA'S EMPLOUMENT
AUTHOR: Sharon Zhou
Date: 30/09/2024
Sheet 3
Task FIT 3179 ASSIGNMENT 2

OPERATIONS

BRUSHING AND SLIDERS
↳ select years to show
on visualisations

TOOLTIPS
↳ Details and measurements
of graphical elements

INFORMATION HIGHLIGHT UPON SELECTION

↳ Highlight information on
Sankey diagram

→ % of people
moving from employed
to employed
↳ % of people
moving from
employed to unemployed

select
bar to highlight
information from group
of employed people in
previous month

DISCUSSION

Advantages
> A lot of interactivity
> Visually appealing
> clean layout for storyboarding

Disadvantages
> Lots of text, information
overload.

FOCUS

> All parts equally important.

> Higher focus on interactivity
(see operations for Sankey
diagram interaction)
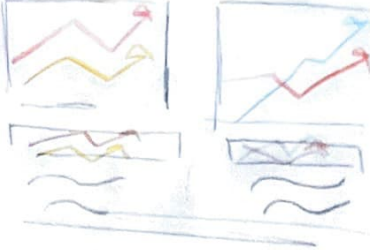
BRUSHING
↳ only show this
section

years
> High focus on storyboarding

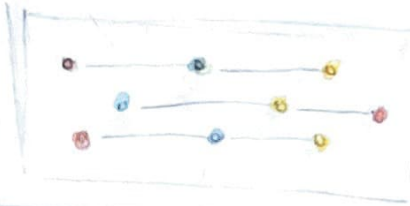# EMPLOYMENT IN AUSTRALIA

AREAS OF EMPLOYMENT

Employment growth

TREATMENT OF GENDER

employment status of each gender selected by age

pay gap

MEDIAN EARNINGS

CHANGE IN EMPLOYMENT STATUS

FOCUS

> Balance between text and visuals
> High focus on sankey diagram
     ↳ must have high interactivity
       (see sheet 3)
> High focus on story-boarding

OPERATIONS

Tooltips

> hover over data points, maps, line graph

selection filter

> Select which industry shown for gender pay gap bar chart

select data to be highlighted on sankey diagram

BRUSHING

select years to be shown

DISCUSSION

Advantage

> like the use of boxes within the layout
> high interactivity
> good story boarding

Disadvantage

> info overload

BASED OFF SHEET 3

EMPLOYMENT IN AUSTRALIA

INTRO TEXT — Intro text

EMPLOYMENT IN AREAS OF AUSTRALIA
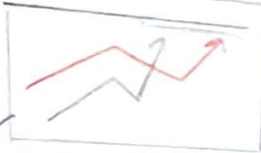
legend

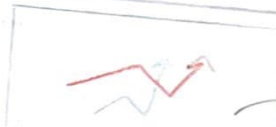% of people employed in each state

text

jobs available per km²

text

GROWTH IN EMPLOYMENT

Industry growth
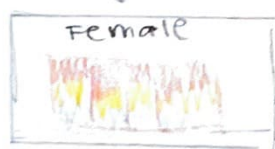

text

Growth amongst gender

text

MEDIAN INCOME IN INDUSTRY
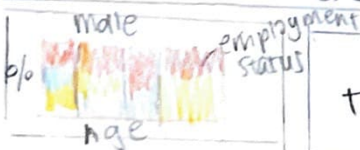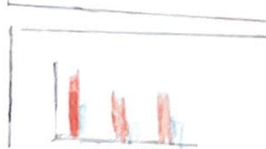
industry income + tooltip to appear

text

TREATMENT OF GENDER

male
% — employment status
age

text

female

CHANGE IN EMPLOYMENT STATUS

text

OPERATIONS

Brushing + sliders
↳ select years to show on visualisations
Highlight information on sankey chart

Tooltips
↳ Hover over points on diagrams

QUESTIONS

can there be any more interactions?

DETAILS

Dependencies
> R studio for wrangling
> Mapshaper for topojson
> Vegalite, visual studio code

ESTIMATED TIME & EFFORT
> 1-2 days to clean data
> 1 week to make visualisations
> 3 days for layout and text

FOCUS

> Storyboarding
  ↳ text + idioms for each section
> High interactivity
> Good balance for overall design