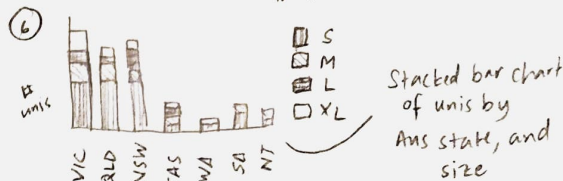
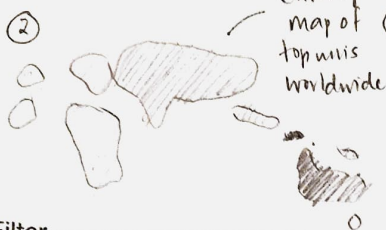
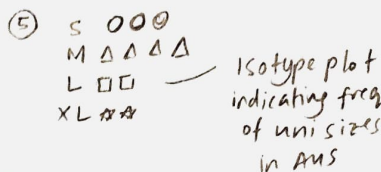
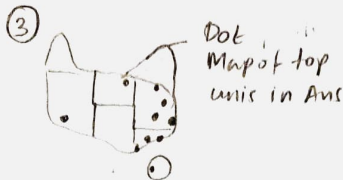
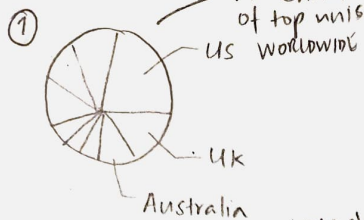


# Ideas

Sheet 1

Name DIYA, R

Date 9 SEP 24



## Filter

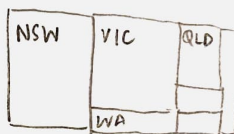
### WORLD OVERVIEW

①, ②

### AUS FOCUS

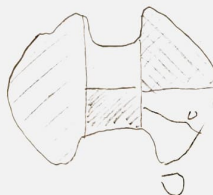
- Map ③ → List of unis ④
- States dist ⑤
- Analysis of size ⑥, ⑤, ⑪, ⑫, ⑬, ⑭, ⑮
- Analysis of age ⑬
- How the unis perform on KPIs ④

⑦



Tree map showing how many top unis by state

⑧



Choropleth map of unis per Aus state

## Categorise

① Top Unis in the world + WHERE?

- (a) Top 10 countries w/ most top unis (PIE CHART ①)
- (b) Top unis per country (CHOROPLETH ②)

② How does Australia perform?

- (a) Where are the unis? (DOT MAP ③)
- (b) Which are the unis? (NODE-UNIV ④)
- (c) Is there a correlation bet<sup>n</sup> age vs size? (⑥, ⑤, ⑪, ⑫, ⑬, ⑭, ⑮)
- (d) How do the top 10 perform against each other? ④

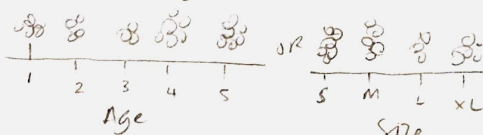
## Combine & Refine

⑨ Tabs for different attributes

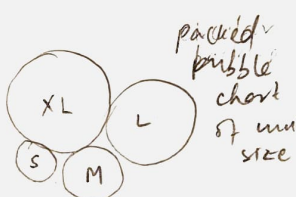
Location, Size, Sub. Page, Age



⑬ Beeswarm → might be hard for large num?



⑪

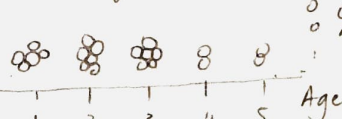


⑫

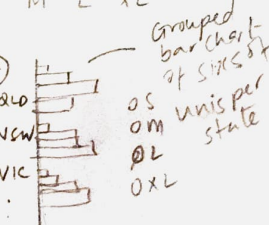


⑬

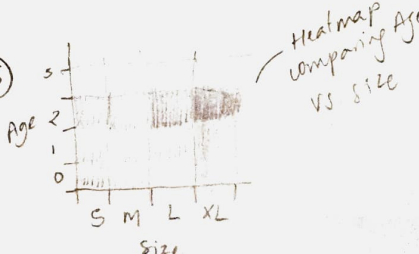
Beeswarm plot of uni's ages



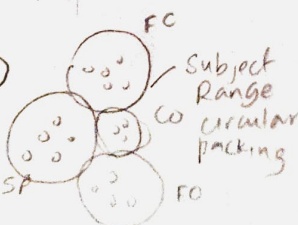
⑭



⑮



⑯



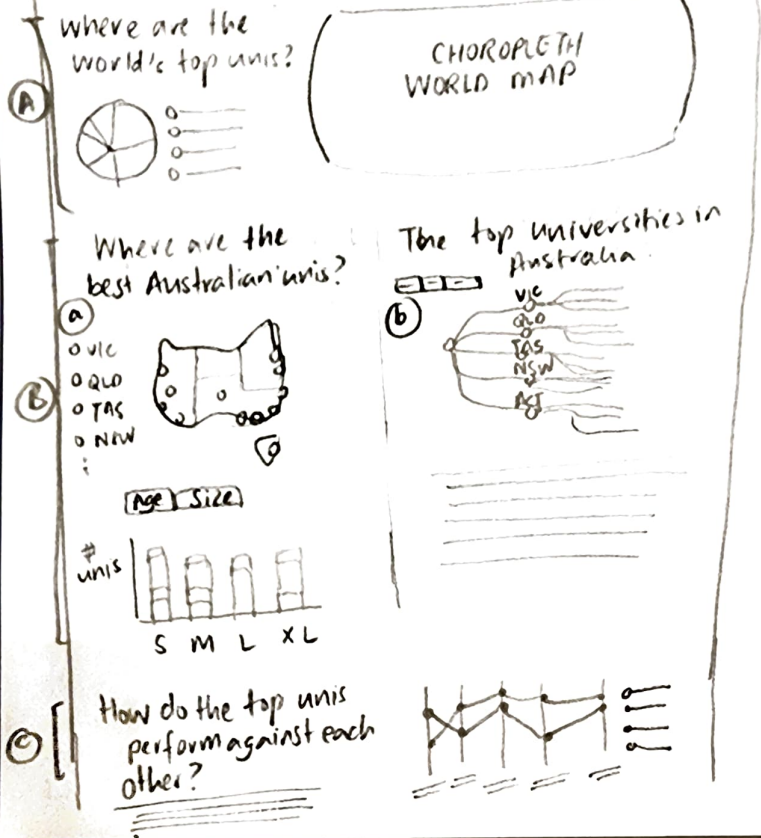
## Summarise and question

### STRUCTURE

WORLD → AUSTRALIA (COUNTRY) → STATE / UNIS

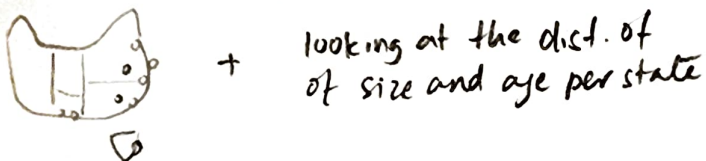
# Big Picture / Layout

## Universities in Australia How do Australian universities fare?



### Parti / Focus

Australia Dot Map - showing unis by STATE



### Node-link diagram

- shows all universities as users can't get a representation of WHICH unis are present in the other views.
- can look at all categories
  - Age
  - Size
  - Subject focus

Sheet 23,4

Name DIYA, K

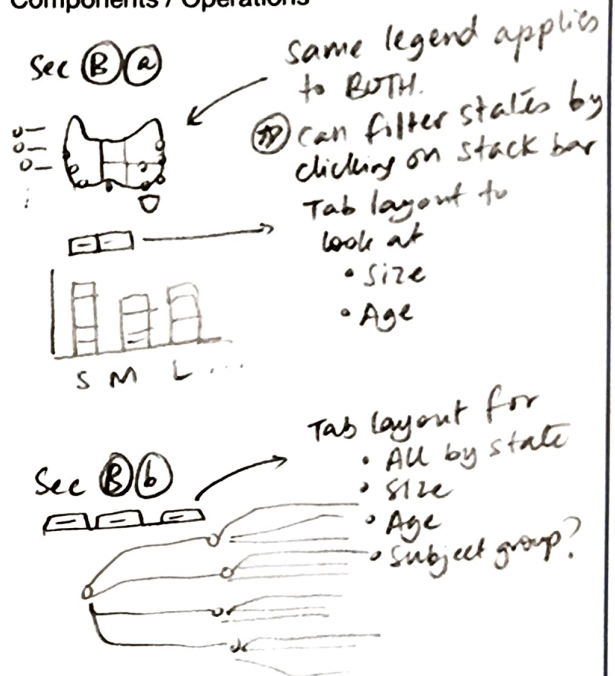
Date 9 SEP 24

Title TOP UNIVERSITIES IN AUSTRALIA

Description

## DESIGN SHEET 2

### Components / Operations



### Pro & Cons

#### PROS

- The node-link diagram is useful to represent the list of unis in a useful, visual manner
- The usage of TABS to layout separate graphs is good

#### CONS

- Australia dot map is supposed to be the focus but in this layout, it is not emphasised
- Layout could be confusing to navigate, esp in sec (B)



# TOP UNIVERSITIES OF AUSTRALIA

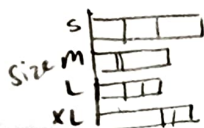
Overview



Where are TOP unis globally?

CHOROPLETH  
MAP

Where in Australia are top unis?



How do top unis  
perform against  
each other?



Parti / Focus

- (A) • Give an overview of Australia  
• The pie chart shows the top 10 countries
- (C) Filtering the map's "dots" by the stacked bars.

Sheet 204

Name DIYA R  
Date 9 SEP 24

Title TOP UNIVERSITIES IN AUSTRALIA

Description

DESIGN SHEET 3

Components / Operations

- (B) Choropleth map will have a tooltip that shows:
  - Country, Num. unis

- (C) Same as in DS 2  
→ tooltip shows:
  - state, city, uni

- (D)
  - rank (global + local)

Score - score

tooltip shows:

- uni name
- Rank (local + global)
- score for each parameter

Pro & Cons

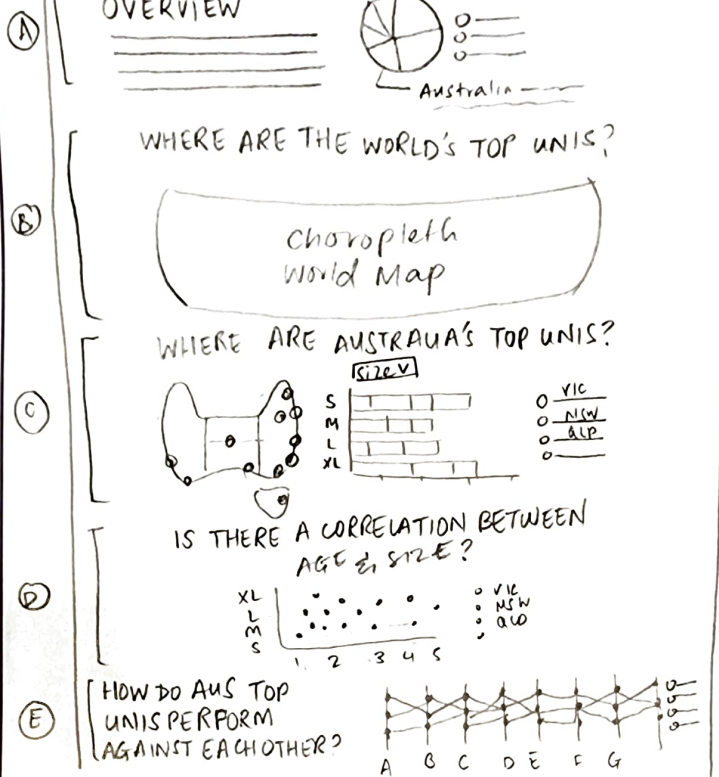
Pros:

- overview + combining top 10 helps
- Enabling the size + age stack bar to control the dot map.

Cons:

- Showing both size and Age might be confusing as they have the same colours.
- Too short? Show more visuals; compare age vs. size.
- Too much whitespace?

## THE TOP UNIVERSITIES OF AUSTRALIA



### Parti / Focus

- (A), (C) same as DS 2, 3
- (B) showcases all countries w/ colour channel (luminance)
  - colour shows # universities
  - add annotations of important info
  - for eg. USA contains the most, etc.

Sheet 2,3,4

Name DIYA RAMESH

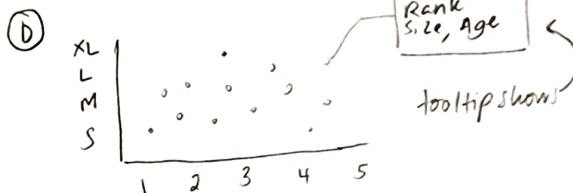
Date 9 SEP 24

Title TOP UNIVERSITIES IN AUSTRALIA

Description

DESIGN SHEET 4

### Components / Operations



- (C) A dropdown menu is shown with options 'Size', 'Size', and 'Age'. The text 'Dropdown helps focus on a single stack bar at a time' is written next to it.

Clicking on a state adds focus on dot map too.

### Pro & Cons

#### PROs

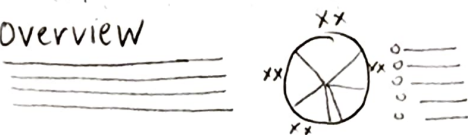
- Layout is readable + pleasing

#### CONS

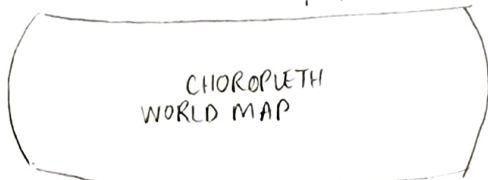
- Scatter plot may not be the best visualisation

# UNIVERSITIES IN AUSTRALIA

## Overview

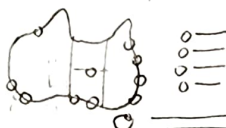


Where are the world's top universities?



Where are Australia's top universities?

Size ☒ Age ☒



(a) Age Size

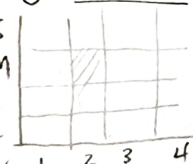


(b) S

M

L

XL

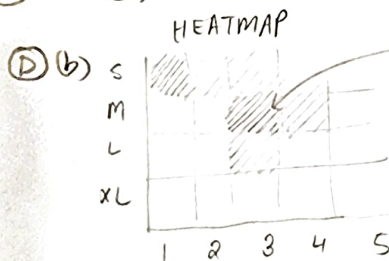


How do top Australian unis perform against each other?



## Parti / Focus

(A) → (C), (D), (E) → same as DS2 → 4.



Tooltip shows

- Uniname
- State
- Rank
- Size
- Age

## Sheet 5

Name DIYA RAMESH

Date 9 SEP 24

Title TOP UNIVERSITIES IN AUSTRALIA

Description

DESIGN SHEET 5

## Components / Operations

- Legend binding → highlights a country when clicking on the legend.
- Size and Age filter helps choose/filter dots on dot map.
- Tab layout helps combine two stack bar charts in one space.

## Details

Relevant params in the dataset:

- ① Institution name
- ② Country
- ③ 2024 Rank
- ④ Various scores used for determining rank
- ⑤ Age
- ⑥ Size

NARROW to Australia; need to get info on:

- city, state
- Latitude, Longitude
- compute country rank

## ESTIMATED EFFORT

- ① → 1/2 day
- ②, ③, ④, ⑤ 1 day each