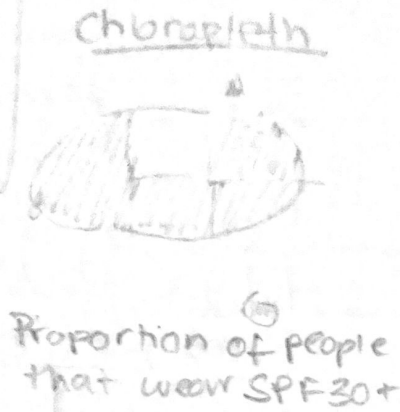
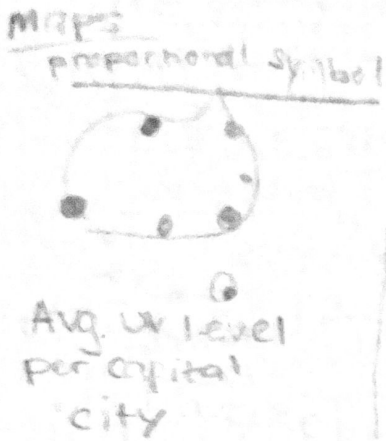
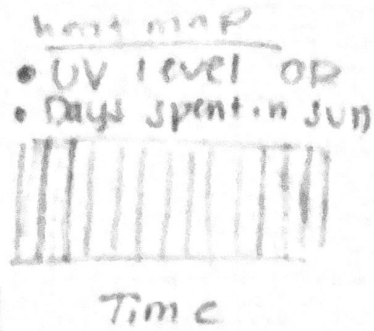
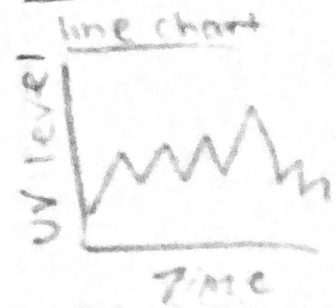
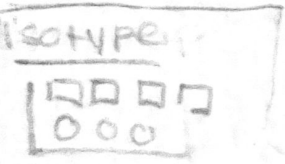


Ideas

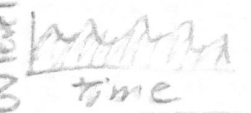


Bar chart



• Sun protection measure

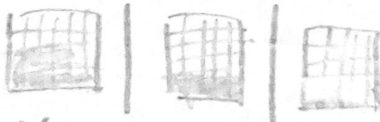
Area chart



Options :

- Used SPF30+
 - ↳ by men vs women
- Sunburn last week
 - ↳ by sun sensitivity
- Suntanned last year
 - ↳ by sun sensitivity

Waffle

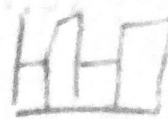
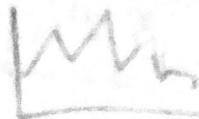


- % of young people who wear SPF/hats

Filter

Author: Alana Elizabeth
Date: 5/10/24
Sheet: 1
Task: Planning

Line & bar graph



alternative:
↳ lollipop chart
↳ radar chart
↳ stacked row
↳ pie

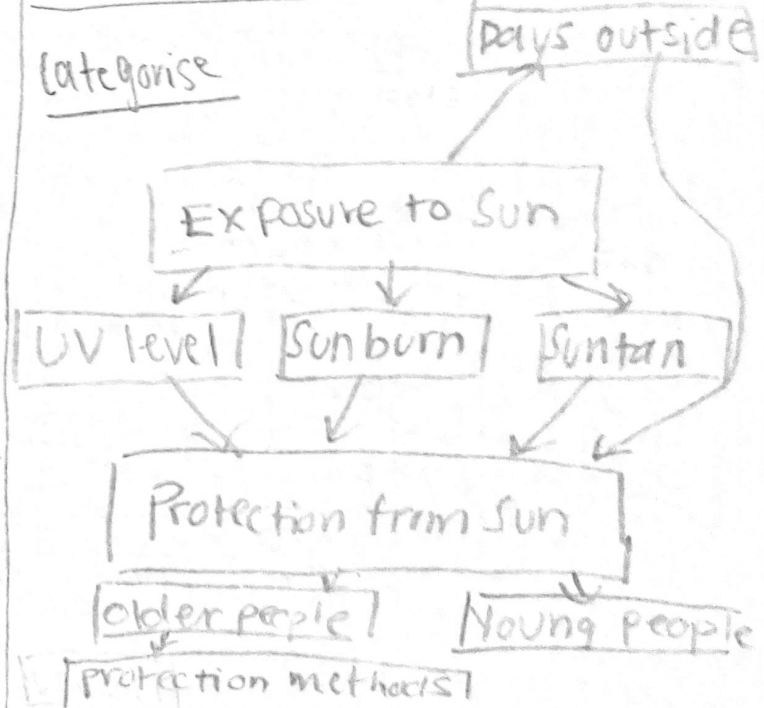
- Bit boring by themselves

Line & area

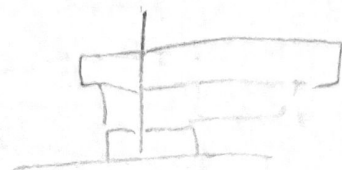
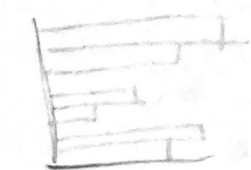


- Similar, should use just 1

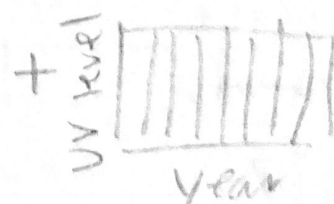
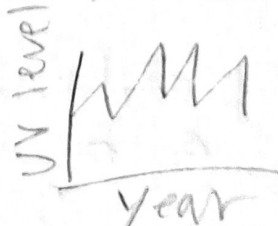
Categorise



Combine & refine



- Grouped / diverging bar charts would be more interesting than a normal bar chart



- Use the heat map to explore the line chart

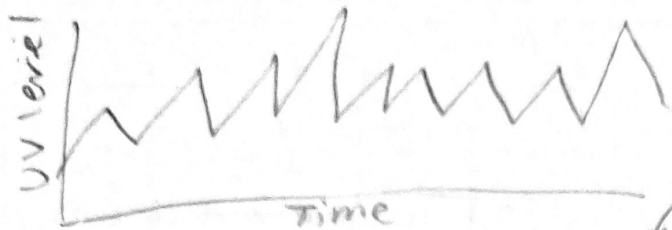
Questions

- Is the story clear?
- How can I make it more interactive?

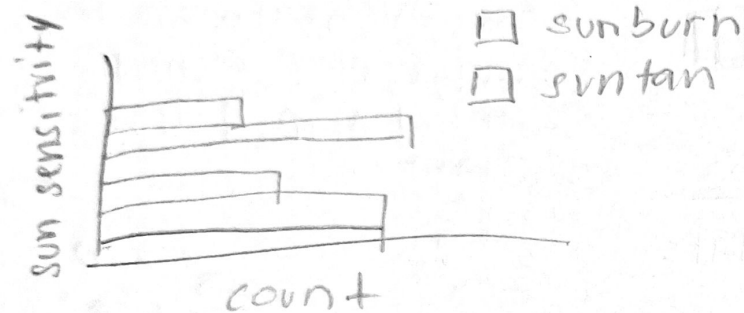
Layout

Sun Protection Behaviours

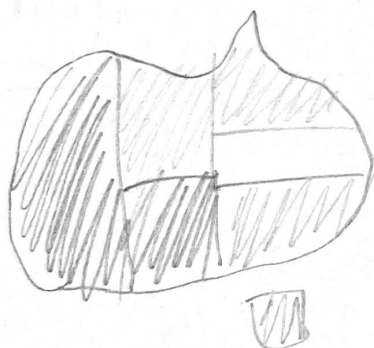
EXPOSURE



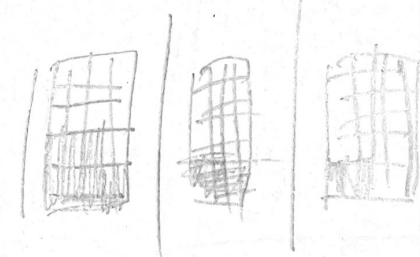
Use the heatmap to explore the line chart



PROTECTION



SPF30+ 15+



SPF hats (Young people)

Title: sun protection
Author: Aleena Elizabeth
Date: 5/10/24
Sheet: 2
Task: Design ideas #1

Operations

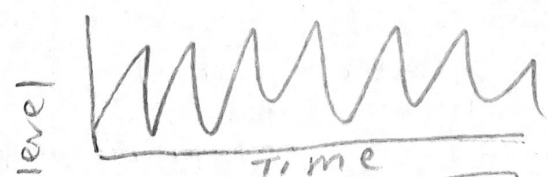


Using the heatmap as a selector

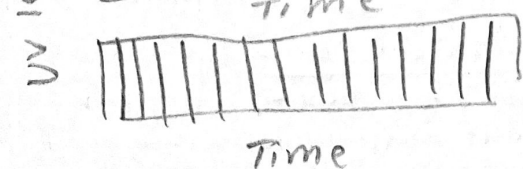
• Tooltip for watt-le & chlorophyll for more detailed views

Focus

• UV level overtime line graph & heat map



UV level every hour of across a year



Average UV level per day across a year

• Line chart more detailed overview

Discussion

Advantages

• Grouped the UV level charts together which has some interactivity

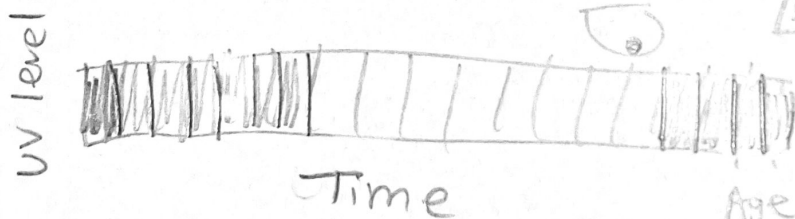
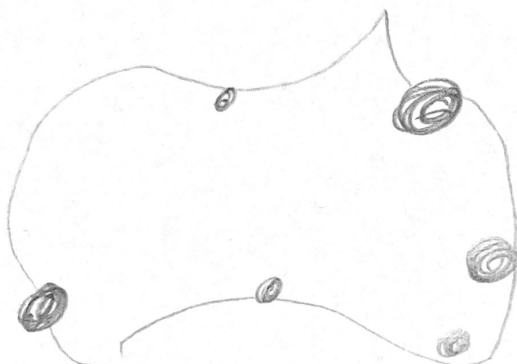
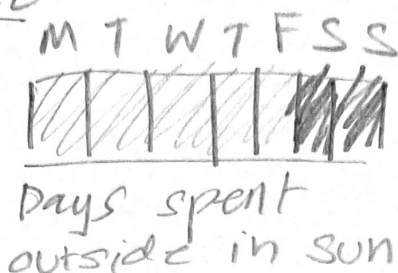
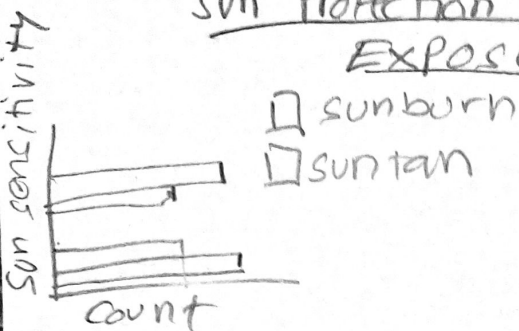
Disadvantage

• whitespace right of bar chart
• charts a bit simple, need more complexity

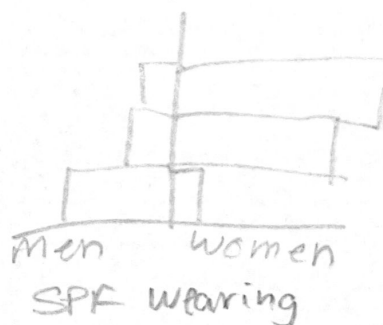
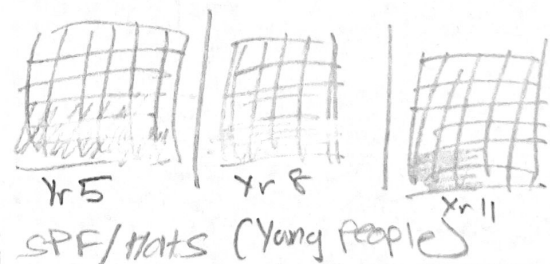
Layout

Sun Protection Behaviours

EXPOSURE



PROTECTION



Title: Sun protection

Author: Aleera Elizabeth

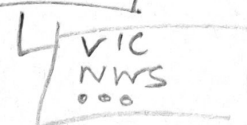
Date: 5/10/24

Sheet: 2

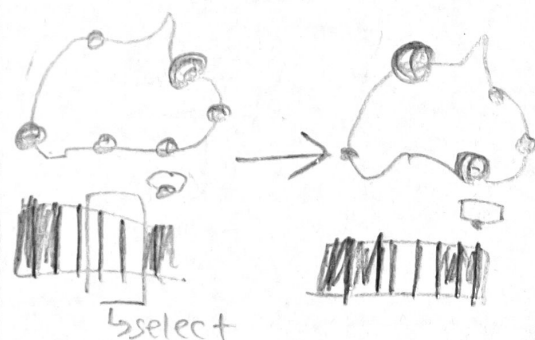
Task: Design ideas #2

Operations

State

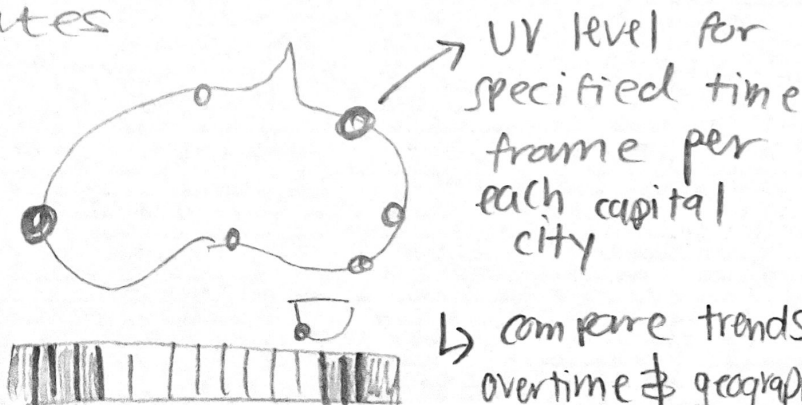


- State drop down button OR click on a dot on proportional symbol map to change heat map to be state specific
- Heatmap can still have selector to change time frame?



Focus

- UV level overtime in different states



UV level for specified time frame per each capital city

compare trends overtime & geographical

Discussion

Advantages

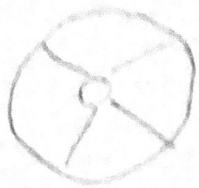
- Less white space
- Interactivity with heat map & proportional symbol map

Disadvantage

- Maybe too many bar charts (one's enough)

Layout

Sunburn



Suntan



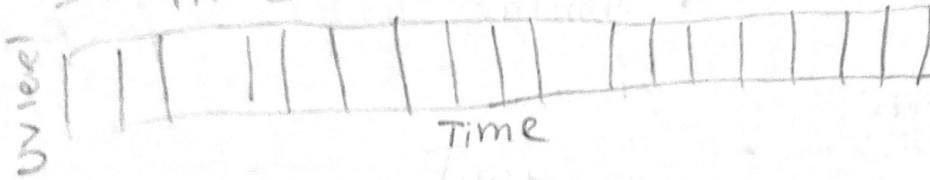
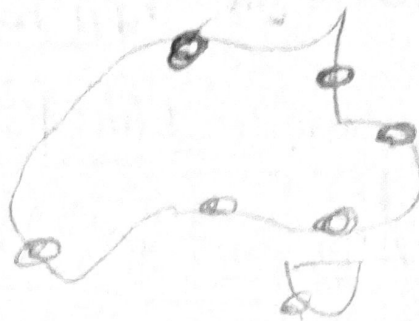
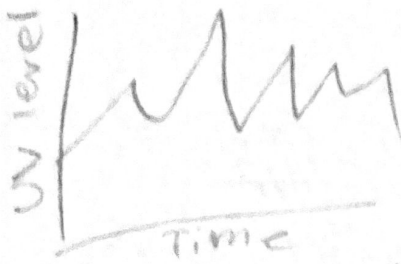
Sun Protection Behaviours EXPOSURE

MTWTFSS



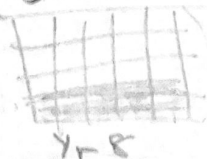
Days spent outside

category: SUN Sensitivity

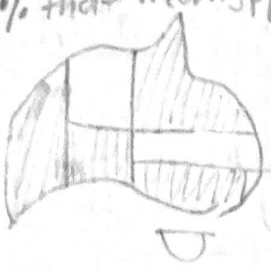


PROTECTION

% of Young people who wear SPF/Hats

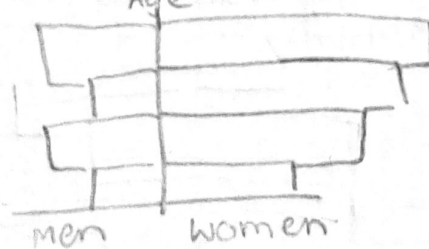


% that wear SPF



older people

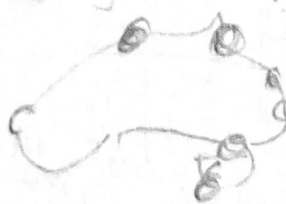
% that wear SPF by age & gender



Protection methods
Methods

Focus

• VV level heat map, proportional symbol map & line chart



• compare over-time (in detail) and geographically

Title: Sun Protection

Author: Heena Elizabeth

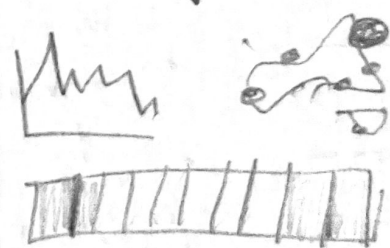
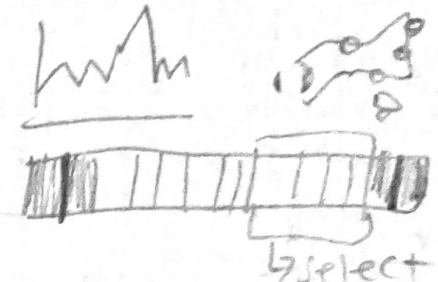
Date: 5/10/24

Sheet 4

Task: Design ideas #1/2

Operations

• Select interval on heat map to change map AND line chart accordingly



DISCUSSION

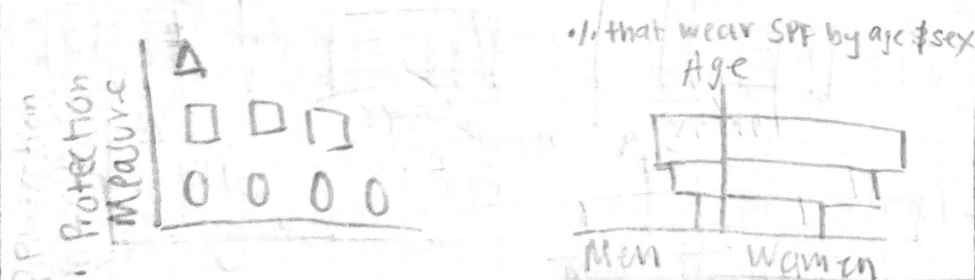
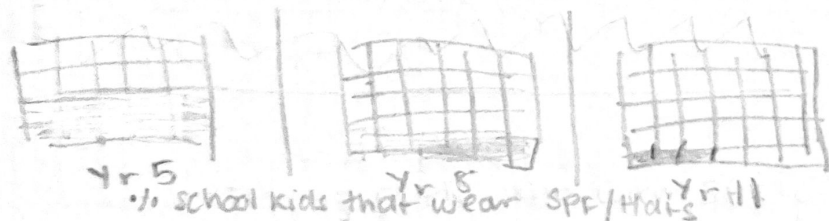
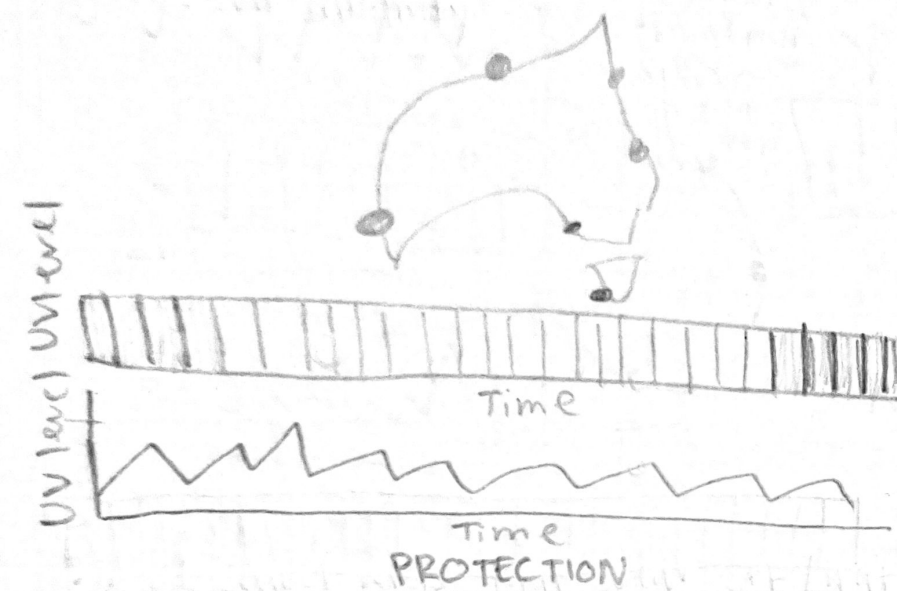
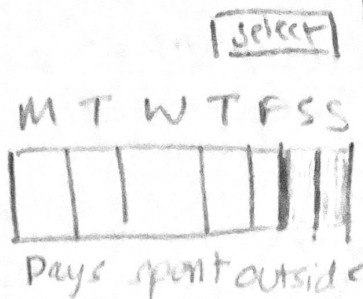
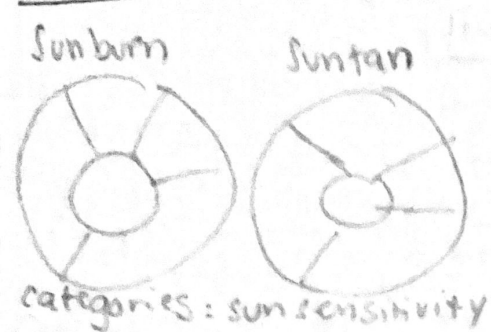
Advantages

- Varied charts
- Effective story telling

Disadvantage

• Having '2 Focus' charts (line chart & geographic map) next to each other maybe is less effective

SUN Protection Behaviours



Focus

- UV level proportional symbol map, heat map & line chart
- Compare overtime & geographically (nicer layout)
- Avg UV level for the city in the specified time frame
 - ↳ have text saying which state has highest level
- Selector. Avg UV level for a day across a year.
- UV level per hour across the given time frame.

Title: Sun protection

Author: Aneela Elizabeth

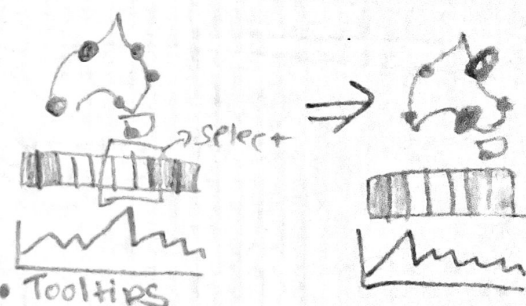
Date: 5/10/24

Sheet: 5

Task: Final design idea

Operations

- drop down
 - ↳ change the calendar heatmap to see breakdown across various states
- Use UV heatmap to change proportional symbol map & line chart



Tooltips

Details

Requirements

- Charts made on Vega-Lite
- Layout with HTML & CSS
- Ensure fits on small displays

Dependencies

- Vega Lite, HTML, CSS
 - ↳ design
- Excel
 - ↳ data cleaning
- Natural Earth
 - ↳ spatial data for map

Estimated time

- 1 day for donut, calendar heatmap, waffle, isotype & diverging bar charts
- 1 day for 'Focus' charts: line, UV heatmap & proportional symbol
- 1 day for layout