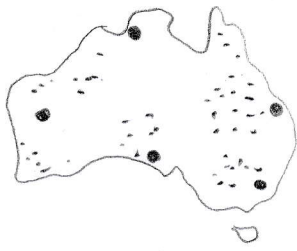
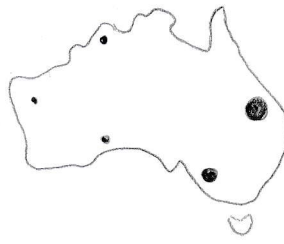


Ideas

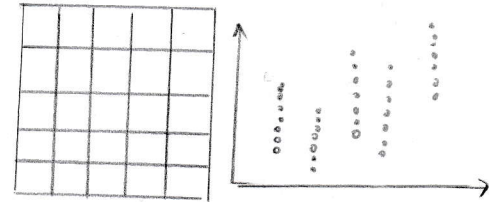
Distribution of airports



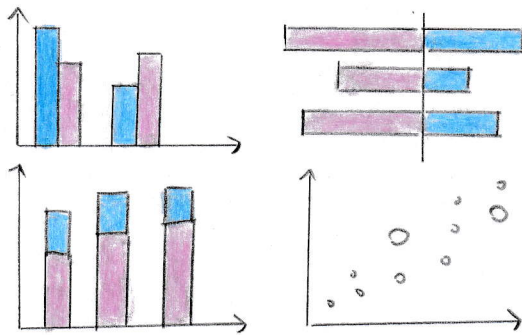
Airport Scores



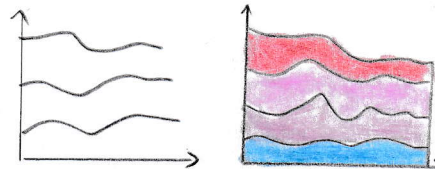
Aircraft movements



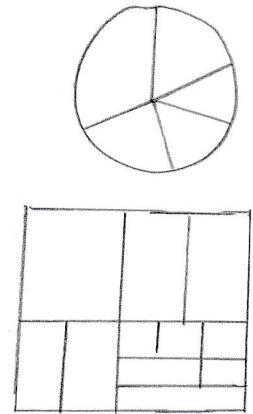
Passenger Traffic Domestic vs International



Trend of cargo movements

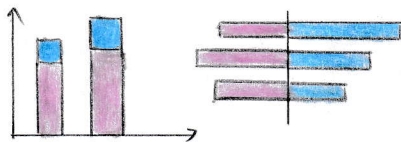


International Airlines in Australia Airports



Filter

Passenger Traffic should use stacked bar or butterfly chart for better comparison



Treemaps will not be suitable for airlines as it will be too difficult to read large number of words.

Categorize

maps → Distribution of airports
→ Airport scores

Airport business → Passenger Traffic
→ cargo movements

Compare Time period → Aircraft movements
others → International airlines

Combine & Refine

Distribution of airports and airport scores can be combined to be presented in one map.

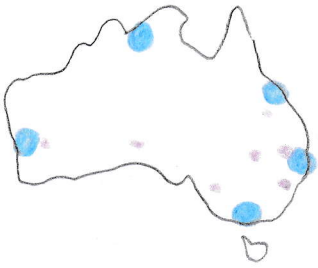


Questions

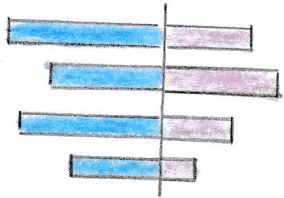
1. Is 5 graphs enough to provide information and insights to reader?
2. Is it possible to create more complicated graph such as sankey diagram or chord diagram for airline routes?

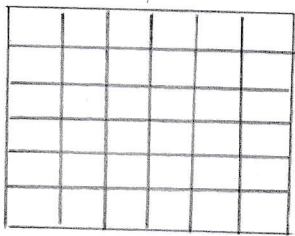
Layout

Australian Airport Statistics

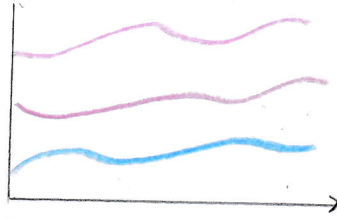


Passenger Traffic

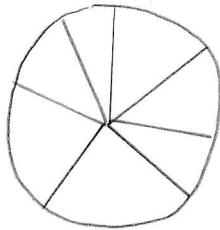




Cargo Movements



International Airlines



Title: Australian Airport Statistics

Author: Chang Yi Dian

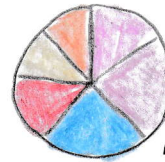
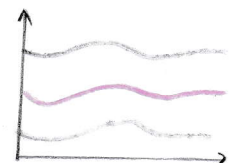
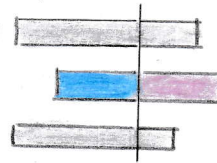
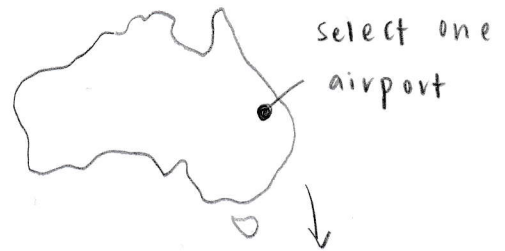
Date: 23/9/2024

Sheet: 2

Task: Design Sheet 2

Operations

- 1) Click on the map to filter the airport names in the whole page.



Airport - selected

Focus

- 1) Main focus is to filter the page from the map.
- 2) All the graphs are of same size to make the layout even
- 3) Implement Year / date filters for passenger traffic & international airlines as a separate filter.
use dropdown or slider filters

2020 v 2020

Discussion

Pros:

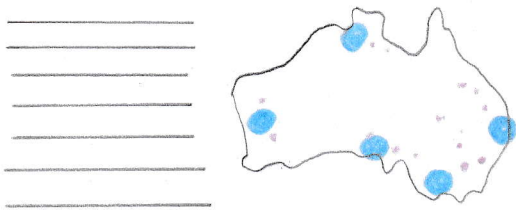
- 1) more interactive filter for airport names for better visualization of the airport selected
- 2) The layout is neat & tidy

cons:

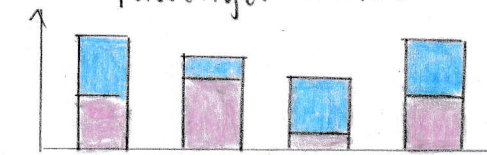
- 1) The layout would be a bit boring, no creativity
- 2) Not sure if all the datasets are able to be combined

Lay out

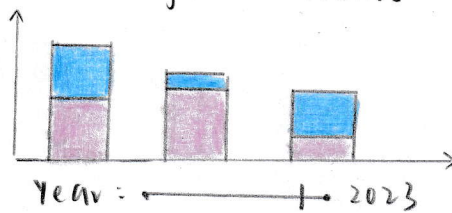
Australian Airport Statistics



Passenger Traffic



Year: 2023 Cargo Movements



Aircraft Movements

1					
2					
3					
4					
5					

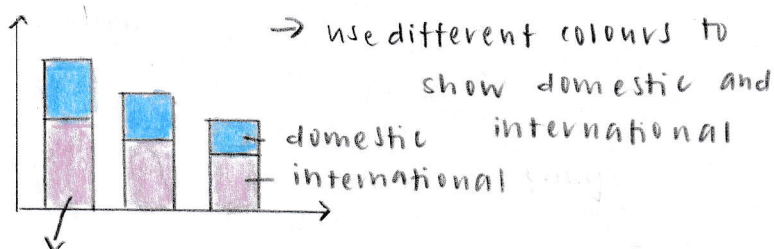
International Airlines

Jetstar				
Virgin				

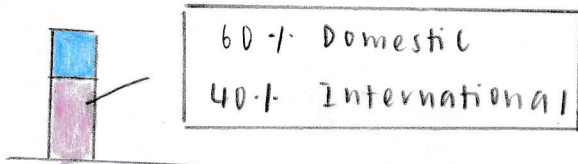
Year: v Airport v

Focus

- 1) Focus on the stacked bar chart



Tooltip show percentage differences. eg.



- 2) The treemap need to be filtered based on Top 10 / Top 5 airlines or it will be difficult to read

Title: Australian Airport statistics

Author: Chang Yi Dian

Date: 23 / 9 / 2024

Sheet: 3

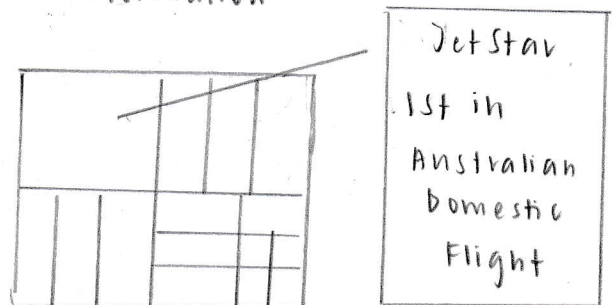
Task: Design Sheet 3

Operations

- 1) The year filters are individually placed below each chart with either sliders or dropdown menu

2023 2023 v

- 2) The tooltip will show more information



Discussion

Pros:

- 1) More spaces for writing information
- 2) Seperate filters are more clear and easier to view values

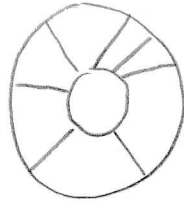
Cons:

- 1) Might be not symmetrical or not neat enough
- 2) The wordings might diverse attention from the graphs

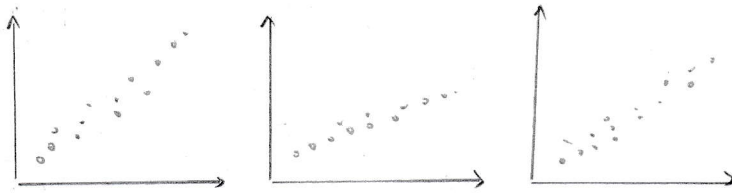
Layout

Australian Airport Statistics

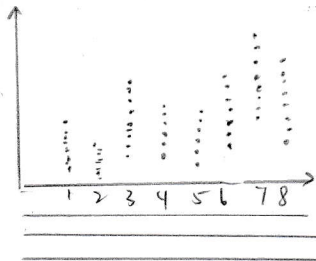
International Airlines



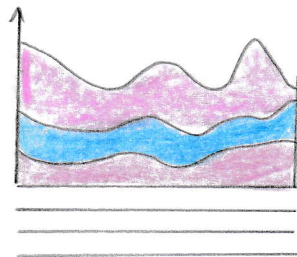
Passengers Traffic



Aircraft Movements



Cargo movements



Title : Australian Airport Statistics

Author : Chang Yi Qian

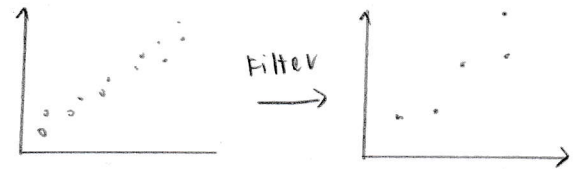
Date : 23/9/2024

sheet : 4

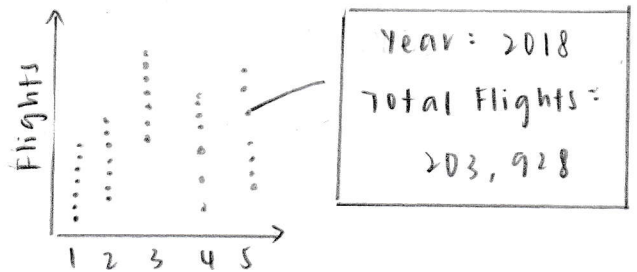
Task : Design sheet 4

Operations

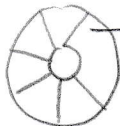

- 1) Filtering airport names for the scatter plot



- 2) Hover over the dot plot to see the exact Year number



Focus

- 1) Focus on the small multiples scatter plots
 - Implement filters to compare different airports better
 - Do 3-5 multiples with alternative years to show obvious comparisons
- 2) Add text annotations for clear explanation
 

- 3) Include summaries and observations from graphs

Discussions

pros:

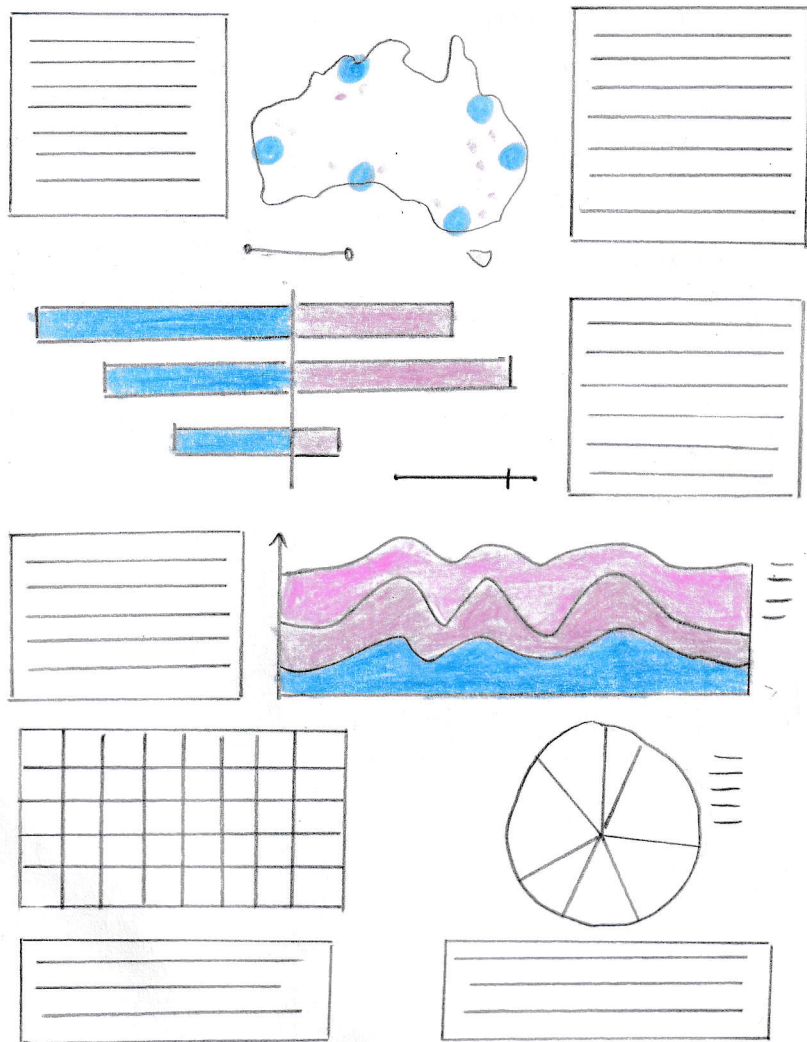
- 1) The small multiples can better show comparisons for trends over time
- 2) wordings below charts are all consistent and neat

cons:

- 1) Too many graphs in the layout will lead to confusion
- 2) The layout is 2-3-2, which is not that symmetrical

Layout

Australian Airport statistics



Focus

- 1) Focus on story-telling, link all the charts together
- 2) Align the text boxes and charts
- 3) Use same colour theme in all graphs
- 4) The international airlines should be filter into 5-10 airlines to be displayed
- 5) The stacked area chart should be expand wider for clearer visualisation
- 6) The circle area should be obvious between different scores

Title: Australian Airport Statistics

Author: Chang Yi Qian

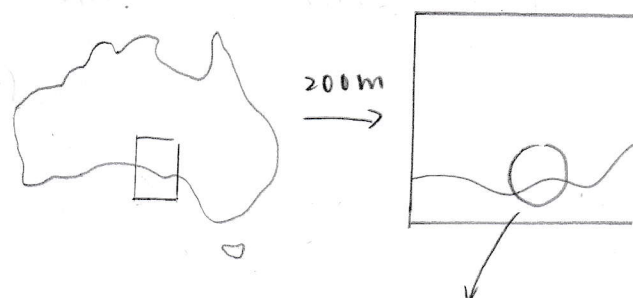
Date: 23/9/2024

Sheet: 5

Task: Design Final sheet

Operations

- 1) Apply Year filters to the butterfly chart to analyse yearly statistics
- 2) Apply zoom filters to map



Hover over to see airport name, region and score

Details

- 1) Some data have too many columns and NA values needed to be removed
- 2) Estimated time and effort
 - 2-3 days for finding dataset, clean and combine data
 - 3-4 days for building idioms
 - 2-3 days editing tooltips, annotations, design and layout