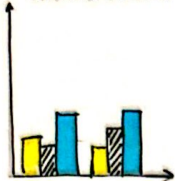
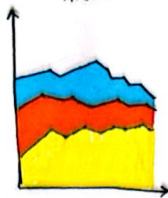


① Ideas

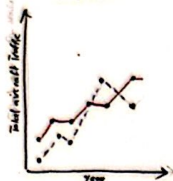
Clustered Bar Chart



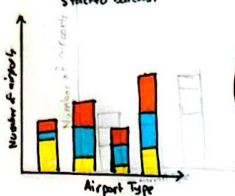
Area chart



Line Chart



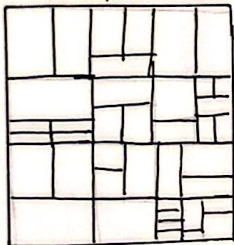
Stacked Bar chart



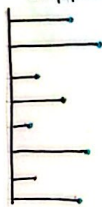
Donut chart



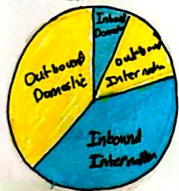
Tree Map



Lollipop chart



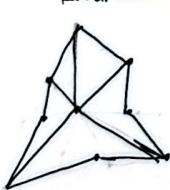
Pie chart



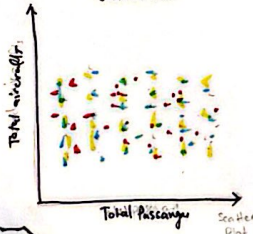
Combine + line chart



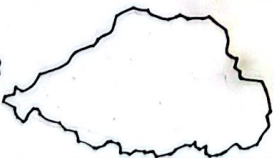
Radar chart



Scatter Plot

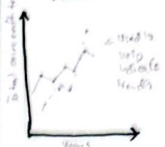


Map

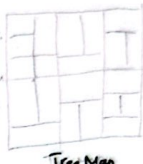
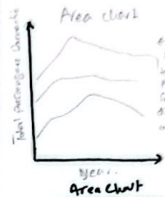
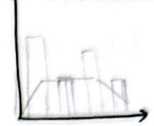


② Filter

Line chart



Line + bar chart



③ Categorise

Trend: Number of passengers at different airports against time in years

- using a dataset that consists of passengers at a particular airport compared their travelling trends per year.

The Pie chart clearly shows the Ranking of the most popular type of air travel domestic (Inland/outbound) and international (Inland/outbound).

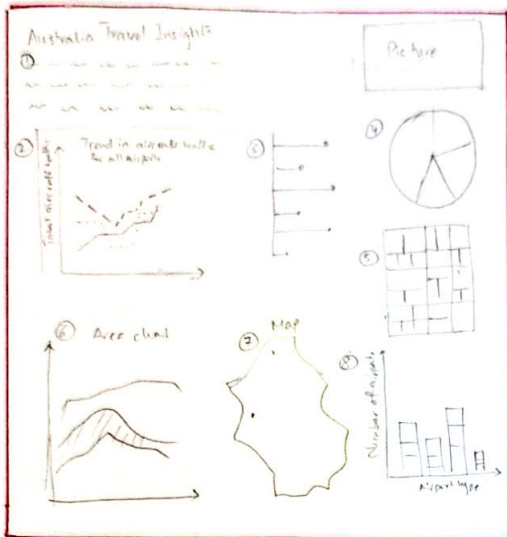
The area chart is used to visualise the total no. of passengers over time as it effectively highlights cumulative trends and changes over the years. The shaded area enhances the perception of what making it easier to compare trends.

④ Combine and Refine

- Instead of using a bar chart to indicate the no. of passengers at airport a direction bar is a much better approach as it compares both domestic and international passenger separately and it allows the user to inspect month by month trends in a particular year.

- Instead of using a donut chart & used a pie chart to emphasize the proportion in each category more clearly. The full circular shape draws attention to individual segments, making it easy for viewers to compare the contribution of each airport travel type.

- Using a line chart is better than bar scatter plot as it is more user friendly as it makes it easier to see the overall trend of the data.



Author: Abdul Rafay

Date: 17/10/2024

Sheet: 2

Task: Airport in Australia

Operation

Select Airport

The dropdown would highlight the linechart for the particular airport selected.

Select year

A filter used to investigate the travel trends for different airports per year. The user would be able to select airports he wants.

Discussion

It is easier for the viewer to understand the data to operate the filters tool tips.

Can easily change the layout as it is easy to implement.

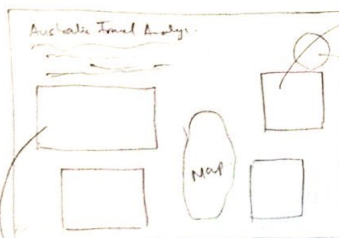
However the position of the map which is currently in the middle maybe adding upto the load. This may overload the viewer.

- 1 Text: It gives an introduction on the visualisation or context on the interface.
- 2 the chart:
 - It is enlarged to emphasize on the importance.
 - Annotation made to the graph for interesting points.
 - Allows the user to see the detailed graph of any airport.
- 3 tooltip chart:
 - x-axis: Most freight
 - y-axis: average revenue
- 4 A pie-chart is used to indicate trends in travel (domestic / international) in different states (Qld, vic etc).
- 5 A tree map is attached.
- 6 Area chart is displaying the total number of passengers per year for domestic / international travels.
- 7 Map of Australia
- 8 Stacked Bar chart: displays the total no. of airports in each state in Australia.

Focus

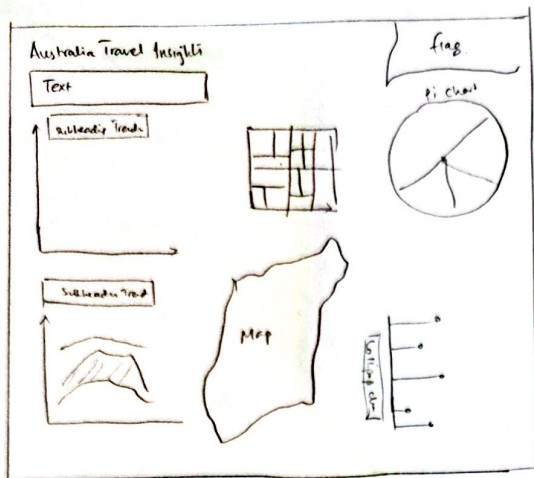
All filters are implemented other than the tree map where is displays the air freight trends for different airports.

Some graphics are larger in order to emphasize them for clearer, analysis and to explain on the importance.



using different colors to indicate the proportion of highlights tooltip

Most interesting different trend lines will be used to display different trends.



Author : Abdul Rafay

Date : 17/10/2024

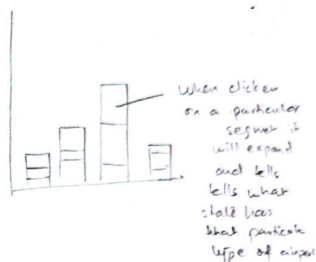
Sheet : 3

Task : Airports in Australia

Operation

Airport v

- Thought of positioning the filter above the idiom but not sure if it is similar



Focus

The stacked line-chart x-axis : Airport types

y-axis : Number of Airports

to indicate the different type of airport services in different states in Australia using a colour blind palette so that it is userfriendly towards colourblind people.

The circular point on the map of Australia shows the places in Australia where the elevation is highest. Higher the elevation means that the air in thin in that area. therefore the run way will have to be longer to support a comfortable landing.

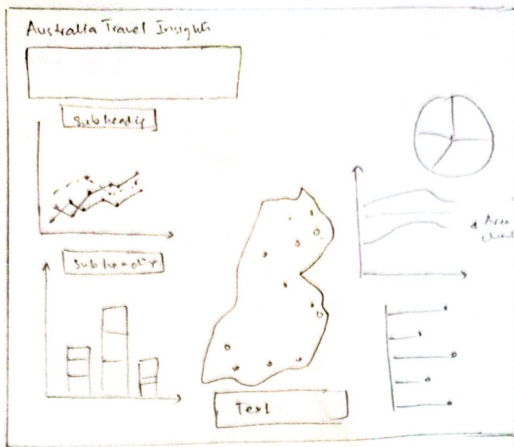
Discussion

Advantages:

- the sections are well defined with the filter and subtitles maintaining hierarchy.
- Having the ranking in terms of state makes it very interesting makes it interesting and eye catching.
- With the use of tool tips good user inbrow is being conducted

Disadvantages:

- Too much idiom may confuse and overload the viewer.
- The flag in the back ground (top right) may contribute to clutter just.
- The right lines may not be clear as the white space is reduced.



Uses a colour blind palette.

Focus.

- The size of the map maybe reduced and moved to the corner to avoid overloading.
- Tool tips are shown whenever the user hovers over the idiom and all the other elements.

Use symbols based on a theme?

Annotations for all interesting + important information.

- There are no main idioms for now, therefore all idioms are equally important?
- Should the trends in the most popular airport (domestic, international) over the years be in the focus?
Maybe!

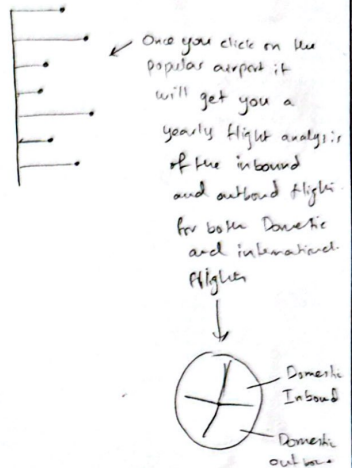
Autor: Abdul Rauf

Date: 17/10/2024

Sheet: 4

Task: Airports in Australia

Operation



Discussion

Advantages:

- Clear layout, structure.
- It also has a aesthetically pleasing theme.
- User interaction with tool tips.

Disadvantages:

- It maybe hard to create annotations for different items and tool tips for the map as there might be areas not having airports at all.
- The layout maybe too wide and it may need to have a main idiom.
- A map of this size maybe be a bit too much.

Australia Travel Insights

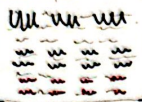
Map



Description



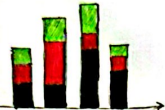
Description



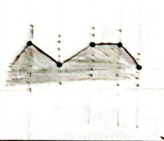
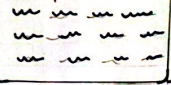
line chart



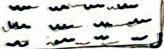
Area chart



Description



Description



pie chart



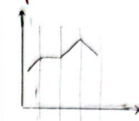
Author : Abdul Rafay

Date : 19/10/2024

Sheet : 5

Task : Analysing Australia Travel Insights

Operation



year

allows the user to inspect and analyse the two trends between domestic and international flights for the years selected.

Combine and Refine

I am not sure if the size and the position of all idioms are correct as some elements might be added to improve visual hierarchy and eliminate chart junk.

Skills and time is very limited.

Focus

- The trends over the years to be placed in the visual centre as that indicates importance.
- No background, background colours will be used for the idiom.
- White space balances the layout with invisible sightlines.
- The visual path is top left to bottom right.
- Larger bold letters for main titles.
- Smaller and light coloured font is used for something that is not that important.
- Will be using a colour blind palette consistently.
- Elements with same importance, same font size, type weight.
- Uses Arial.