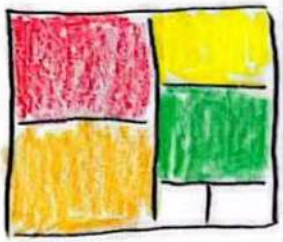
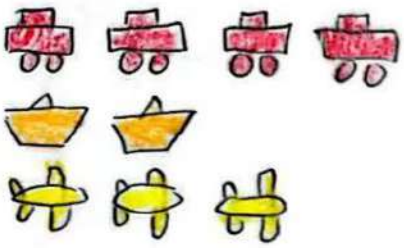
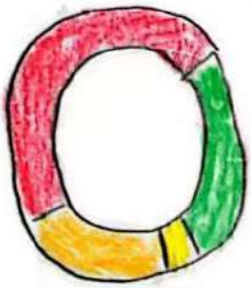
1. Ideas

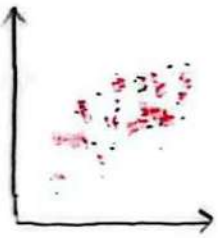
- choropleth map

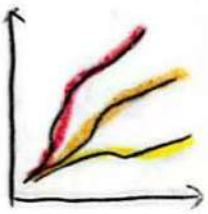


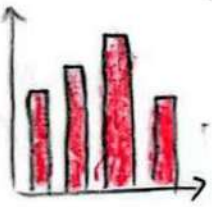
- Isotype

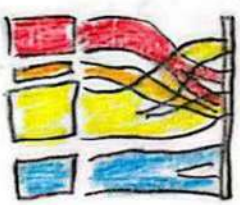


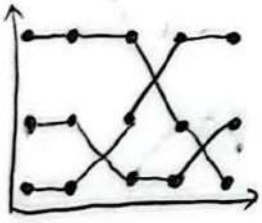


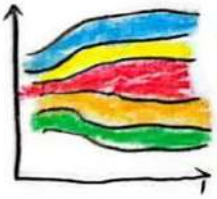


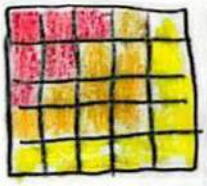




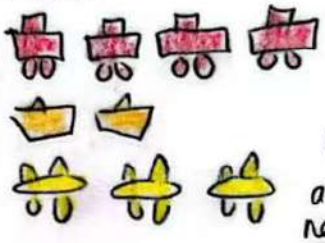




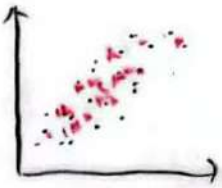




2. Filter

1. 

Isotype requires a lot of space, not space efficient even though it is appealing, and often lack precision needed for detailed analysis

2. 

Although Scatterplot could provide insight on correlation between two variables with linear regression, but it is not meaningful for tourism analysis, making it less relevant

3

Can be difficult to read, especially when dealing with multiple years and categories, causing clutter of stacked bar chart

3. Categorize

- Geographic data :
  - ↳ Tourist arrivals to malaysia by country
  - ↳ Hotel guests by state
- Trends overtime :
  - ↳ Tourist arrivals and receipts
- Comparative data :
  - ↳ expenditure component
  - ↳ mode of transport

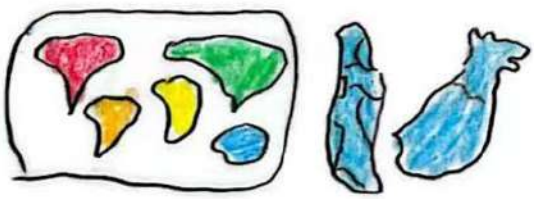
5. Question

1. Does the design provide any insight?
2. Are the designs visually appealing?
3. Is it easy to understand?
4. Are multiple view needed?

4. Combine and Refine

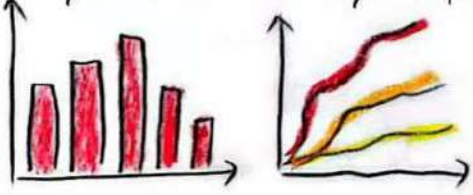
1. Geographic data section :

(a) By country (b) By state



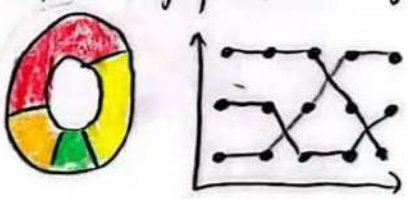
2. Trends over time

(a) By arrivals (b) By receipts



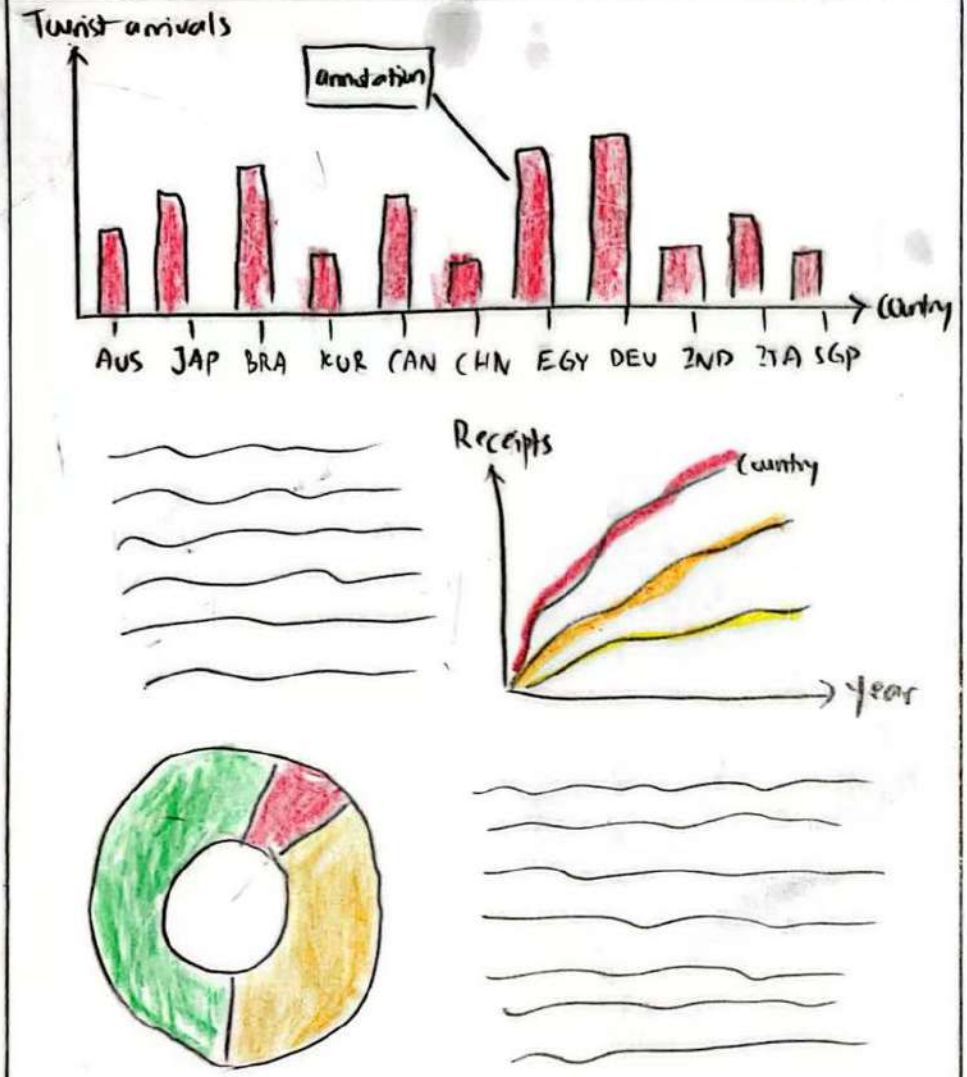
3. Comparative data

(a) lesser category (b) more categories



CS Scanned with CamScanner

MALAYSIA TOURISM STATISTICS (2016 - 2023)



Title : Malaysia Tourism Statistics (2016-2023)

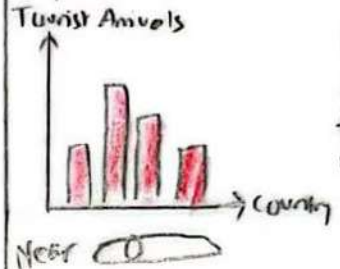
Author : Tan Jian Kai

Date : 13 October 2024

Sheet : 2

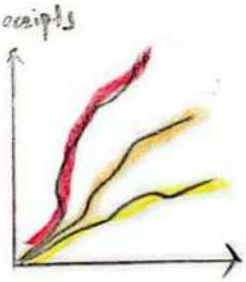
Task : FIT3179

Operation



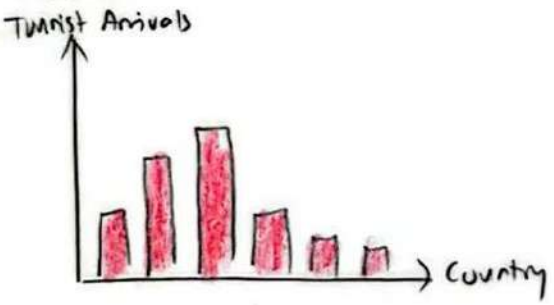
Hover on the ba to discover the tooltips that sho more details

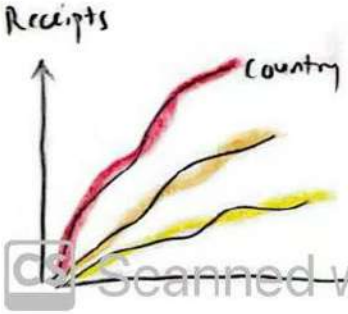
there will also be a slider to change the variable year to show each year receipt of countries



selecting on a line will make other line opacity lower and create figure ground

Focus





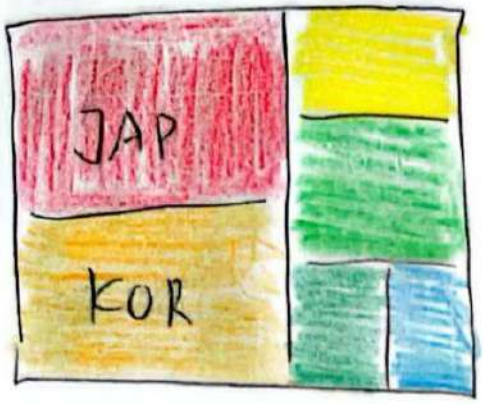
The focus of the visualization is to explore annual inbound tourists to Malaysia and its receipts to better understand how important it is to Malaysia

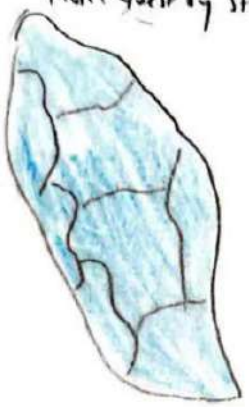
Discussion :

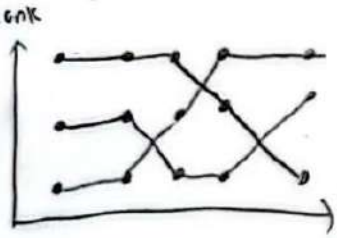
- Pros :
  - ↳ The visualization allows user to focus more on tourist arrivals and receipts to get better insight on Malaysia tourism
- Cons :
  - ↳ If our dataset has many countries, it might cause the X-axis to be very long and even not fit in every country in a single page.

Scanned with CamScanner

MALAYSIA TOURISM STATISTICS (2016-2023)







Title: Malaysia Tourism Statistics (2016-2023)

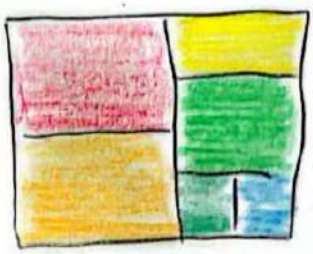
Author : Tan Jian Kai

Date : 13 October 2024

sheet : 3

Task : FIT3179

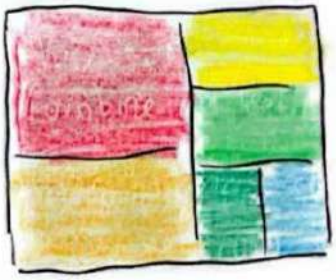
Operation



annotation will be added so that even if the category is too small we will still be able to identify it through annotation

when hovering on state it will show tooltips about hotel guests number and the zoom slider will zoom in based on map centre drop down menu to give better clarity

Focus



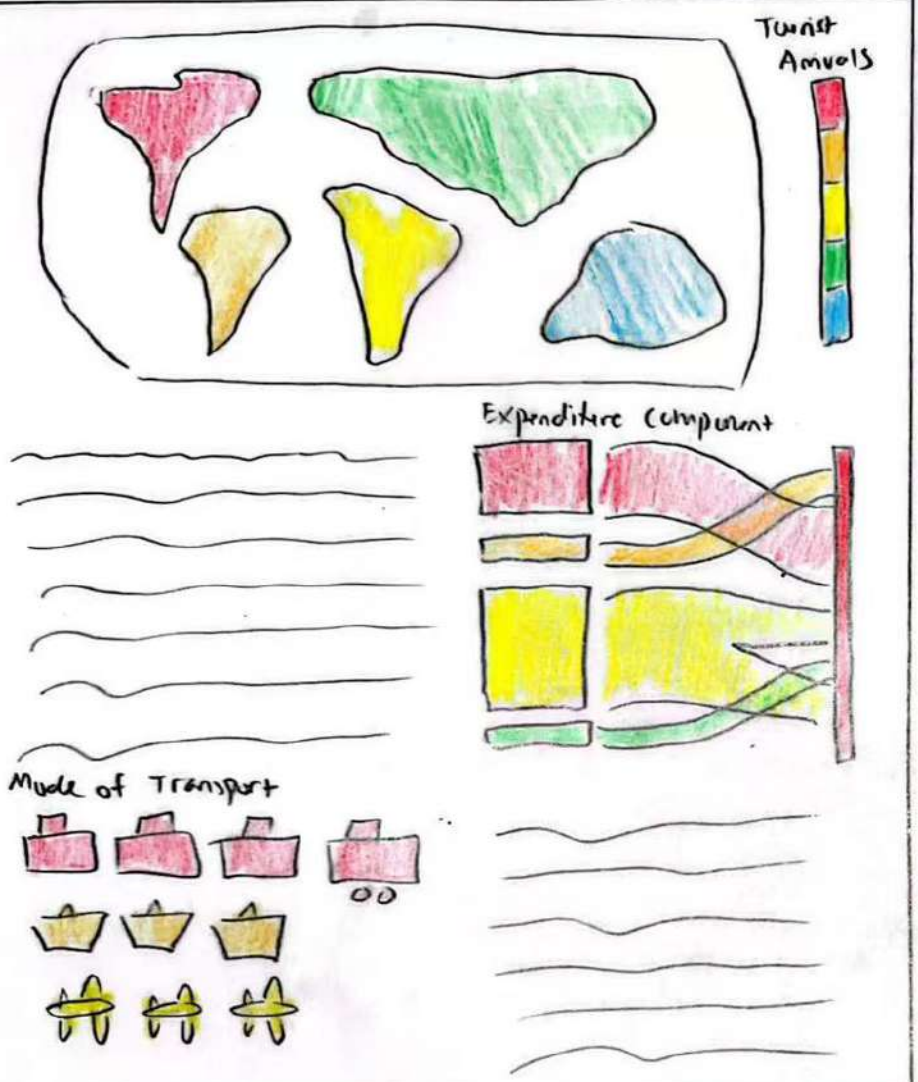
the focus of the visualization is to highlight where tourism stay and where they come from, mainly about the travel and accomodation of tourist so that we have insight about which state has most tourist arrivals

Discussion

- Pros :
  - ↳ the choropleth map that shows malaysia gives geographi clarity of each state and visually appealing
- Cons :
  - ↳ the tree map will make it hard to read small values and the bump chart can be cluttered with too many categories

CS Scanned with CamScanner

MALAYSIA TOURISM STATISTICS (2016 - 2023)



Title : Malaysia Tourism Statistics (2016-2023)

Author : Tan Jian Kai

Date : 13 October 2024

Sheet : 4

Task : FIT3179

Operation

When hovering on the country it will show tooltips to better understand the country detail and also it will show fisheye effect to give figure ground. Besides it will has a zoom slider to zoom in certain region to look clearly and a map centre drop down of several region so that we can zoom in based on the map centre.

Focus

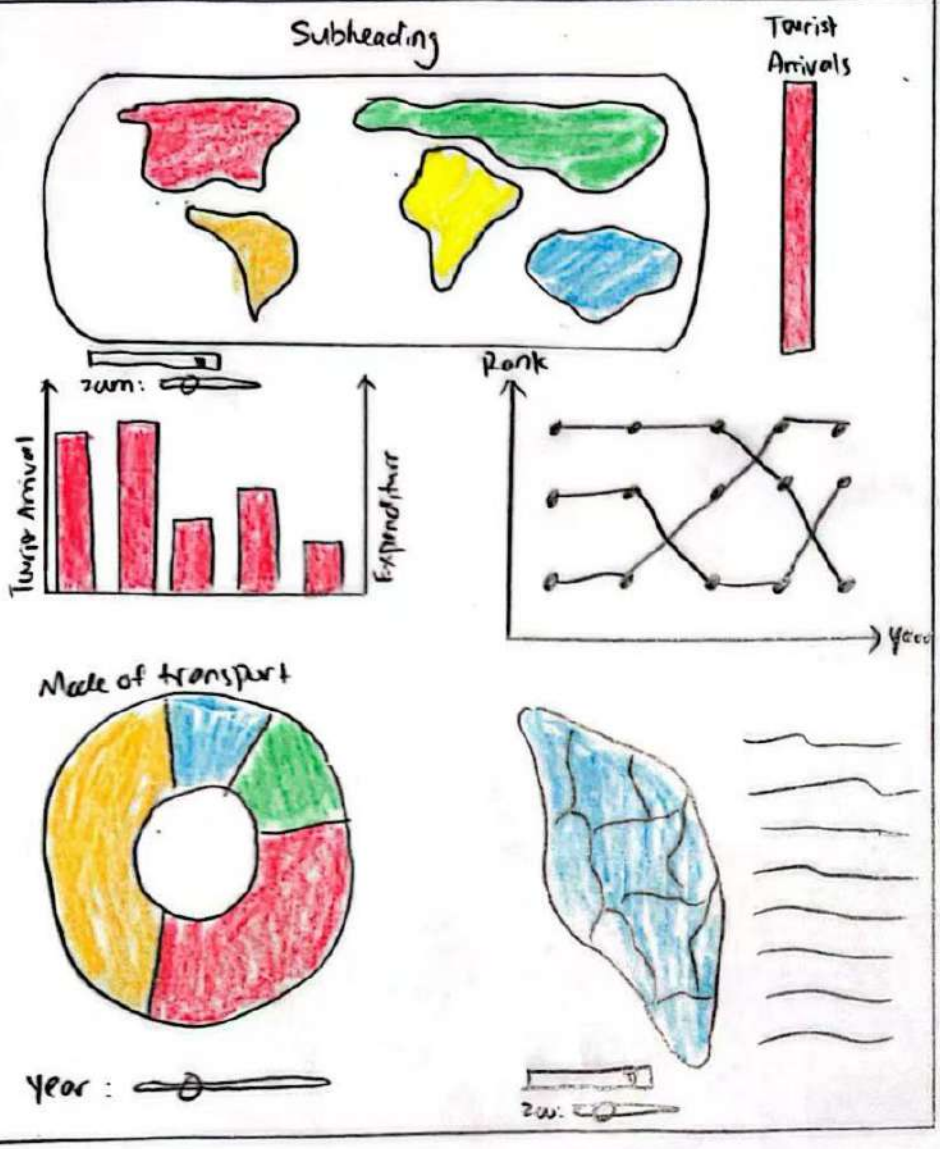
- All charts in the visualization is equally important, there is no main focus
- Choropleth map provide a geographic overview of which countries contribute the most tourists to Malaysia
- Sankey diagram shows the distribution of spending among different expenditure components, gives insight into economic impact.
- Isotype chart emphasizes on how tourists travel to Malaysia in an engaging way.

Discussion

- Pros :
  - ↳ the choropleth map able to fit in all countries, so we will not lose any information
- Cons : data density limitation
  - ↳ Too many countries will make it hard for user to compare and the Isotype requires a lot of space, not space efficient plus often lack precision.

Scanned with CamScanner

MALAYSIA TOURISM STATISTICS (2016-2023)



Title : Malaysia Tourism Statistics (2016-2023)

Author : Tan Jion Kai

Date : 13 October 2024

Sheet : 5

Task : FIT3179

Operation

- legends to display the variable
- slider to zoom in and zoom out as well as changing the parameter of the variable like year
- drop down menu to control the map centre
- every visualization will also have tooltips to further provide the details

Focus

- There is no main focus, all graphs are equally important
- This visualization is to provide a board, multi-faceted view of Malaysian tourism, focusing on:
  - ↳ where tourists are coming from globally
  - ↳ how tourist numbers and receipts have trended over time
  - ↳ how tourists spend their money
  - ↳ where tourists are staying within Malaysia
  - ↳ what transport modes they are using to travel

Details:

Dependencies :

↳ world and Malaysia map topojson (json)

↳ vega lite integration

Estimated time and effort :

↳ estimated 1 week

specific requirement :

↳ high resolution display

CS Scanned with CamScanner