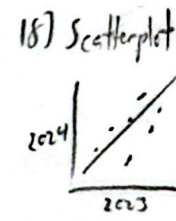
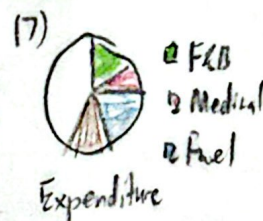
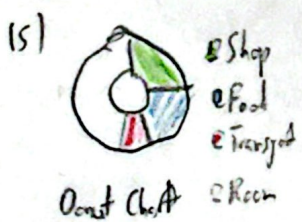
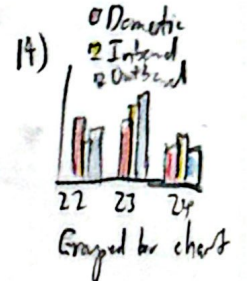
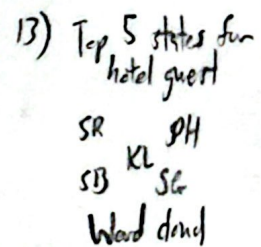
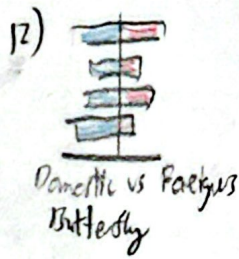
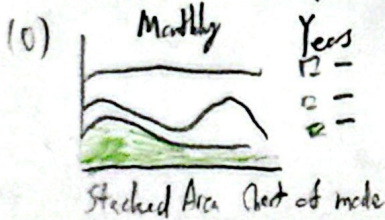
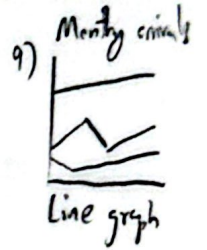
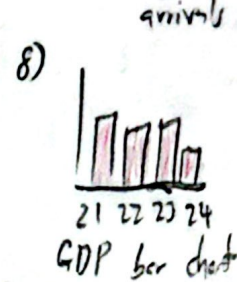
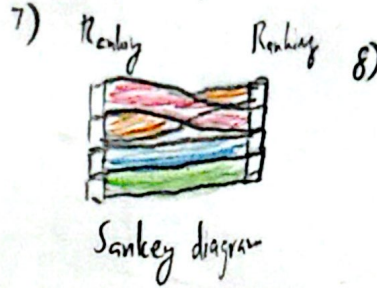
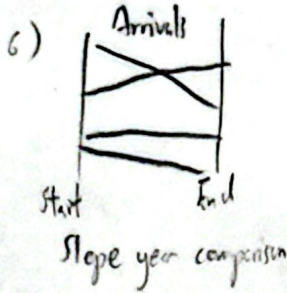
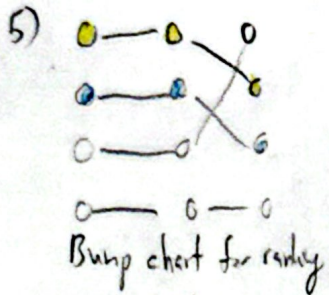
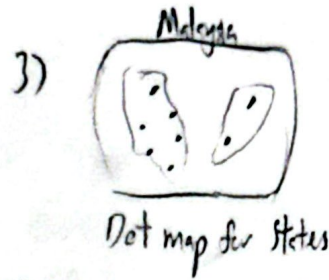
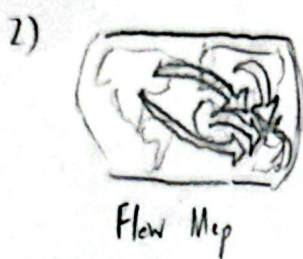


IDEA

- Questions
- What trends from 2019 to 2024 has due to covid?
 - What countries have more visitors to Malaysia?
 - Which states are more popular to Domestic and Foreigners?



Filter

- 18 Graph would be showing the trend but it would not be clear and show outliers.
- 3 Map would be bad as certain states will be too close to each other to show the dots.
- 7 would be a lot of overlapping throughout the years and so it will create confusion in the users.

CATEGORIZE

1. Map
1, 2
2. Ranking
4, 5, 6, 7
3. Time comparisons
8, 9, 10, 18
4. Hotel Analytics
11, 12, 13
5. Trends between variables
14, 15, 16, 17

COMBINE & REFINE

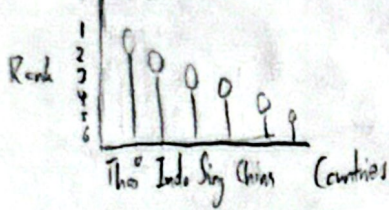
1. Ranking
4, 5, 6 will show up to maximum ten countries with highest ranking.
2. 9 and 10 will be using filters to pick two years to compare trends
Start Year vs End Year
3.
 - Bubble sizes will be based on
 - seats per flights to show if a country prioritise more in their plane capacity.

LAYOUT 2

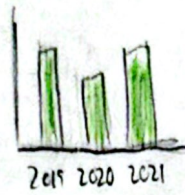
MAP



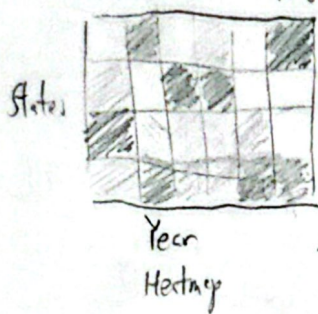
Lollipop trend of arrivals



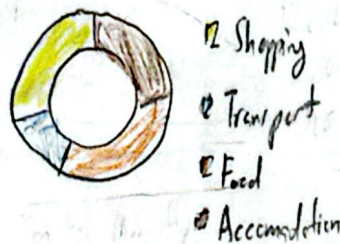
GDP bar chart



Hotel & Room Supply



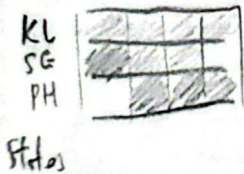
Inbound tourism expenditure



OPERATION

- Select countries to see tooltip of the map and the lollipop chart.
- The heatmap will show a filter to each trends and comparisons between the states through the years.
- The years will be focusing around 2019 to 2024.

FOCUS



- - Have a filter on the states to show
- - specific states to see the Rooms per
- - Hotel.



Has a tooltip to show all the countries and arrivals.

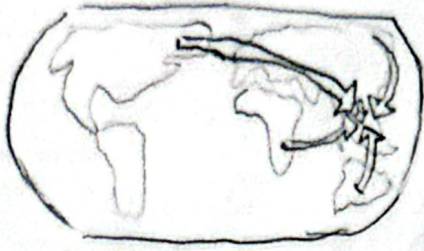
If a country is grey, the arrivals are assumed lower than 15000 arrivals, which is insignificant

DISCUSSION

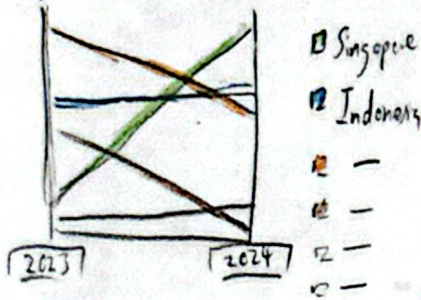
- The Map will be chorepleth to show the different countries and show if each continent has more visitors going to Malaysia.
- GDP bar chart shows the general trend and the heatmap shows the hotel statistics per States and the donut shows the tourists statistics.
- The lollipop chart which is sorted will show the trends of the countries from the map based on the arrivals.

LAYOUT 3

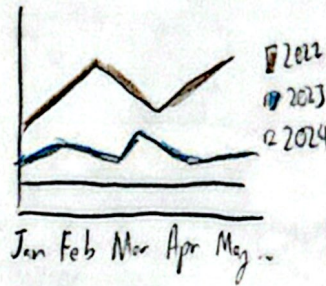
MAP



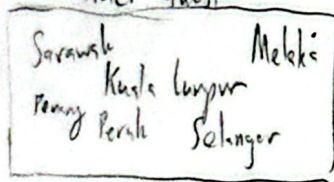
Slope chart of countries' arrivals



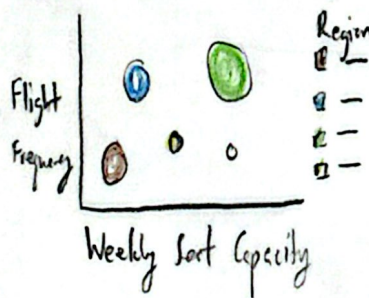
Monthly Visitor Arrivals



Top 5 States with highest Hotel Guest



Weekly Air Connectivity



INFO sheet 3

Title: FIT3179 DV2

Author: GITHAN SHERIE FRANCIS

Date: 13/10/2025

OPERATION

- Select the start and end years of the slope chart to see trends.
- Select filter on the years of the line chart to see overall year growth.
- Hover over countries to see the specific country and its tooltip.

FOCUS

Shows if there are more flights than seats as more commercial flights are prioritizing more seats to bring more people.

Bubble Size is average seat per flight.

Top countries
Start
End

The filter will compare one year with another year to show the trend of growth and the ranking out of the top countries.

Discussion

- The map will be a flow map which shows all the highest countries and uses weighted arrows to show the arrival count.
- The multi-line chart shows trend across January to December of multiple years.
- The word count shows the hotel guest favoring states based on the size.
- The bubble chart shows the different region and its flight count.
- The slope chart shows the ranking and more absolute trends.

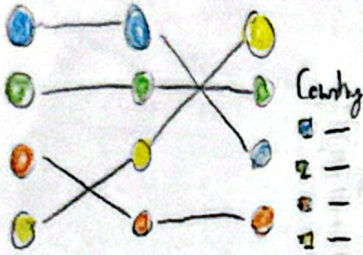
LAYOUT 4

MAP



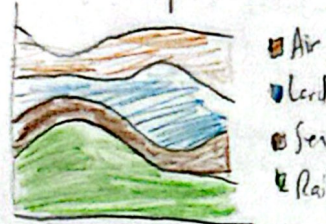
Choropleth map

Arrivals



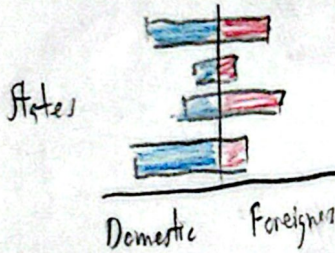
Country ranking bump chart

Stacked area chart for mode of transport

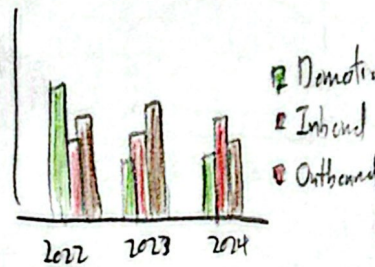


2021 2022 2023 2024

Hotel Guest by State

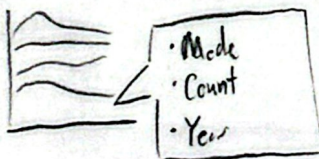


Inbound vs Outbound vs Domestic



2022 2023 2024

FOCUS



Hover a region of the chart will show the year of the mode.



Filter

- ☒ Domestic ✓
- ☒ Inbound ✓
- ☒ Outbound ✗

Choose atleast one of the columns to show difference in the years and trends.

INFO Sheet 4

Title: FIT3174 DV2

Author: ETHAN SHEW FRANCIS

Date: 15/10/2023

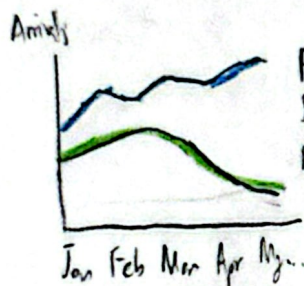
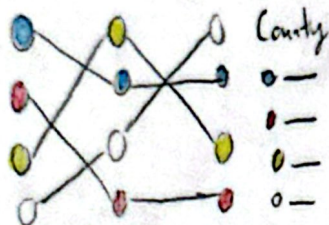
OPERATION

- Select the dots in the bump chart to show the arrival and the ranking
- Filter the expenditure type of the grouped bar chart
- Sort one of the domestic or foreigners to show trend better

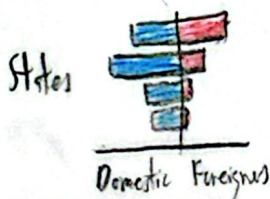
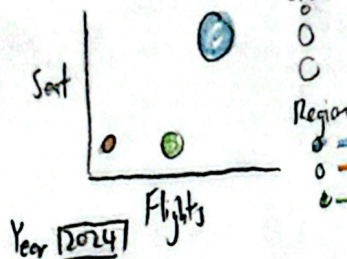
DISCUSSION

- The bump chart shows the ranking for the top 6 countries.
- The stacked area chart shows the overall trend and comparison between the years and other modes.
- The butterfly chart shows the domestic and foreigners hotel guest count in states.
- The grouped bar chart shows the tourists expenditure types.

LAYOUT S



Filter
Start 2019
End 2021



INFO sheet S

Title: FIT3179 DV2

Author: ETHAN SHENG FRANCIS

Date: 13/10/2023

OPERATION

- Uses a slider to show changes in arrivals for top 30 countries.
- Filter the line graph to show comparison between 2019 to 2024.
- Have tooltip for the map and bump chart to show the arrivals and rank.

DETAIL

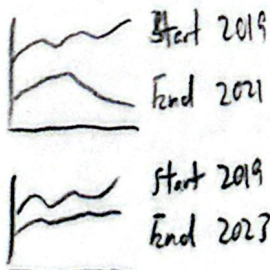
- The choropleth map will be used to show what regions or continents have a rise or drop in arrivals and the slider is used to show different growths.
- The filters for the line and bubble chart will be used to show overall trends of data to help justify the GDP data.
- Bump chart will be used to show more detailed data of the map where it shows the highest arrival countries.

FOCUS



Grey countries are below 15000 arrivals.

The range from 2019 to 2024 will be used in a slider and show the arrivals of those countries.



The year can be selected to compare and show growth. During 2020, covid decrease the numbers and can be used to compare life events.