

IDEAS

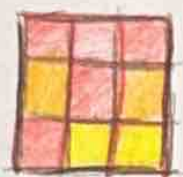
DATE: 20/10/25

SHEET 1:

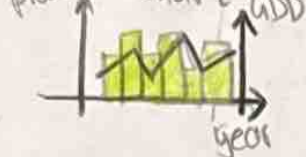
AUTHOR: MARZANA
BINTE ASRAF

TASK: BRAINSTORM

① Heatmap



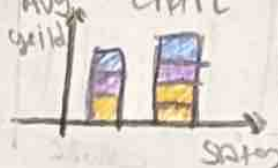
② Dot axis line
production chart GDP



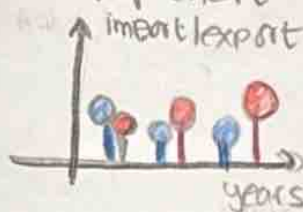
③ Scatter Plot



④ Stacked Bar Chart



⑤ Lollipop chart



⑥ Pie Chart



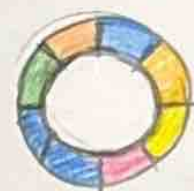
⑦ Grouped Bar chart



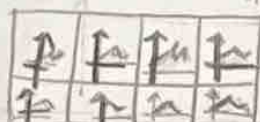
⑧ Line Chart



⑨ Donut Chart



⑩ Small Multiples Area chart



⑪ Proportional Map symbol



⑫ Box Plot



⑬ Choropleth Map



② Filter

Pie Chart:



Pie chart works best when wanting to show proportions in a slice and I wanna do more relationships and comparison.

Proportional Map:



It is used to depict the spatial distribution of quantitative data.

③ Questions

↳ How well does the graphs tell in order to showcase the story that needs to be told

④ Combine and Refine

① Category 1: Climate sectors
Shows how climate is in Malaysia

② Category 2: Agricultural Sector
Show how yield is across states

③ Category 3: Agricultural Imports Exports & Employment

How agriculture contribute to the Economic sector

③ CATEGORIZE

Compare values across categories

Stacked Bar Chart
Bar chart
Donut chart / Pie chart

Time series

↓
line chart

Distribution Chart

Data spread across ranges ↳ Box plot

MATRIX

↓
Heatmap

LAYOUT



Chloropath Map



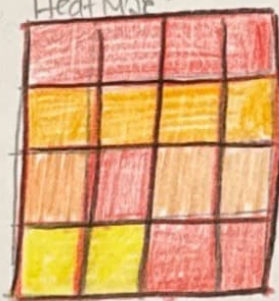
Total rainydays in Malaysian States:

Plot:- Climate Variables Across Malaysian State.

Box Plot



HeatMap



Are there any climate that dominates Malaysia more?

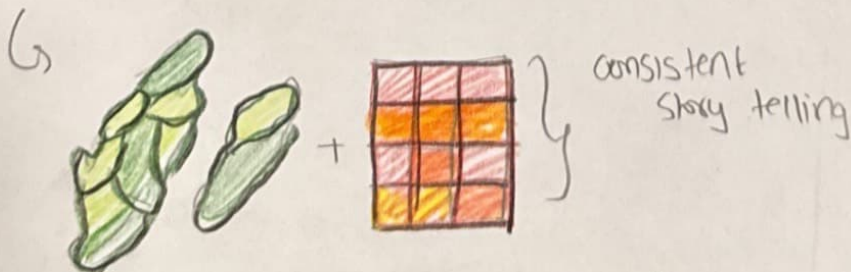
or

Severity of different climate variable

FOCUS:-

Focuses on the climate side of Malaysia.

Malaysia is known as a tropical country so in sense, it is sometimes raining a lot or maybe the temperature is really hot, so to focus on such trends and capture the pattern we are combining states with climate variables.



Chloropath Map + Heatmap → To show rainy days severity and trends of max/min temp.

Title:- Climate sectors of Malaysia

AUTHOR:- MARZANA BINTE ASRAF

DATE:- 20/10/25

SHEET:- 2

Task:- To know by the trend of climate variable across states.

Operations:-

➤ User can explore with a slider to see over the years which states have more rainy days on a avg, and compare with the states.

➤ Users can see the heatmap and clearly see the pattern of max/min temp within each state in Malaysia.

Discussions:-

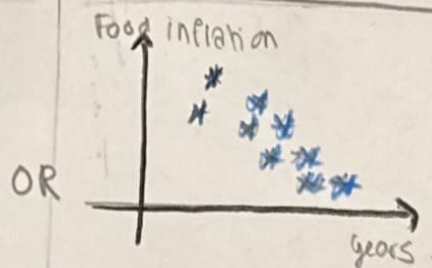
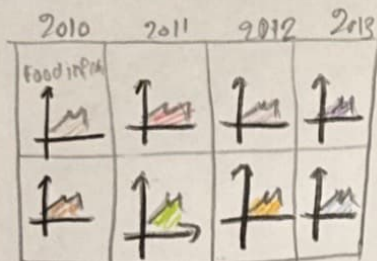
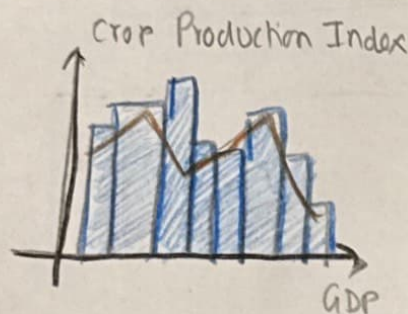
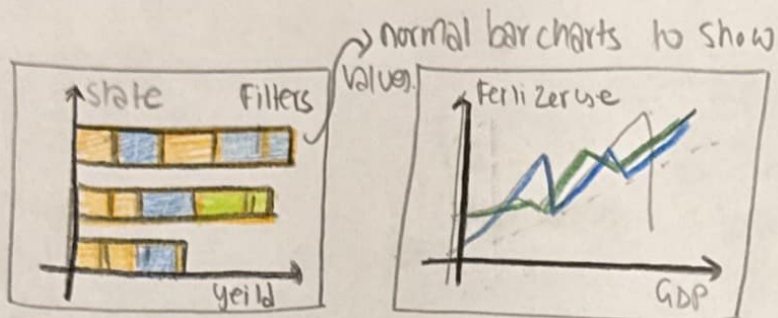
Pros:-

➤ Is the box plot more useful than the heatmap?
➤ But depending on the intensity of climate variables the heatmap makes more sense logically.
➤ graph/map is easy to understand.

Cons:-

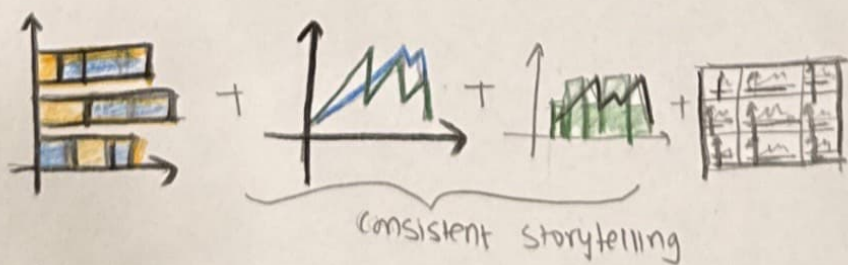
➤ Chloropath map's colours are tricky if not normalised so data must be normalised.

LAYOUT



Focus:

The focus of this sheet is to acknowledge the agriculture sector. Agriculture sector is not only responsible for giving us food but it contributes to a country's GDP very importantly and ^{majorly} the main essence is to capture these different contribution perspectives that come along in the agriculture sector.



Shows how agriculture embeds in other sector.

Title: Agriculture influencing sectors in Malaysia

Author: MARZANA BINTE ASRAF

DATE: 20/10/25

Sheet: 3

Task: Show Agriculture influencing sectors (Yield, GDP, inflation)

OPERATIONS:

Users can trace and see which crop type brings in the most yield.

Users can also understand that how fertilizers contribute to the GDP: positively / negatively.

Allows users to understand how GDP is effected through crop / food which comes from agriculture.

Also shows food inflation trends.

DISCUSSIONS:

Pros:

Uses a variety of charts so each and every sector of agriculture is thoroughly explored.

Line and bar charts shows clear comparisons / stacked display proportion - easy to understand.

Cons:

The scatter plot is precise compared to the multiples graph.

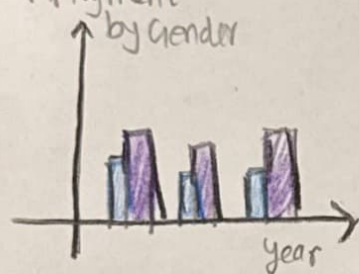
LAYOUT

Agriculture
Imports/Exports



Shows the lollipop chart to show the import/export with the year.

Employment
by Gender



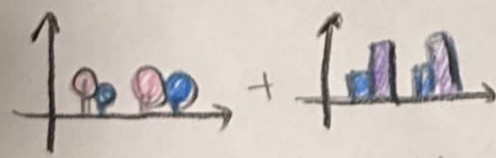
OR



Shows how employment is differed across the years.

FOCUS:

This sheet focuses on the impact of import and exports and employment of male/female in the agriculture sector. Import and exports are a huge part of Malaysian economy and agriculture plays a huge part in it, not only that it is responsible for employment for both genders.



Consistent storytelling

agriculture in trade and employment

Title: Trade and Employment
Author: MARIANA BINTE ASRAF

Date: 20/10/25

Sheet: 4

Task: Examine to see how agriculture effects trade and employment sector of Malaysia.

OPERATIONS:

6 Allows user to understand what proportion of male/female are being employed in agriculture across the years

6 The lollipop chart allows to see the agricultural import/export giving a clear guide in how much the agricultural sector gives out

Discussions:

Pros:

6 Show clear correlation of how import/export differ from year to year giving clear pattern of what sector Malaysia specialises in.

Cons:

6 Users might need guidance if a stack chart is used to show employment if the numbers don't vary at all.

LAYOUT

(combination of 3 sheets)

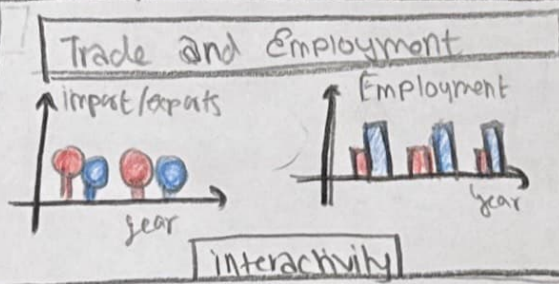
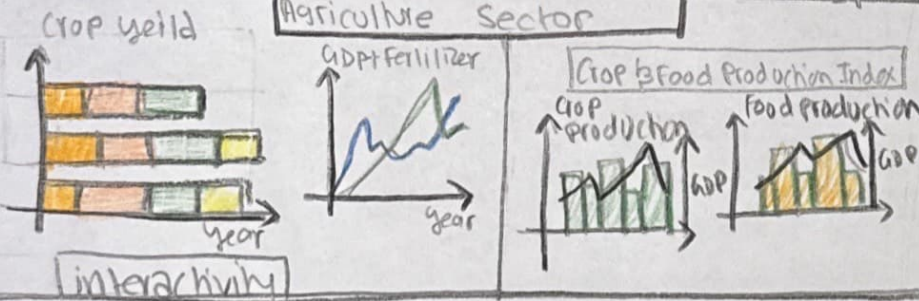
Climate Trends and Agricultural Sectors of Malaysia

Climate Trends

Rainy Days Across Malaysia States



Agriculture Sector



FOCUS

This dashboard shows how climate trends and agriculture sector's trends and patterns are, giving us a knowledge of Malaysia's climate, economy.

A brief layout of how the DV2 HTML will look like with interactivity.



Title: Climate Trends and Agricultural Sectors Across the years.

AUTHOR: MARZANA BINTE ASRAF

DATE: 20/10/25

SHEET: 5

TASK: Final implementation of 5 sheet design.

OPERATIONS:-

- Uses vegalite and d3.js library.
- Allows users to scroll up and down and interact with the graphs present.
- Allows the user to visually understand the pattern and even filter to see the information visually.
- Allows the user a different perspective of agricultural sector rooted to other sectors.

DISCONS:-

Pros:-

- Put all the trends and pattern in one place with vertical scrolling, making it easier for users to quickly spot key correlations without having to navigate charts.

Cons:-

- Without proper notes or legend it can be confusing on how parts connect.