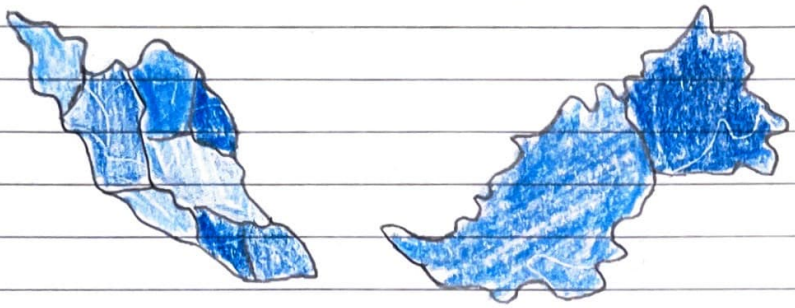
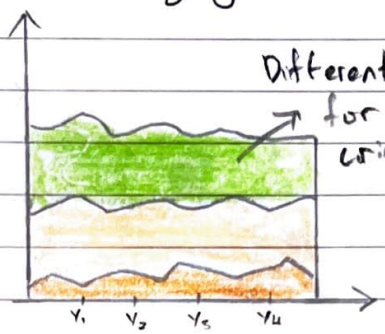
IDEAS

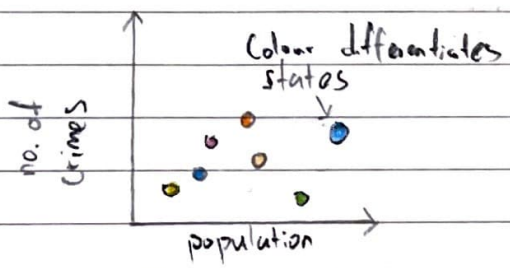
Idea 1: Choropleth showing crime index by state or district in Malaysia.



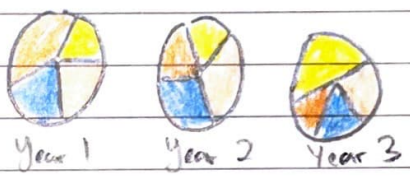
Idea 2: Area chart of crime types/ category



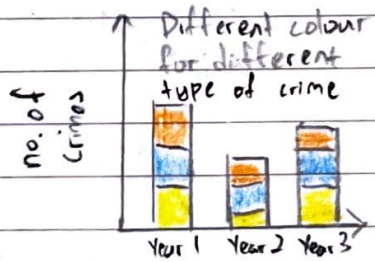
Idea 3: Scatterplot of crime occurrence versus population by state or district.



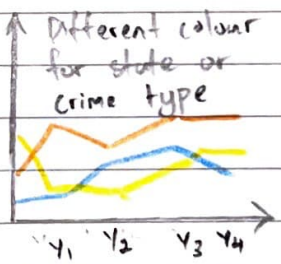
Idea 4: Piechart showing the composition of the crime type over the year.



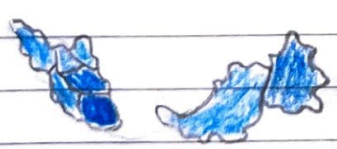
Idea 5: Stacked bar chart showing the crime type composition over time



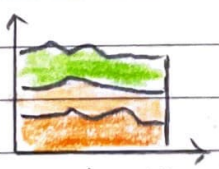
Idea 6: Line chart showing trend of total crimes over time for a specific state or crime type.



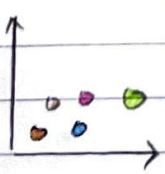
Filter



A nice visualisation to have at the start for viewer to an idea of the Malaysian states' crime situation



with choropleth map showing index, area chart can help provide better insight by showing the crime types.



Help identify potential factors of high crime index.

Group the crime type into categories

Categorise

Crime index and its composition
Choropleth map + Area chart

↓

Population affects crime rate?

↓

Which type of crime is more common? (require more awareness)

Combine and refine

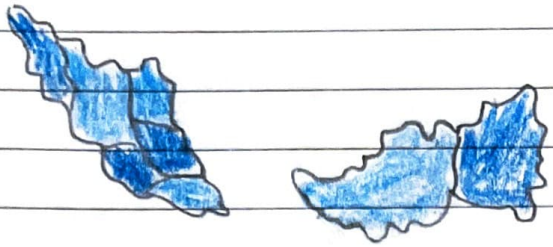
Area chart + choropleth map: show the same crime type when filtering providing different perspective on same info.

Question
Do the visualisations satisfy the why? Provides enough info/ insight on Malaysia crime?

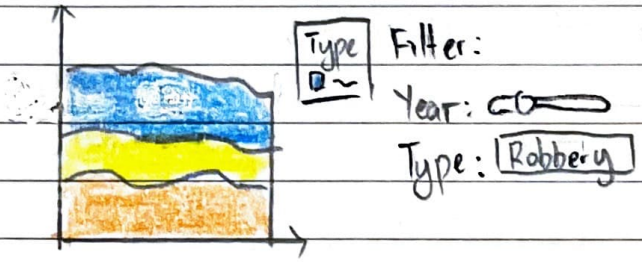
LAYOUT

Title here

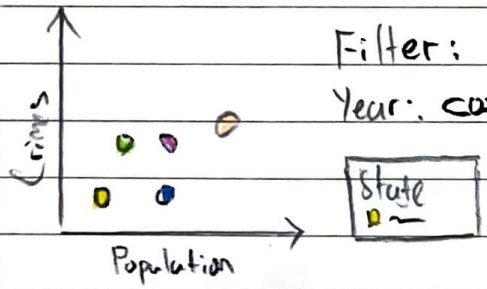
Section 1: Description



Some text talking about the choropleth highlighting something interesting about it

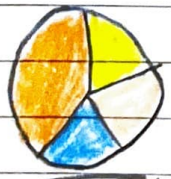


Section 2: Description



Text about the scatterplot highlighting something interesting.

Section 3: Description

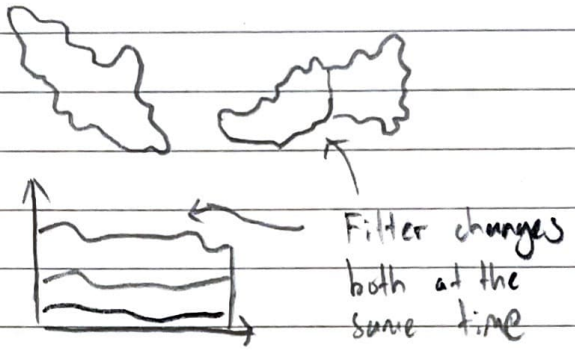


Text about the piechart highlighting something interesting.

Title: Malaysian's states' crime statistic
Author: Go Wei Zheng
Date: 8/10/2024
Sheet: 2
Task: Initial designs

Focus:

Choropleth map and area chart will change according to the filters showing two perspective of the same data.



OPERATIONS

Each visualisation has a filter for year. for viewers to see the corresponding years year's crime situation.

DISCUSSION

PROS

- Viewers have control over the visualisations' time to show the specific time of the data they want.
- Viewers can see what type of crime is more common for which state.

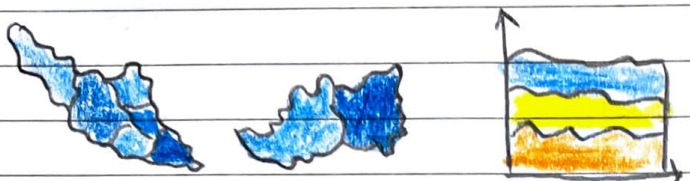
CONS

For scatterplot and piechart, it may be difficult for viewers to see the compare the correlation as they will have to see between each filter.

LAYOUT

Title here

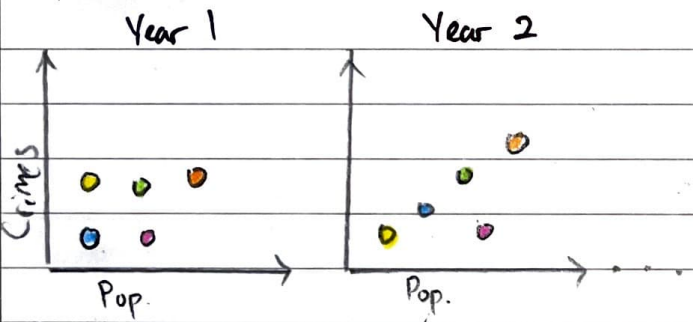
Some story or description about the intention behind making the visualisations.



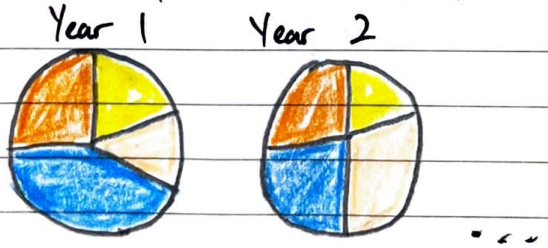
Filter: Year:

Type: Robbery

Description about ~~some~~ the vis



~~Year~~ Description about the vis.



Description about the vis

Title: Malaysian states' crime statistic
Author: Go Wei Zheng
Date: 8/10/2024
Sheet: 3
Task: Initial designs

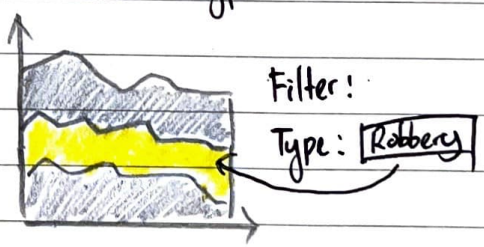
FOCUS

A story at the beginning as a form of hook to get the viewers engaged.

Small multiples for the scatterplot and piecharts by year making it easier for ~~views~~ comparison.

OPERATIONS

Filter by year and crime type for both the choto choropleth map and area chart. Highlight the corresponding area of the area chart for crime type



DISCUSSION

PROS

- Small multiples allow for easier comparison.
- Starts off with a hook to get viewers engaged.

CONS

- Having small multiples may cause the visualisations to overflow making it necessary to scroll the entire page.

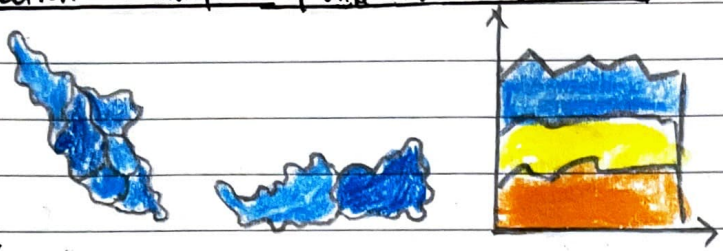
Title: Malaysian states' crime statistic
Author: Goo Wei Zheng
Date: 8/10/2024
Sheet: 4
Task: Initial designs

LAYOUT

Title here

Hook or story to engage the viewers

Section 1: Choropleth map and area chart of...

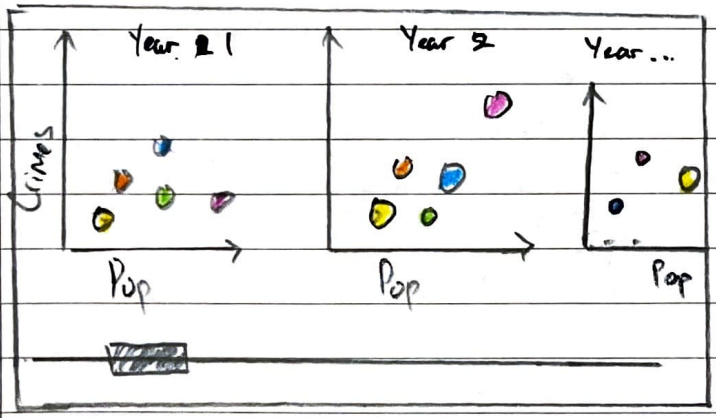


Year:

Type: All

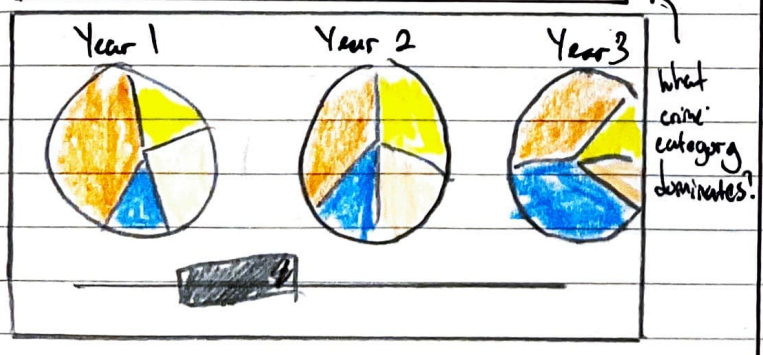
Description about the visualization like which state has the highest crime index

Section 2: Does the population affect crime rate?



Some text providing some insights and contribute to the question in the header

Text....



What crime category dominates?

Some description about the crime category and its trend over the year

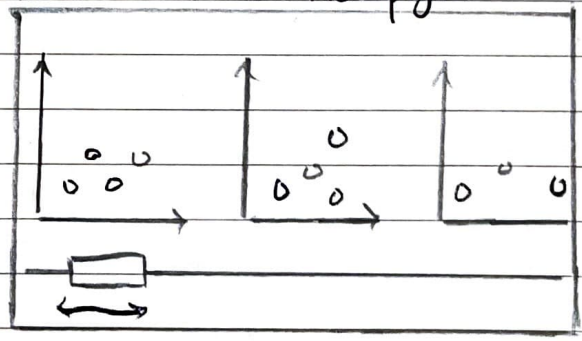
FOCUS

Each section header contains some text with a question / goal of the visualization.
E.g.
Scatterplot: Is higher population leading to higher crime rate?
Piechart: What is the crime category mostly comprised of?

A scrollbar is made for visualizations that are too big to fit in one entire page.

OPERATIONS

Scrollbar for visualization too large to fit the width of the page.



DISCUSSION

PROS

With the addition of a scrollbar, viewers do not have to scroll the entire page and only the visualization.

CONS

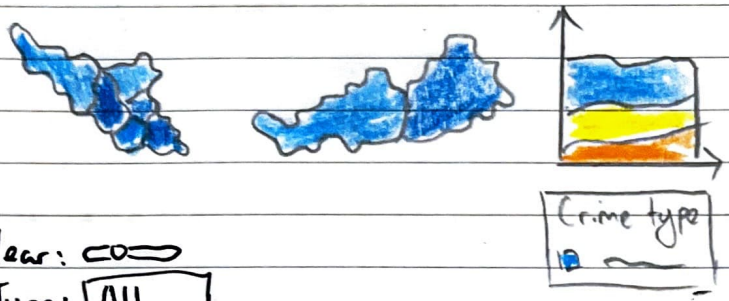
While this does make it easier to view the visualization viewers are unable to compare all multiples at once.

LAYOUT

Malaysian states' crime statistics

"Hook or stay here"

Section 1: Malaysia's crime index and its composition

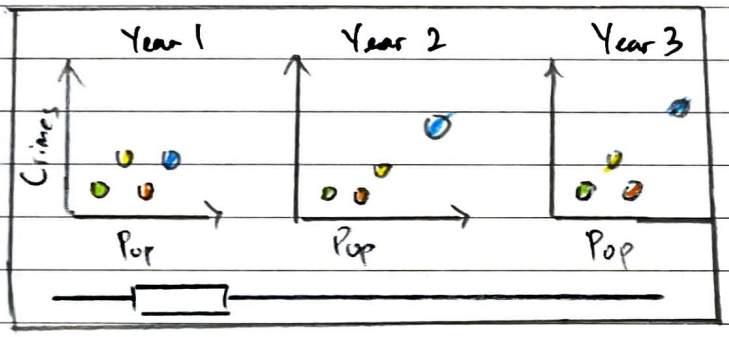


Year: ⊂⊃

Type: [All]

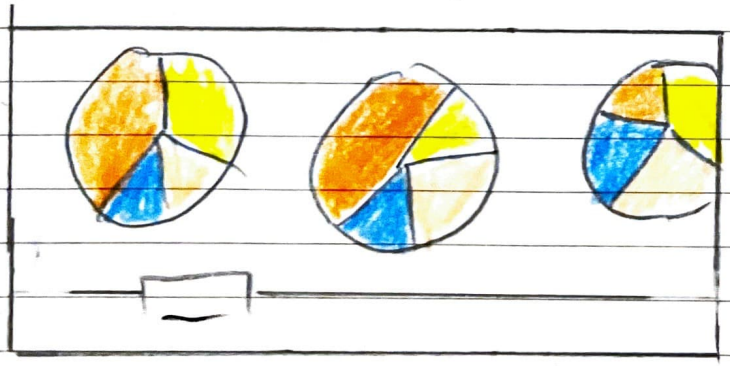
Description of the visualization

Section 2: Does the population affect crime rate?



Description of the visualization

Section 3: Which crime category is more prominent?



Description of the visualization.

Title: Malaysian states' crime statistics
Author: Go Wei Zheng
Date: 9/10/2024
Sheet: 5
Task: Realisation

FOCUS

Arrangement of visualisations:
Top: choropleth and area chart.
Showing a map initially to let the viewer to have a rough idea of Malaysia's crime situation.
Middle: A deeper dive in to crime ~~cause~~ potential factors.
Bottom: Categorisation ~~Grouping~~ of crime type to cause awareness of which category of crime is more common.

OPERATIONS

- Filter for year and crime type for more specific data visualisation.
- Scrollable bar for overly large visualisation.
- Highlight of filtered crime type area of area chart to help viewer better see the visualisation

DISCUSSION

- Dataset will be navigable at the bottom of the page
- Visualisation to be coded in Vegalite and embbeded in HTML and will be viewable via url.
- Time estimated to complete:
  - 1 to 2 days to find relevant dataset
  - & 2-3 days to encode vocalisation and polishing