

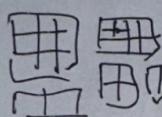
Name: Dylan Choo
Id: 30718732
Fit3179 Data Visualization 2
5 design sheet

Sheet 1

Dylan Choo
30718732
Data Visualization 2
5 design sheet

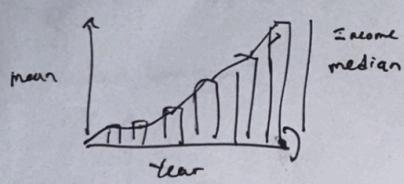
Sheet 1 - Brain Storm

- Treemap

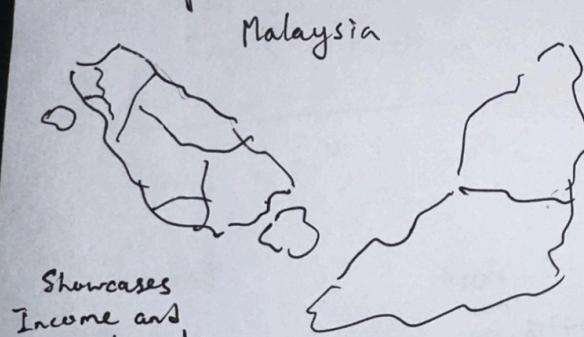


Population of
Malaysia

- Bar like chart

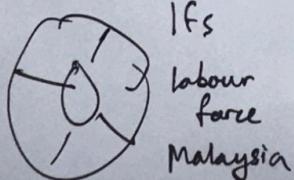


- Maps



Showcases
Income and
poverty rate

- Donut chart



IDEAS

Household Income and the
Poverty rates in Malaysia
with the current population
2022 Analysis

Income
~ Year 2022

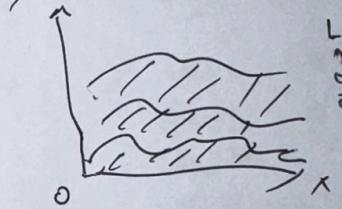
Poverty
~ Multi
line
chart
~ 1970
- 2022

Population
- 2022
population

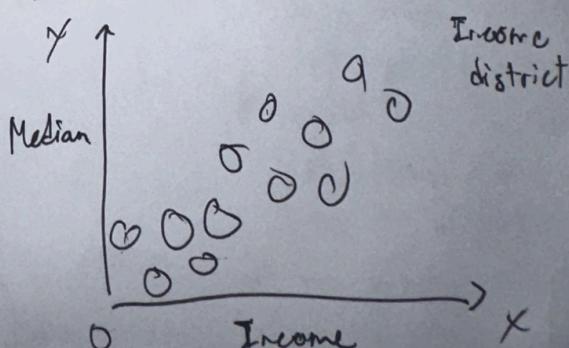
- Treemap
or
Stacked
bar chart

Labour force Income

- Area line chart



- Bubble plot

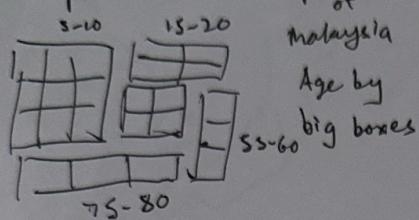


Sheet 2

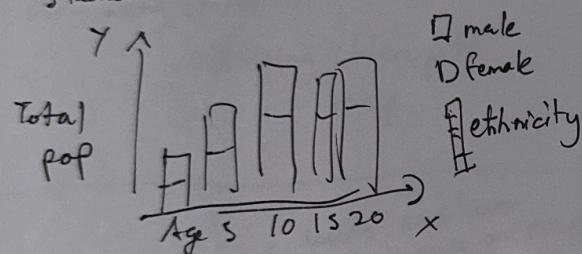
Sheet 2
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Layout

Treemap

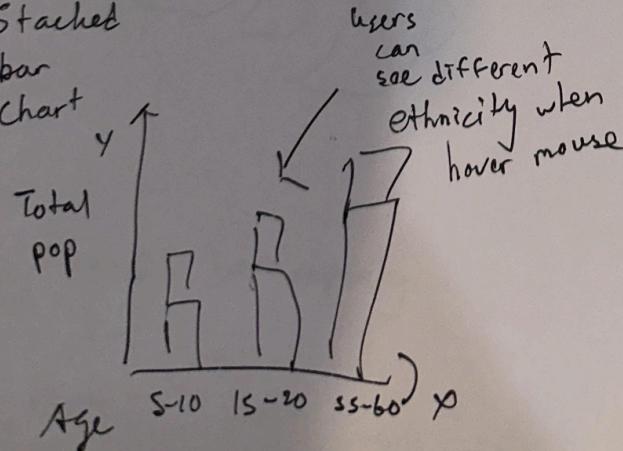


Stacked bar chart



Focus

Stacked bar chart



Operations

- * Display data of the population of Malaysia
- * Allow the user to hover their mouse to see the tooltip of data
- * Display ethnicity to showcase how many different race are there
- * Bar chart showcase only male and female categories not both cat

Discussions

- * Users have a cleaner look at the data
- ↓ positives
- * Users can see the data better than the treemap
- * Slick left to right look allows the difference to be more obvious
- * Want look as interesting as the treemap

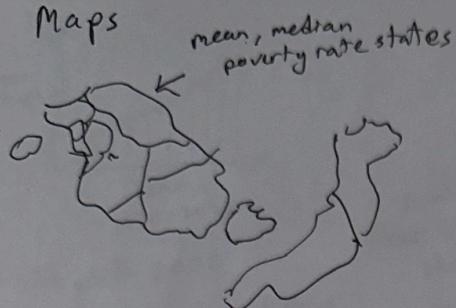
Sheet 3

Sheet 3

Dylan 30718732

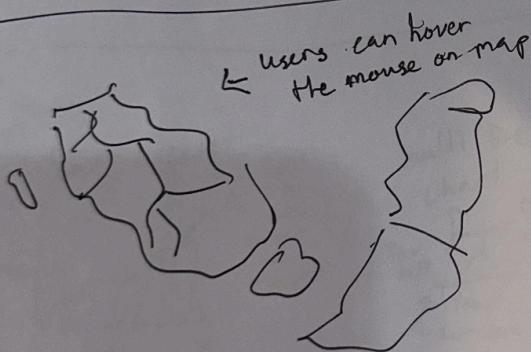
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Maps



Map of Malaysia
showcasing states

Using choropoth
map



Filter

mean income  15000 capacity
Allow user to
see which state
have good mean income
at a certain threshold

Operations

* Demonstrates the trend of income poverty of the states in Malaysia

* The choropoth map colour will showcase the highest and lowest income as dark is high and light is low

* The tooltip will showcase all of the remain data of median, poverty and mean income

Discussion

* Positive

* users to hover mouse to see the value of income, poverty

* users have the chance to filter out which country they want to know have a min income

* Negative

* users can't see the districts of the state with income and poverty

* users filter only works as a min threshold meaning they can only see Geo state with high income

Sheet 4

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 Data Visualization 2

Bar line chart

 A bar line chart with 'Year' on the x-axis (1970-2022) and 'mean income' on the y-axis. The bars represent mean income for each year, and a line connects the tops of the bars.

Bubble plot 2022

 A bubble plot for the year 2022. The x-axis is 'mean' and the y-axis is 'median'. Bubbles represent data points for different districts, with labels like 'District', 'color', 'sat', 'state', 'colour', 'Hue', 'size', and 'bubble'. A legend indicates bubble size corresponds to poverty rate.

Layout
multi line chart

 A line chart with 'Year' on the x-axis and 'Poverty rate' on the y-axis. Three lines represent different poverty categories: 'absolute', 'not', and 'yes'. Arrows point to the lines with their respective labels.

Focus
Bar line chart

 A bar line chart with 'Year' on the x-axis (1970-2022) and 'mean income' on the y-axis. The chart includes a line for the mean and a line for the median, with annotations explaining they can be seen together.

Bubble plot 2022

 A bubble plot for the year 2022. The x-axis is 'mean' and the y-axis is 'median'. Annotations explain that the size of the bubbles represents the poverty rate, with a note that the trend before 2022 is not shown.

Operation

- Multiple charts to support the topic where the map showcases the income and poverty
- Display districts, percentage poverty, Income of malaysian in the past.
- Showcases the trend of how people in malaysian survive with the amount of income they earn

Discussion

- Positive
 - Helps the users to see the trends of income vs poverty through the years 1970 to 2022 in mrsia
 - Each graph contribute detail into about states detail into about states and poverty
- Negative
 - The data doesn't really show states for the previous years only overall
 - District will be shown on bubble chart as maps will be hard to implement districts

Sheet 5

Sheet 5
 Dylan 30718732 Data Visualisation 2

Layout

Title Household Income vs Poverty
 description
 maps
 Income all
 VS
 bubbleplot
 Poverty All
 Poverty All

Operations

- * users will be first see the population of MSA which have a tooltip
- * The maps and bubbleplot will tackle the income base of state and districts
- * The Income vs poverty will showcase the past trends till 2022 which users can hover it to see tooltip
- * There will be filter function at maps and bubbleplot for users to see clearly

Focus

Title Household Income vs Poverty
 description
 maps
 Income
 VS
 Poverty
 bubbleplot

users can see population with tooltip
 filter can be used by user

comparison by the past year can be seen

Discussion

- * Implementation will take 3 weeks
- * Some of the charts and graph are subjected to change or added
- * Aim to showcase all the info stated here
- * Dashboard uses Vega lite to visual
- * Dataset will be cleaned by r studio