

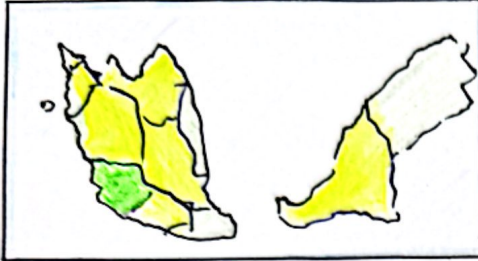
# IDEAS //

## MALAYSIA HOUSEHOLD INCOME AND ECONOMIC WELL-BEING

Exploring salary growth and the gap between rural and urban

Colour  
Luminance

Trends in Income Growth (1970-2022)



Median Income (RM)

19000

5000

0

Average Salary  
RM2,745

Average Hour Salary  
RM17.31

Minimum Wage  
RM1,700

Map Region:  Income Type:  Year:

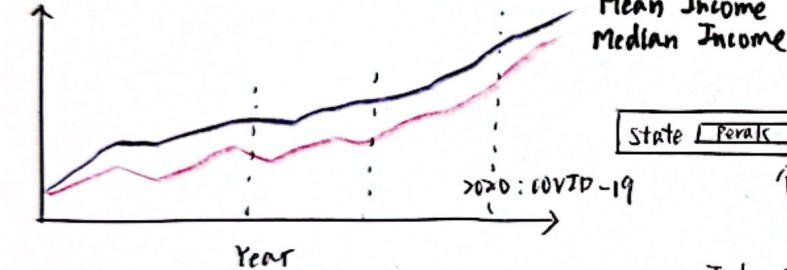
Choropleth map

- ocean layer
- graticule
- East & West Malaysia

KPI card

Interactive Filter

Median Household Income Trend Over Time



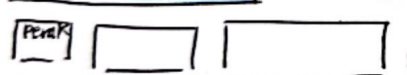
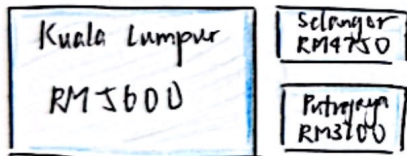
Mean Income  
Median Income

State:

Interactive Filter

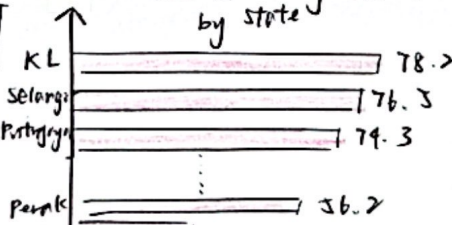
- 13 states
- 3 federal territories

mean Expenditure by states



Year:

Cost of Living Index  
by state



Map Region

- Malaysia
- West Malaysia
- East Malaysia

Income Type

- Median Income
- Mean Income

Year

- 1970 to 2022

Author: Chai Shou Zheng

Student-ID: 34035958

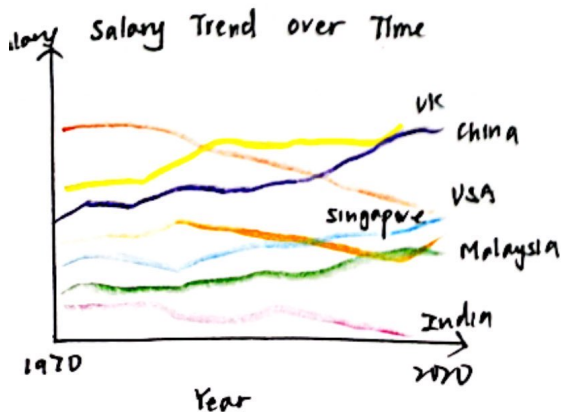
Date: 19/10/2025

Page: Sheet 1

Topic & Task: Brainstorming graphs ideas

⇒ Treemap and bar chart are Interactive and update automatically based on selected year.

How's Malaysia's Salary & Economy compare to other country.



Poverty Rate



Discussion:

Questions //

- 1) Are all the essential map elements present? (graticule, ocean layer..)
- 2) Does the map look too crowded or too empty?
- 3) Is there a clear visual hierarchy?

Data source //

- 1) Is the data source reliable?
- 2) Is the data source clearly mentioned?



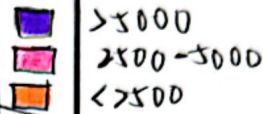
# LAYOUT,

# Operational,

## The story of Income: MALAYSIA



Salary (RM)



Tooltip

State: Sabah  
Income Type: Median  
Income: RM 4,517  
Year: 2022

Average Salary  
RM 7,743

Minimum Wage  
RM 1,100

Annotation

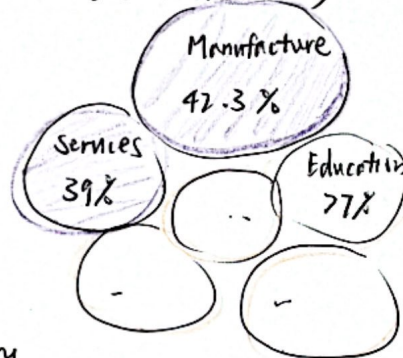
Average Salary by State

Kuala Lumpur  
RM 9,723

Putrajaya  
RM 9,200

Selangor

Malaysia Economy Type (%)  
(Share of GDP)

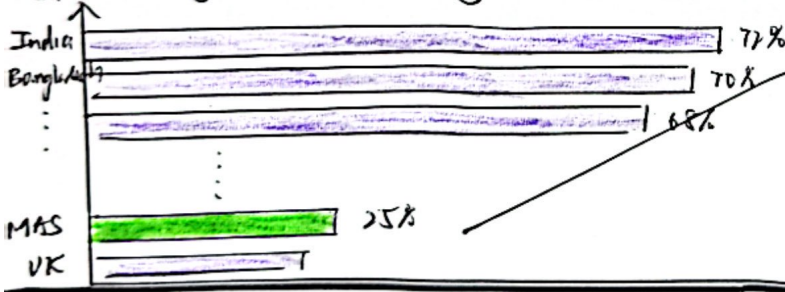


Year Filter

- will update based on selected year

Malaysia was highlighted using distinct colour.

Poverty Rate by Country



Author: Chai Shou Zheng

Student ID: 34035958

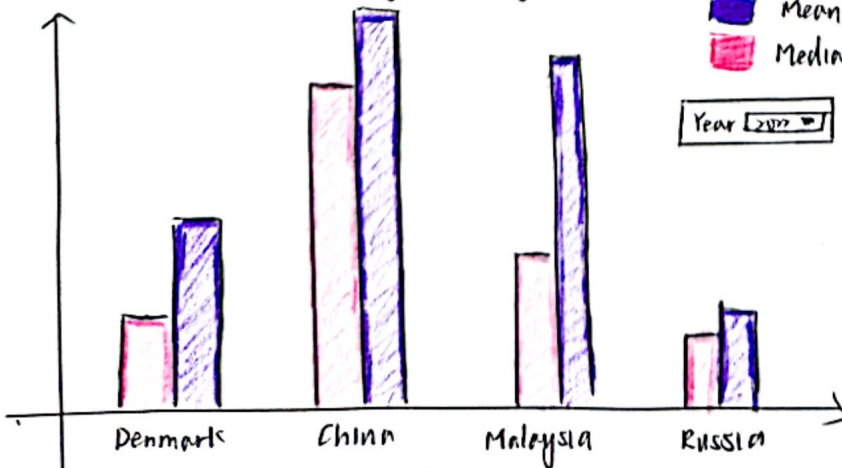
Date: 19/10/2025

Page: Sheet 2

Topic & Task: Layout design

## Focus,

Mean Income vs Median Income  
(by country)

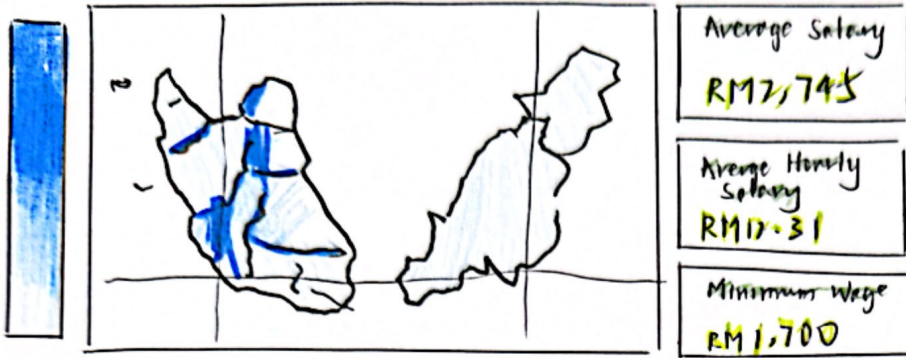


## Discussion,

- 1) Does the map distort or misinterpret any area or value?
- 2) Is the scale of the map appropriate for the level of detail needed?
- 3) How could the map be improved for clarity or impact?
- 4) Does the map exaggerate or hide any information?

## LAYOUT

### MALAYSIA INCOME VISUALIZATION



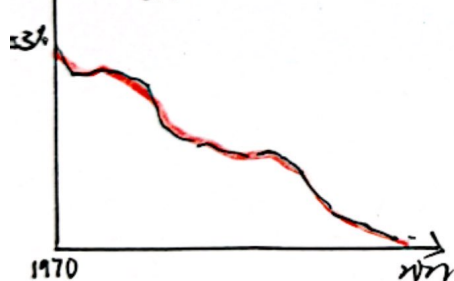
#### Income Ranking by State (2022)

Median	Mean
#1 Kuala Lumpur	RM10,728
#2 Putrajaya	RM9,765
#3 Selangor	RM9,605
...	
#15 Perak	RM4,500

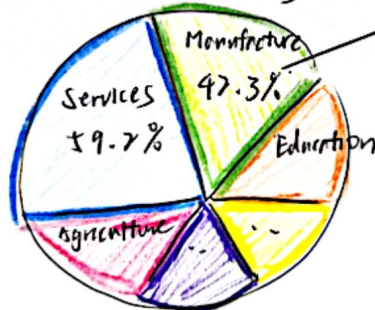
#### Justification

Kuala Lumpur, Putrajaya... consistently record highest income...

#### Poverty Rate of Malaysia (1970 to 2022)



#### Malaysia Economy Type (%)



Customize card container using CSS

Malaysia salary related / KPI card

#### Clickable button

- To switch between medium income and mean income
- Showing the salary ranking

#### Tooltip

Economy Type: Manufacture  
Share of GDP: 47.3%  
Year: 2022

Author: Chai Shou Zheng

Student ID: 34035958

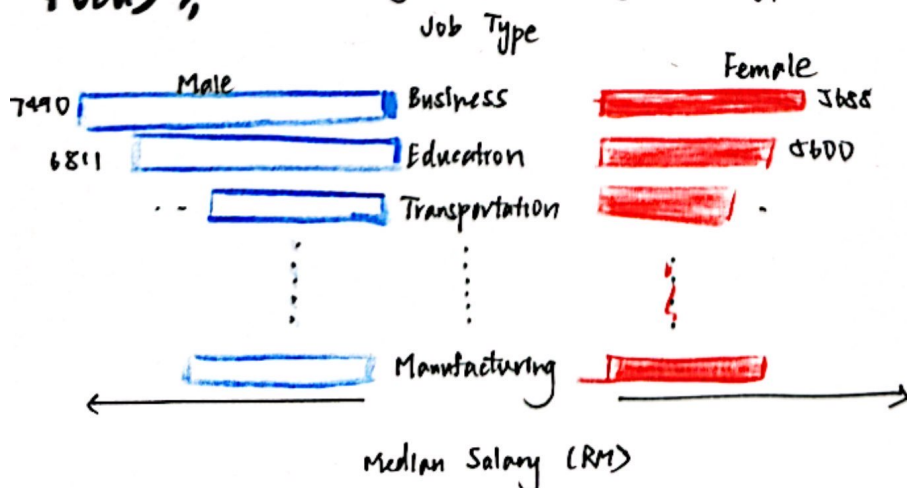
Date: 19/10/2025

Page: Sheet 3

Topic & Task: Layout & graph design

## FOCUS

### Gender Pay Comparison by Job Type



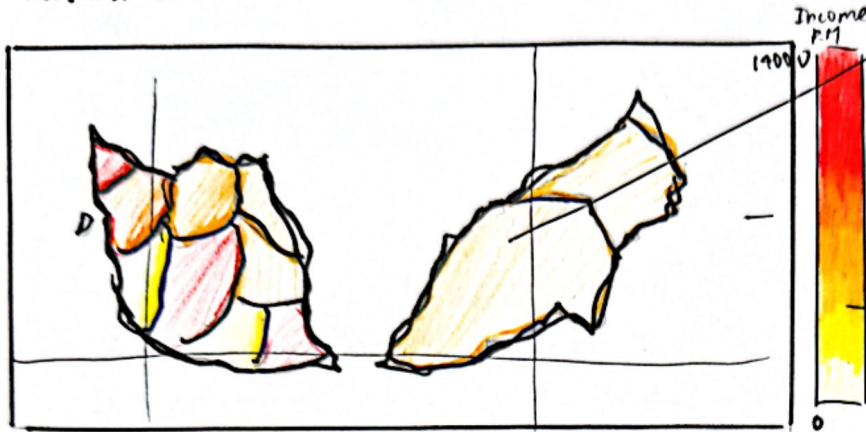
## DISCUSSION

- 1) Can the audience grasp the key takeaway within 5 seconds?
- 2) Are colours legible, fonts readable and label unambiguous?
- 3) Could another type of map communicate the data more efficiently?
- 4) Is the legend clear to interpret?



# LAYOUT,

## MALAYSIA HOUSEHOLD INCOME (1970-2022)



- MALAYSIA
- WEST MALAYSIA
- EAST MALAYSIA

- Income Median
- Income Mean

- Year
- 2022
- 2021
- 2020
- ...
- 1970

## How's Malaysia's Salary Compare to Other countries

### Cost of Living



### Poverty Rate

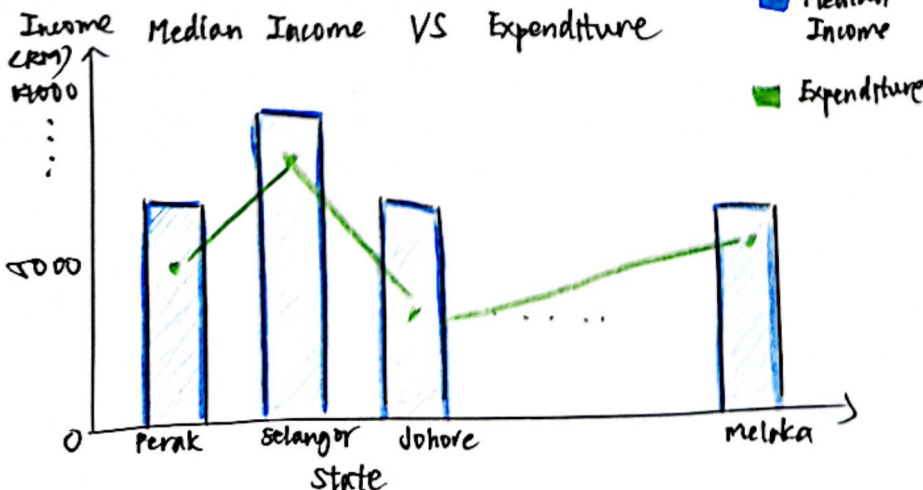


Country:  Year:

- Treemap and bubble chart are interactive and updates based on selected year

## Focus,

- Malaysia is highlighted using distinct colour.



# Operational,,

## Tootip

State: Sarawak  
Income Type: Mean  
Income: RM4978  
Year: 2022

## Graticule

colour  
luminance

## SELECTION FILTER

- Map Region
- Income Type
- Year

## Tootip

Country: Indonesia  
Poverty Rate: 46%  
Year: 2022

Author: Chai Shou Zheng

Student ID: 34035948

Date: 19/10/2025

Page: Sheet 4

Topic & Task: Final layout & graph  
adjustment based on  
feedback

## Discussion,,

- 1) Are scales, number formats and colour encodings consistent across views?
- 2) Is the chart type appropriate for the question and data's granularity?
- 3) Is the map type appropriate?
- 4) Is there anything redundant?



# LAYOUT,

## MALAYSIA Household Income and Economic Well-Being

Exploring Salary Growth and the gap between rural and urban

Average Salary

RM7,745

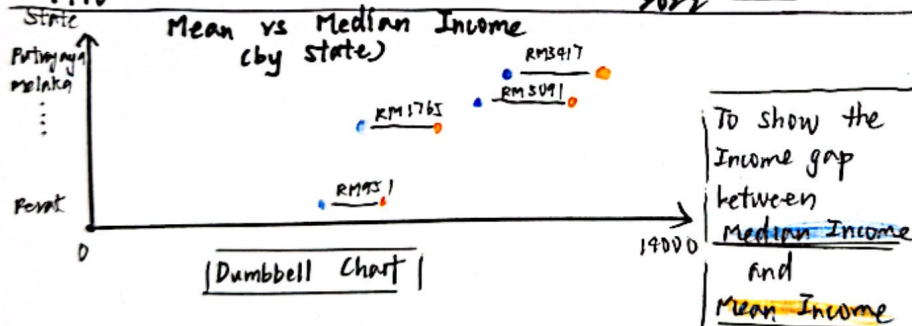
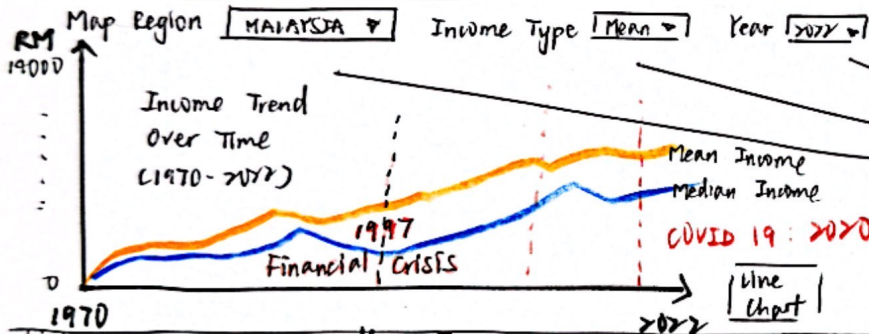
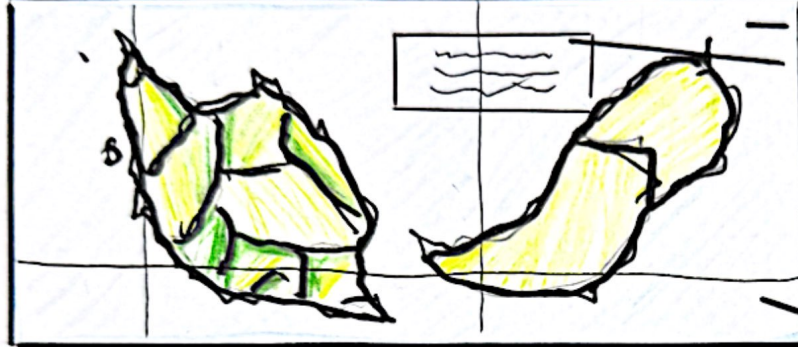
Average Hour Salary

RM17.31

Minimum Wage

RM1,700

### Trends in income Growth (1970-2022)



# Operational,

UISS design  
- card container

KPI cards

Ocean Layer

Annotation

colour  
luminance

Graticules

Drop-down

Filter  
Map Region   
 West  
 East  
 Income Type   
 median  
 mean  
 Year 1970-2022

Author: Chai Shou Zheng

Student ID: 34035958

Date: 19/10/2025

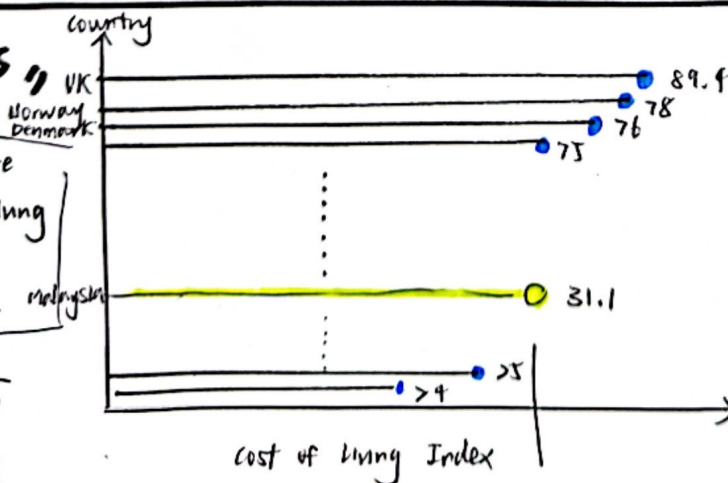
Page: Sheet I

Topic & Task: Final design version

## Focus,

To compare  
cost of living  
across  
Countries

Lollipop  
Chart



Malaysia was highlighted  
using different colour to  
show contrast.

## Discussion,

### Advantages:

- ① Simple & Clean
- ② Created a dashboard with clear story and sections well defined.

### Disadvantages:

- ① The dashboard is not informative
- ② Can utilize the dashboard space better by adding more content.