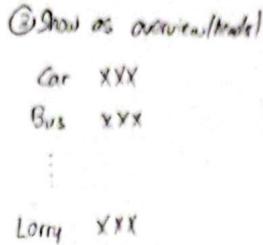
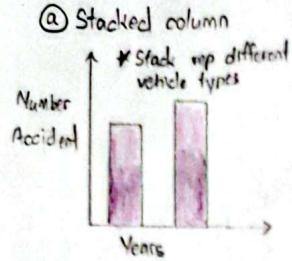


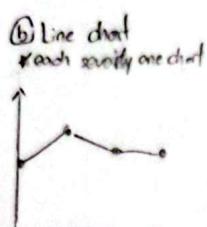
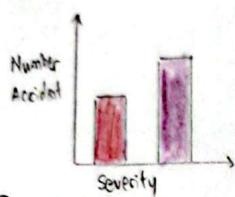
# IDEAS

## ① Accident Types

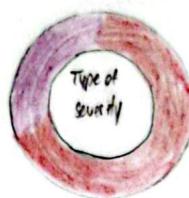


## ② Accident Severity

### ⓐ Column Chart

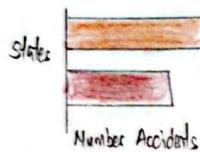


### ⓒ Donut chart



## ③ Accident by States

### ⓐ Bar Chart

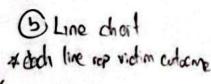
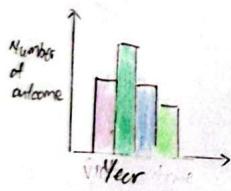


### ⓑ Bubble chart

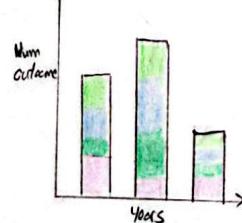


## ④ Victim Outcome

### ⓐ Paired Column Chart

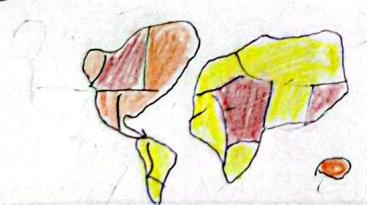


### ⓒ Stacked column chart

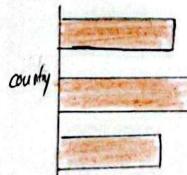


## ⑤ Global Comparison

### ⓐ Choropleth map



### ⓑ Bar chart

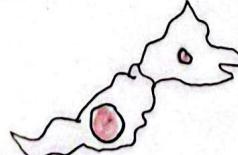


# COMBINE & REFINING

③ Ⓩ + ⓑ → Show number of accident happened in each states  
Choropleth Map / by colors

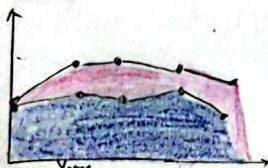


ⓐ + ⓑ → Show number of accident by Proportion map  
Proportion of bubble



④ ⓒ + ⓑ are chart

→ Display total victim over the year with different outcome



# FILTERS

### ① ⓑ



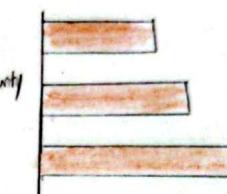
→ Having multiple Donut chart is redundant and there is no percentage to number of accident since it will keep increasing

### ④ ⓑ Paired Column Chart



→ Harder to see trend over the years

### ⑤ ⓑ Bar Chart



→ Only shows name  
→ Harder to spot regional pattern

# CATEGORIZE

### ① Geographic Overview

→ Where accidents happen

### ② Victim Outcome (trend over time)

→ What happened to them

### ③ Vehicle Type

→ Vehicle that cause the accident

### ④ Accident Severity

→ How many accident were in each category

### ⑤ Global comparison

→ Show road safety over the world.

# QUESTION

① Which state has the highest number of accidents?

② What is the proportion of accidents that lead to death, serious injury or minor injury?

③ Which vehicle type cause the most accidents?

④ Are accidents increasing or decreasing over the years?

⑤ How is Malaysia doing in terms of road safety compared to other countries?

Author: Ean Ruqi

Date: 21/9/2025

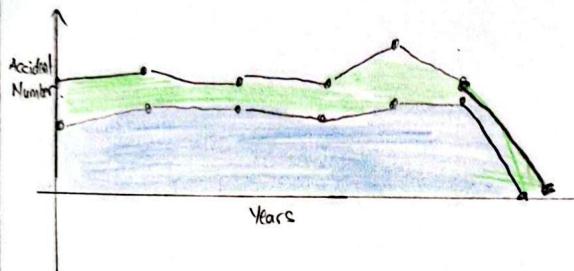
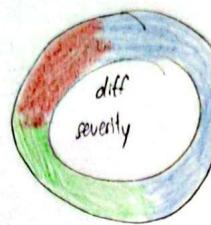
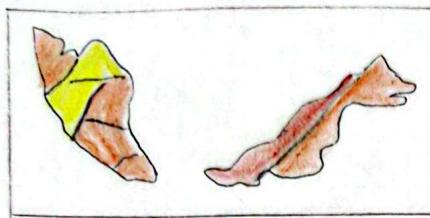
Sheet: 1

Task: Planning visualisation

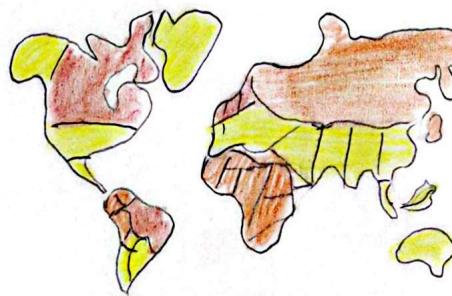
## LAYOUT

### Accident In Malaysia

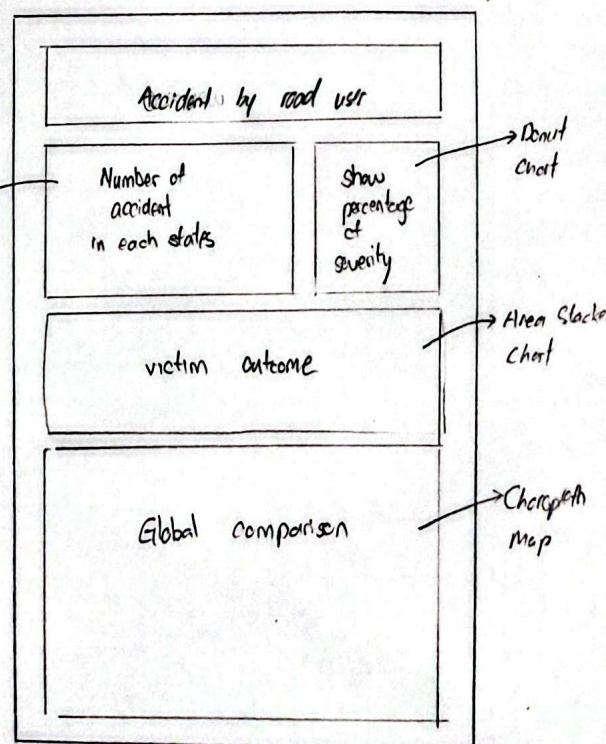
Total Accident	Bus	Car	Cyclist	Pedestrian
xxx	xxx	xxx	xxx	xxx



### Global Comparison



## FOCUS



Title : Dashboard View

Author : Gan Ruigi

Date : 23/9/2025

Sheet : 2

Task : Accidents in Malaysia

## OPERATION

- use a year slider to select a range of years for the visualisation

Years 0 —————— 2020

## DISCUSSION

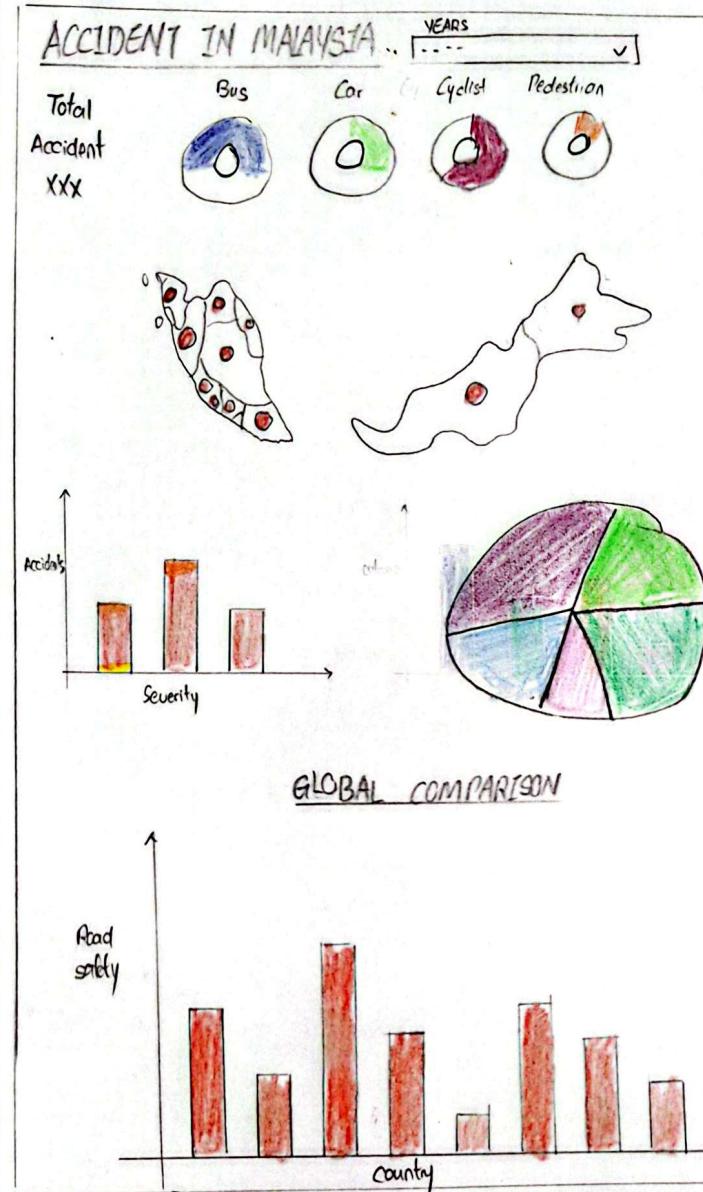
### Advantages :

- well segmented into clear section
- Possible to change chart without data augmentation
- Easy to Understand
- All data can be link back to accidents
- Main Focus is Malaysia Map showing the number of crime

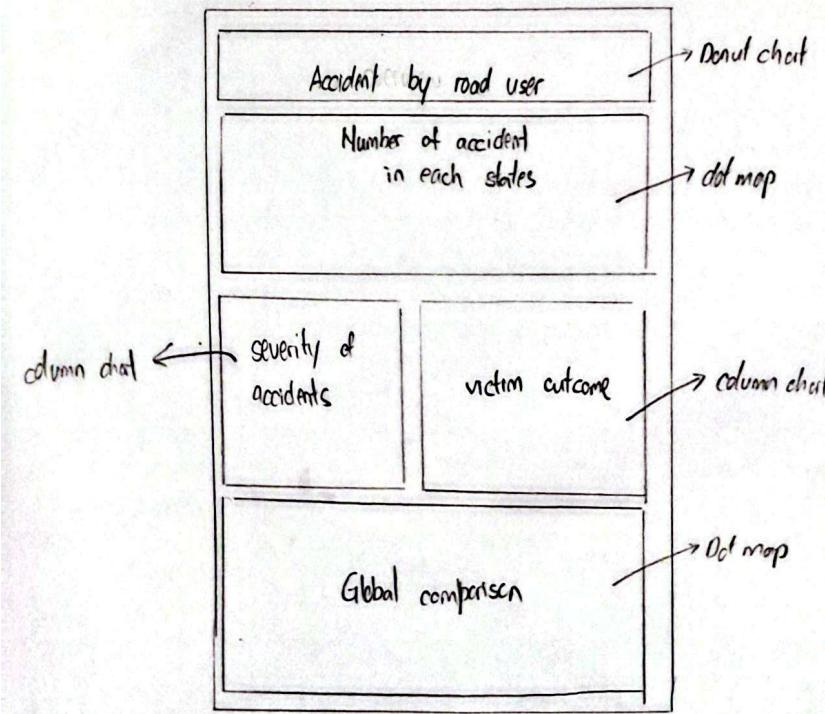
### Disadvantages :

- Global comparison might be misleading if not presented correctly, since the rest is about road accident
- Main focus size is too small
- Using choropleth map cannot see which city has the most accident.

# LAYOUT



# FOCUS



line - Dashboard View

Author : Gao Ruiqi

Date : 23/9/2025

Sheet : 3

Task : Accidents in Malaysia

# OPERATION

- use a drop down list to select the years for the visualisations

Years

Selected years	<input checked="" type="checkbox"/>
2012	<input type="checkbox"/>
2013	<input type="checkbox"/>
2014	<input type="checkbox"/>
2015	<input type="checkbox"/>
2016	<input checked="" type="checkbox"/>

# DISCUSSION

Advantages :

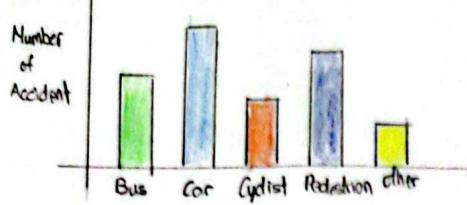
- well segmented into clear section
- Possible to change chart without data augmentation
- Easy to understand
- All data link back to accidents
- Using dot plot, can see which city / ports has more accidents

Disadvantage

- Only have state level dataset, so choropleth more suitable

## LAYOUT

### ROAD ACCIDENT IN MALAYSIA

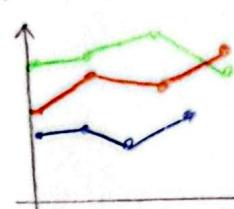


SELECT YEAR

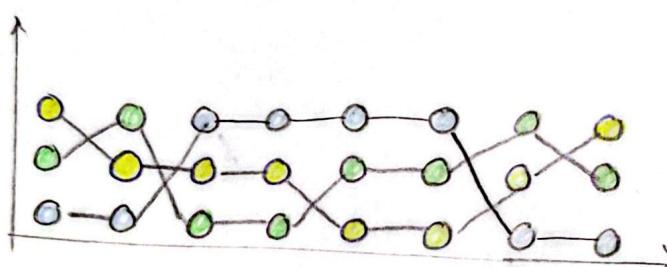
### Accidents by states



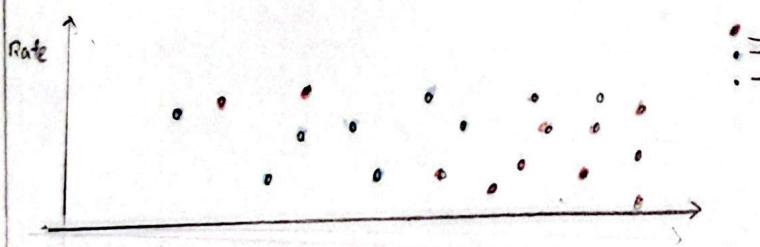
### Victim



### Accident severity



### Road Accident over the world



Title: Dashboards View

Author: Ean Ruqai

Date: 11/10/2023

Sheet: 4

Task: Accidents in Malaysia

## OPERATION

- use a Datepicker but with only years
- Selected Year

<	2011 - 2022	>
2011	2012	2013
2015	2016	2017
2019	2020	2021
		2022

## DISCUSSION

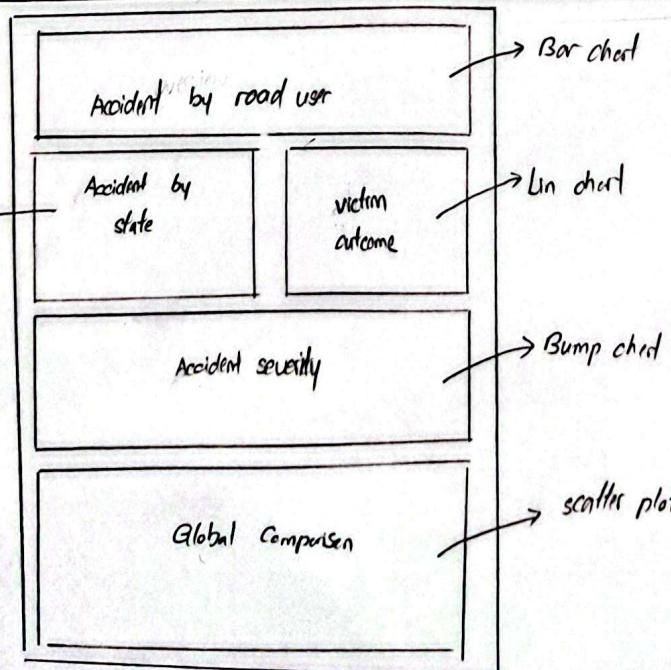
### Advantages:

- Well segmented into clear section
- Possible to change chart without dot augmentation
- Good flow

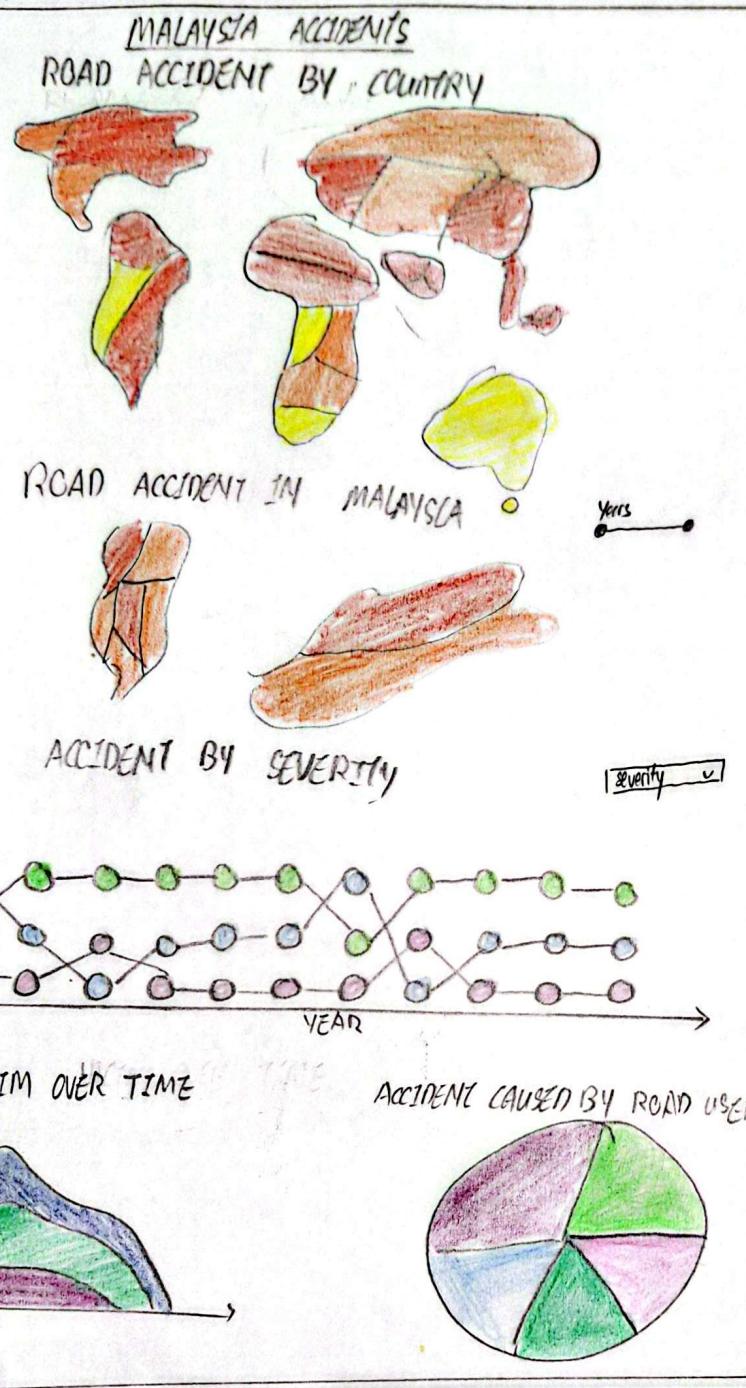
### Disadvantage

- No main focus
- Can not compare accident by state over the years

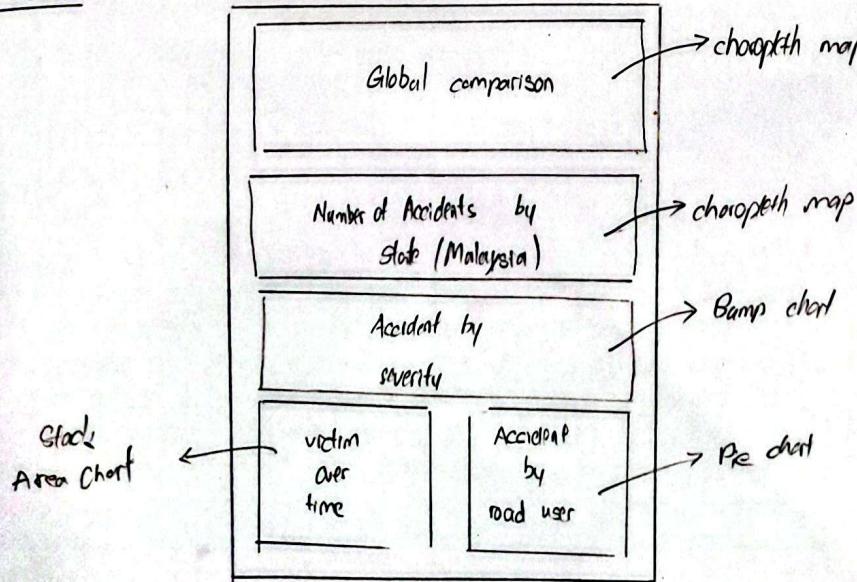
## FOCUS



# LAYOUT



# FOCUS



Title : Final Design

Author : Gan Ruqi

Date : 21/10/2025

Sheet : 5

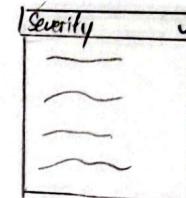
Task : Final Implementation Design

## OPERATION

→ Year slider to select a range of years

Years 2016 2020

→ Drop down for severity selection



## DISCUSSION

Advantages :

- Well segmented into clear section
- Possible to change chart without data augmentation
- Easy flow to understand
- All charts are related to accidents

Disadvantages :

- Bump chart might beabit messy with all states
- Area chart might be too cluttered