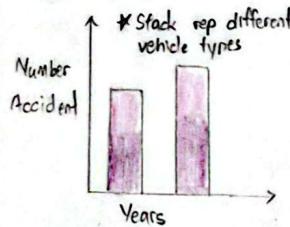


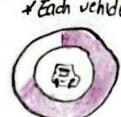
IDEAS

① Accident Types

a) Stacked column



b) Donut chart

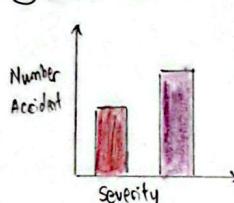


c) Show as overview/heads!

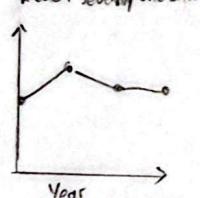
Car XXX
Bus XXX
Lorry XXX

② Accident Severity

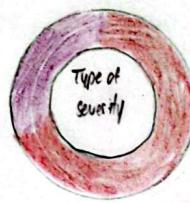
a) Column Chart



b) Line chart

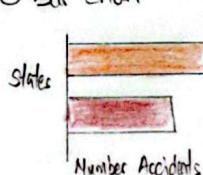


c) Donut chart



③ Accident by States

a) Bar Chart

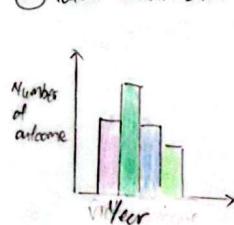


b) Bubble chart

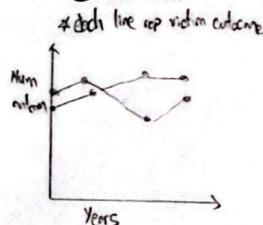


④ Victim Outcome

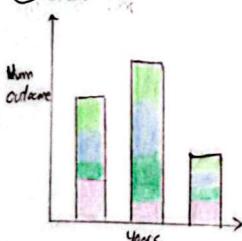
a) Paired Column Chart



b) Line chart

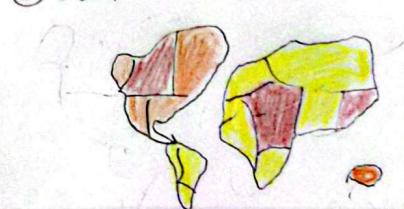


c) Stacked column chart

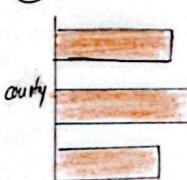


⑤ Global Comparison

a) Choropleth map



b) Bar chart

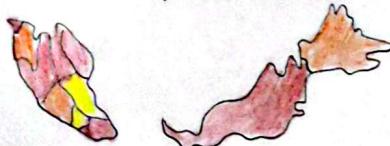


COMBINE & REFINER

③ a + b

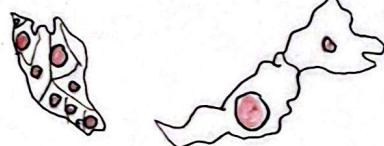
→ Show number of accident happened in each states by colors

Choropleth Map



② + ⑥ → Show number of accident by size of bubble

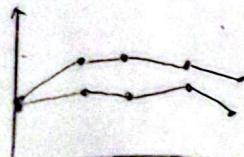
Proportion map



④ b + c

Stacked area chart

→ Display total victim over the year with different outcome



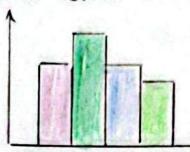
FILTERS

①②



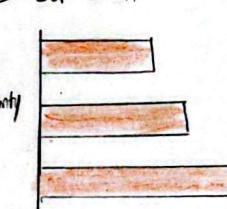
→ Having multiple Donut chart is redundant and there is no percentage to number of accident since it will keep increasing

④⑥



→ Harder to see trend over the years

⑤⑥



→ only shows name
→ Harder to spot regional pattern

CATEGORIZE

① Geographic Overview

→ Where accidents happen

② Victim Outcome (trend overtime)

→ 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: Gan Ruqi

Date: 21/9/2025

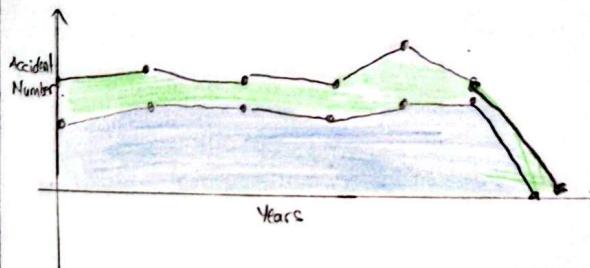
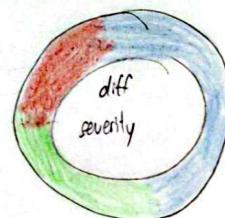
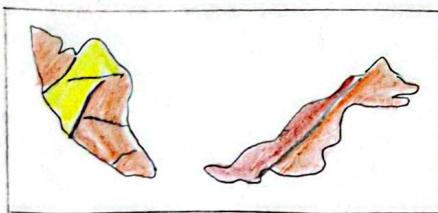
Sheet: 1

Task: Planning visualisation

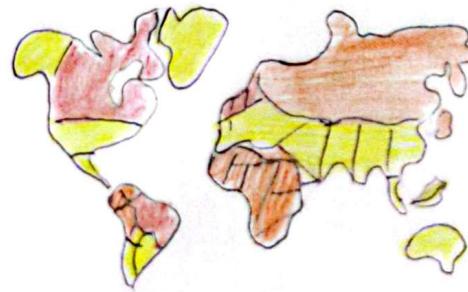
LAYOUT

Accident In Malaysia

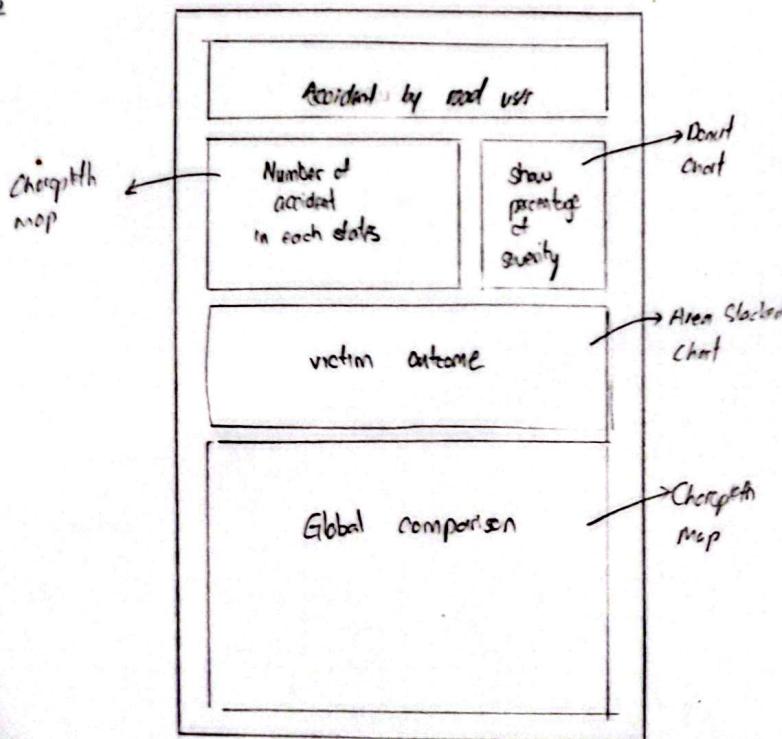
Total Accident	Bus	Car	Cyclist	Pedestrian
xxx	xxx	xxx	xxx	xxx



Global Comparison



FOCUS



Title : Dashboard View

Author : Gan Ruqi

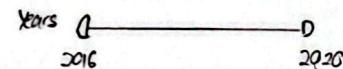
Date : 23/9/2025

Sheet : 2

Task : Accidents in Malaysia

OPERATION

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



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

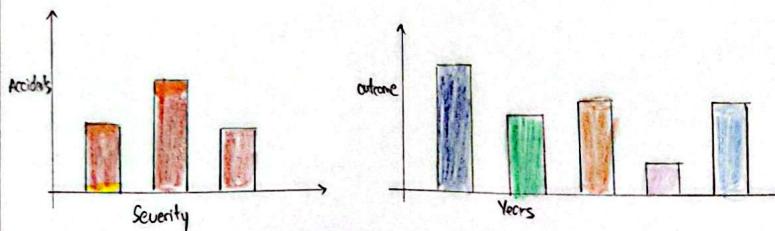
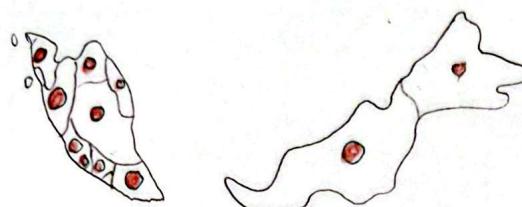
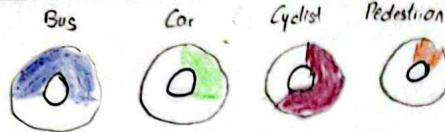
Disadvantages :

- (road safety)
 - 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.

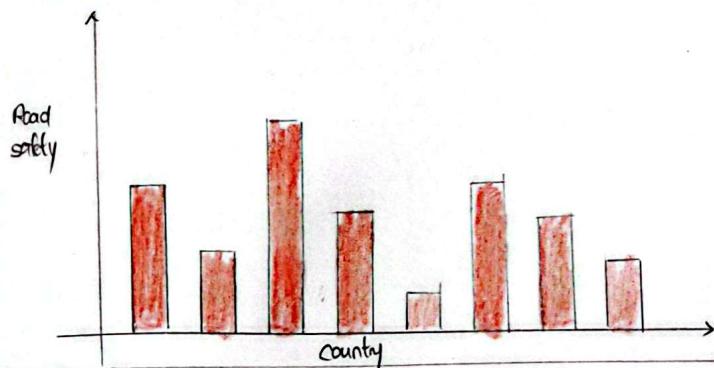
LAYOUT

ACCIDENT IN MALAYSIA ..

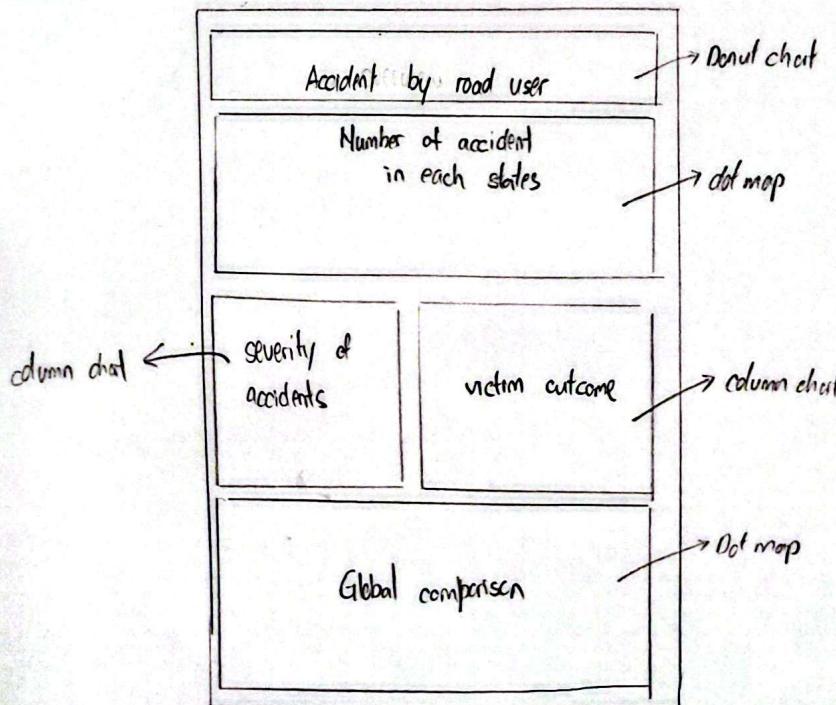
Total Accident
XXX



GLOBAL COMPARISON



FOCUS



Title : Dashboard View

Author : Gon 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

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

DISCUSSION

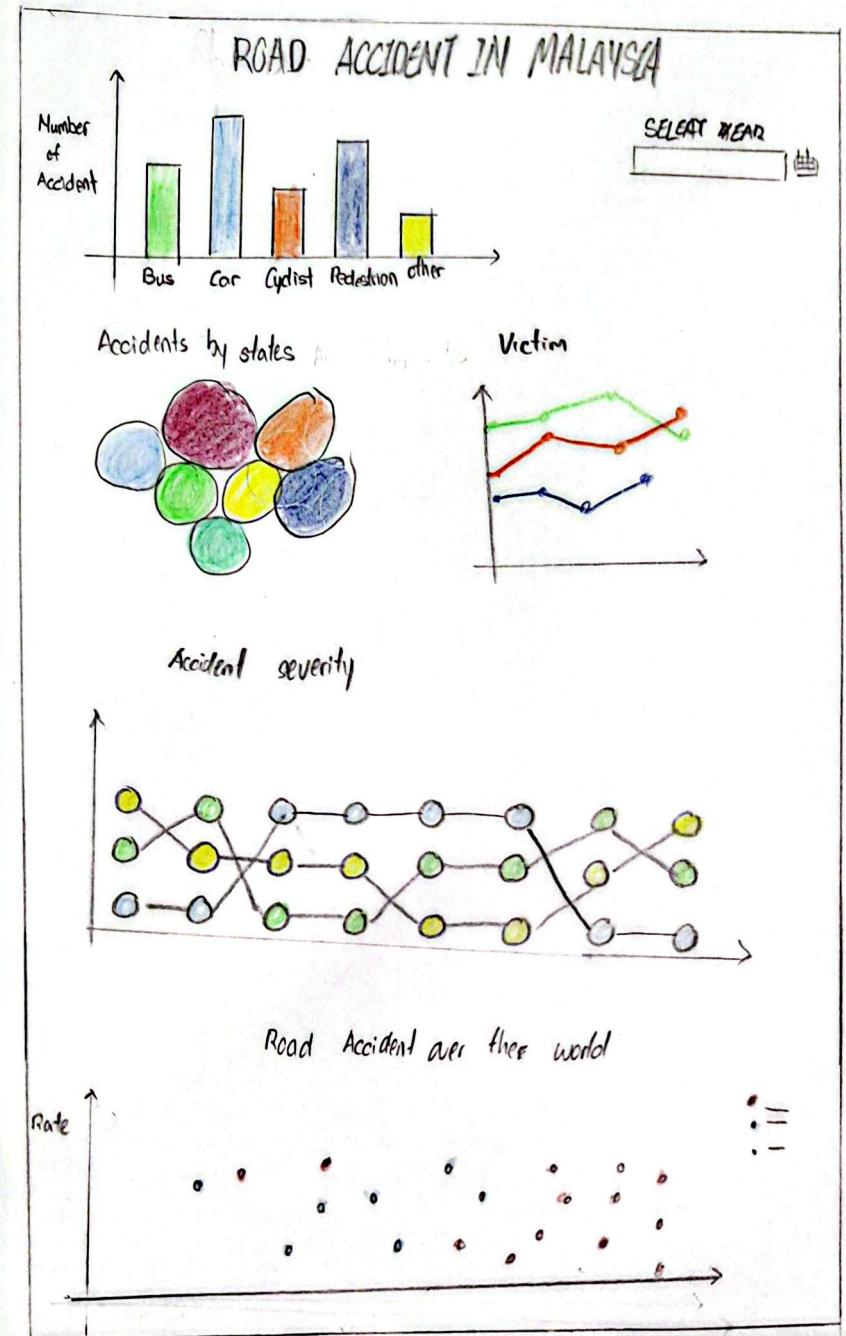
Advantages :

- 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



Title : Dashboard View

Author: Ean Ruqai

Date : 1/10/2025

Sheet : 4

Task : Accidents in Malaysia

OPERATION

→ use a Datepicker but with only years
Select Year

Year			
<	2011 - 2022	>	##
2011	2012	2013	2014
2015	2016	2017	2018
2019	2020	2021	2022

DISCUSSION

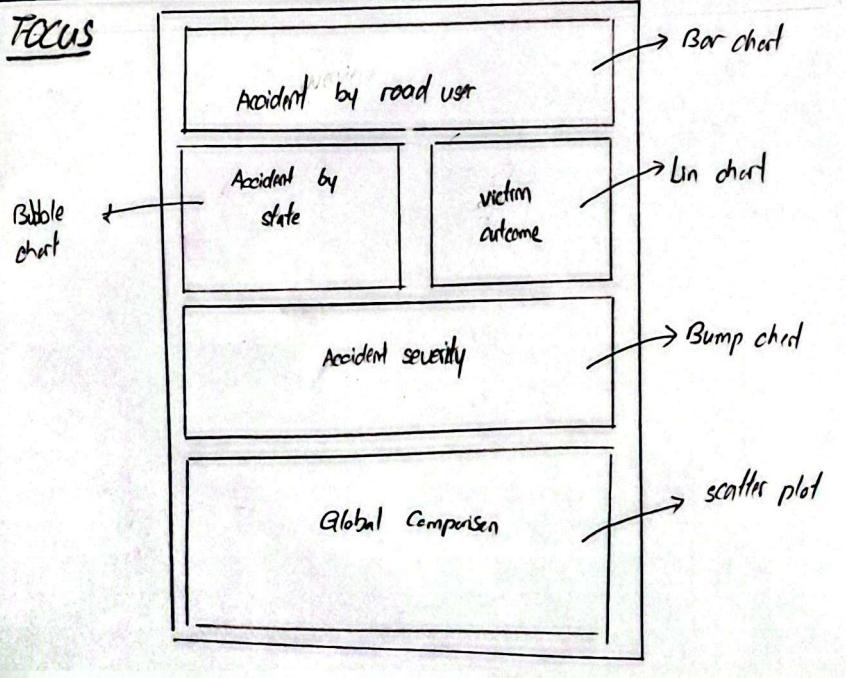
Advantages :

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

Disadvantage

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

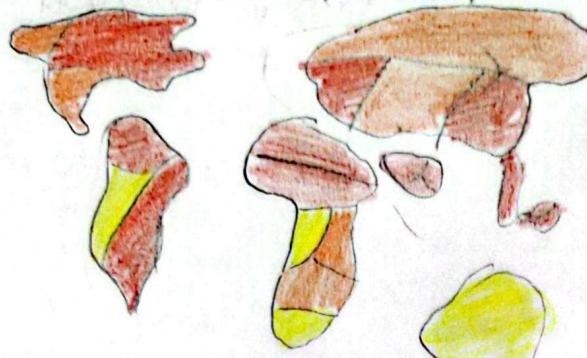
FOCUS



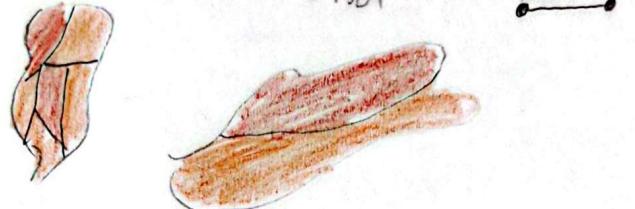
AYOUT

MALAYSIA ACCIDENTS

ROAD ACCIDENT BY COUNTRY

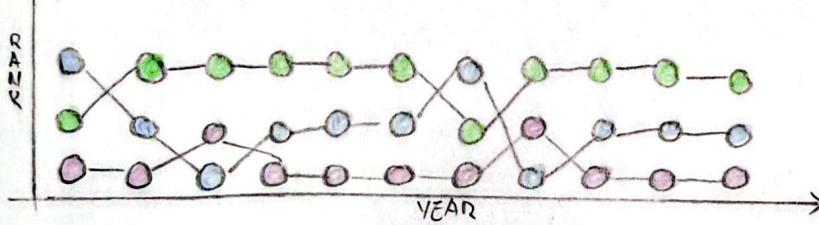


ROAD ACCIDENT IN MALAYSIA

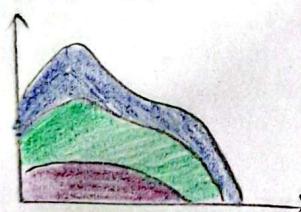


ACCIDENT BY SEVERITY

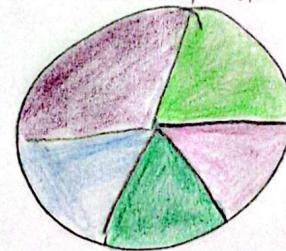
severity ▾



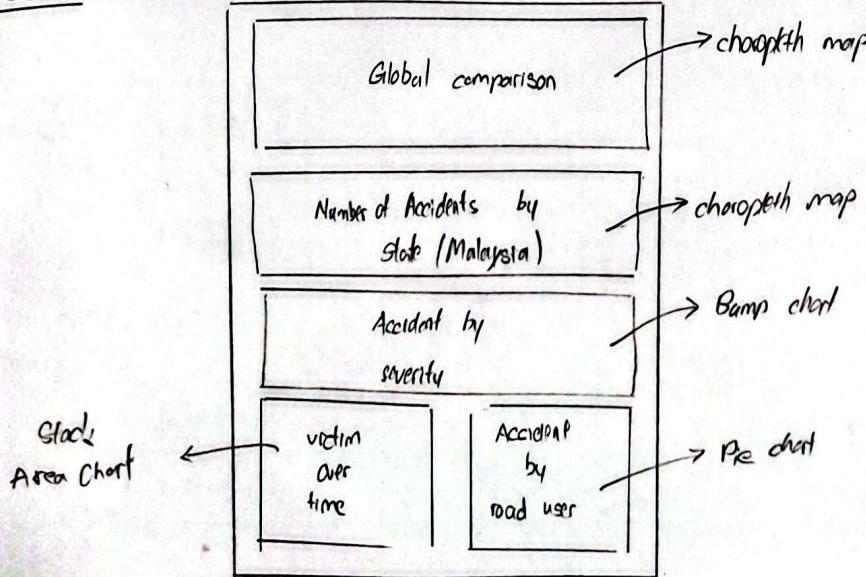
VICTIM OVER TIME



ACCIDENT CAUSED BY ROAD USER



FOCUS



Title : Final Design

Author : Gan Ruiqi

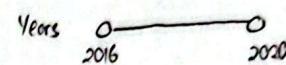
Date : 21/10/2025

Sheet : 5

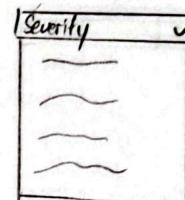
Task : Final Implementation Design

OPERATION

→ Year slider to select a range of years



→ 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