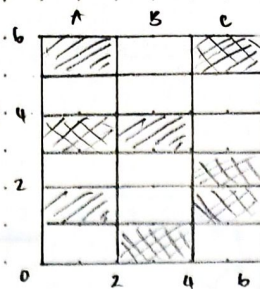


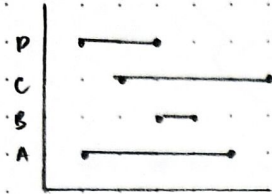
① IDEAS



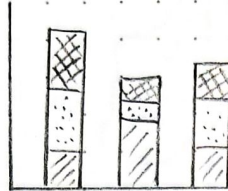
map



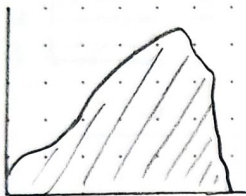
heat map



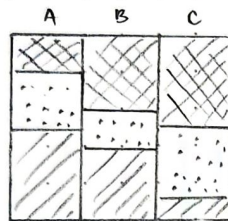
dumbbell plot



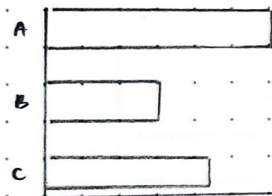
stacked bar chart



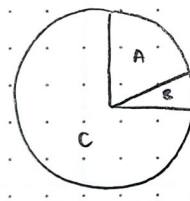
area chart



marimekko chart



horizontal bar graph



pie chart

TITLE :

AUTHOR : Samantha Khoo

DATE : 06/10/24

SHEET : 1

TASK : Brainstorm

② FILTER

1. map
2. dumbbell plot
3. area chart
4. horizontal bar chart
5. pie chart
6. marimekko chart

heat map X

stacked bar chart X

③ CATEGORISE

DS 1 : Crime per state

→ map

DS 2 : crime rates

→ area chart

→ stacked?

DS 3 : Juvenile crimes

→ bar chart

→ male vs female

DS 4 : Global crime

→ bar chart

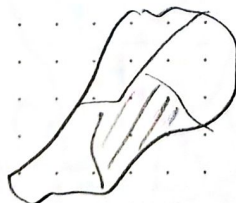
→ top 8-10 countries

④ COMBINE & REFINE

map → choropleth map



show crime rate per state

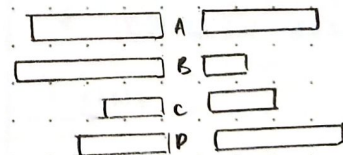


colour scale

back to back horizontal bar chart

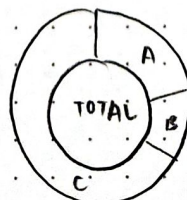


butterfly chart



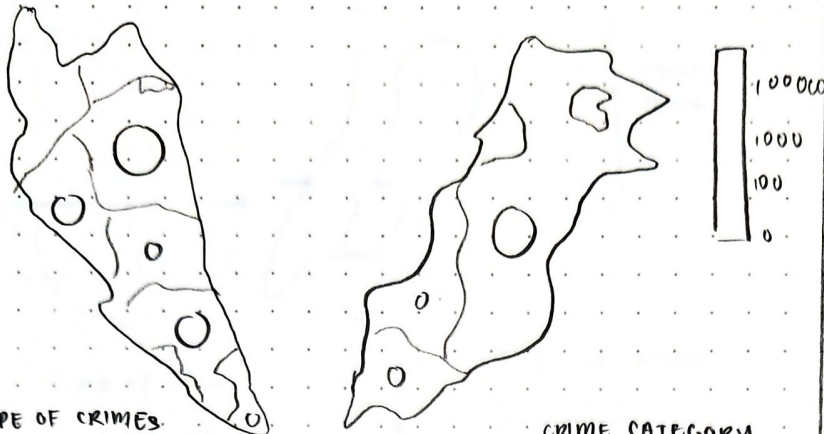
female vs male

pie chart → donut chart
+ total number in middle

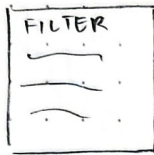
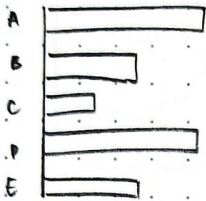


① LAYOUT

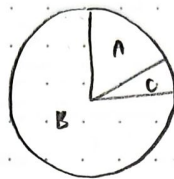
crime across Malaysia



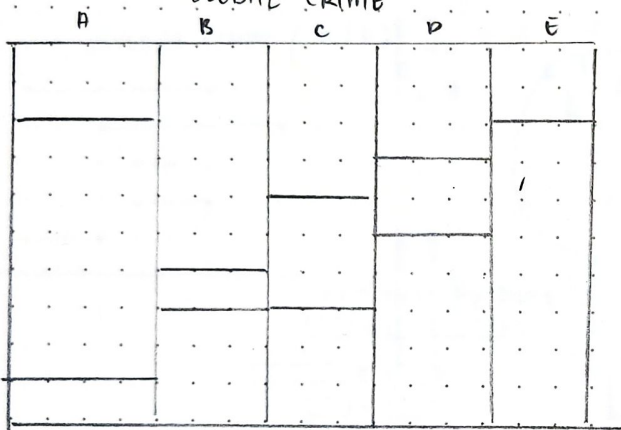
TYPE OF CRIMES



CRIME CATEGORY



GLOBAL CRIME



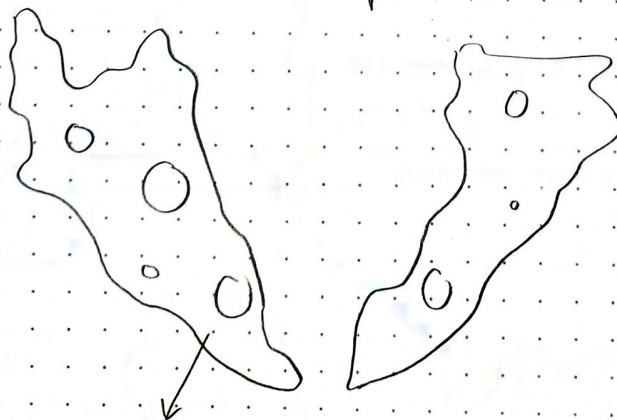
TITLE: A Deep Dive into
Malaysian Crime
AUTHOR: Samantha Khoo
DATE: 08/10/24
SHEET 2
TASK: Design Idea of
Malaysian Crime Stats

③ OPERATIONS

- filter
 - ↳ filter by years
 - ↳ crime types
 - ↳ global crime
- hover for tooltips
 - ↳ map → display crime rate etc.

② FOCUS

bubble map



bubble size change according
to crime rate per state

④ DISCUSSION

PROS

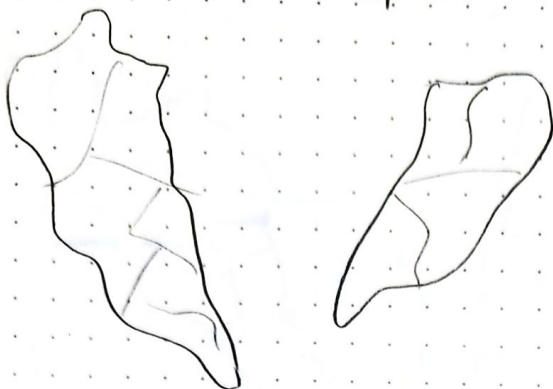
1. Shows different aspects of data
2. Interactive design

CONS

1. Less intuitive
 - ↳ marimekko chart
2. Difficult to implement

① LAYOUT

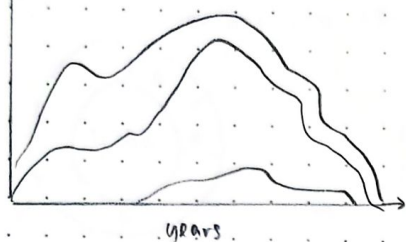
crime in malaysia



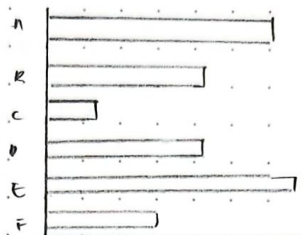
colour
scale

types of crime

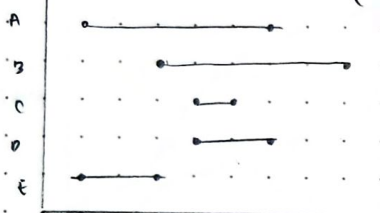
cases



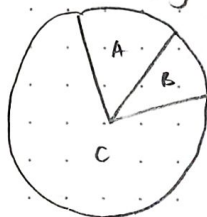
global crime



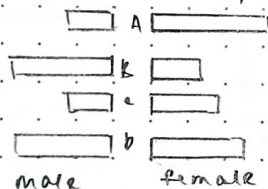
juvenile crime (m/f)



crime category



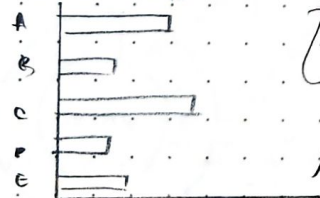
prisoners by state



legend

② FOCUS

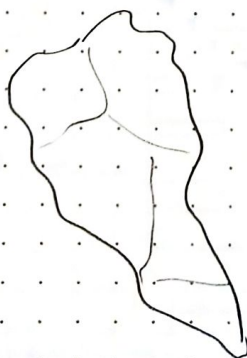
Global Crime



display only 8-10

filter by region?

colour
saturation
to display
crime rate



classification

TITLE: A Deep Dive into
Malaysian Crime

AUTHOR: Samantha Khoo

DATE: 07/10/24

SHEET: 2

TASK: Alternate Design of
Malaysian Crime Stats

③ OPERATIONS

- filter by years
 - ↳ crime category
 - ↳ juvenile crime
 - ↳ prisoner by state
- hover for tooltips
 - ↳ pie chart - display total crime category number over year

④ DISCUSSION

PROS

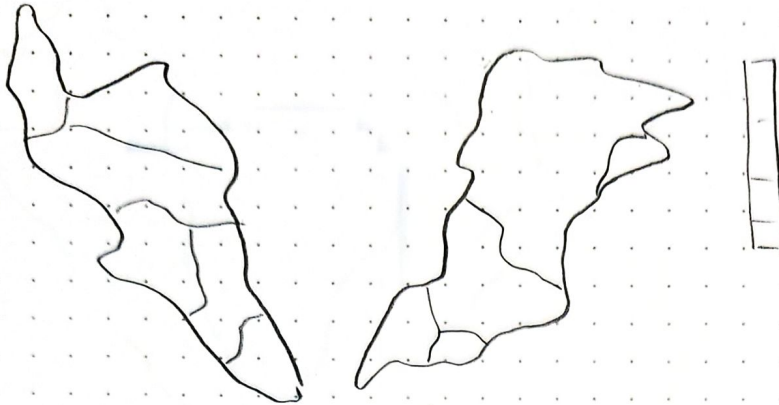
1. Shows global data
 - ↳ compare Malaysia
2. Interactive

CONS

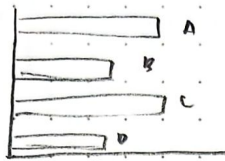
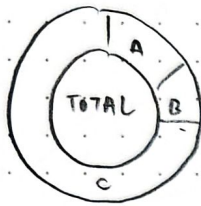
1. Does not show many data values

① LAYOUT

crime in malaysia

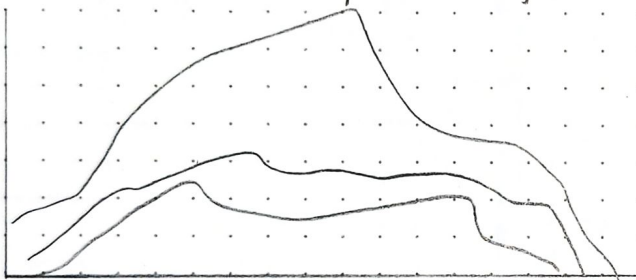


crime types / categories

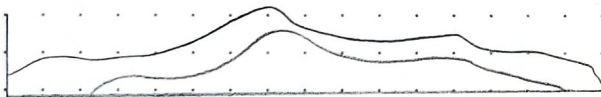


prisoners by state & year

overview



detail



TITLE A Deeper Dive into

Malaysian Crime

AUTHOR Samantha Khoo

DATE 07/10/24

SHEET: 4

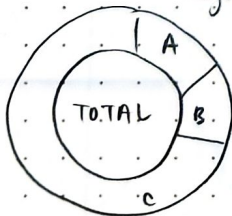
TASK Alternate Design of
malaysian crime visualisation

③ OPERATIONS

- select on horizontal bar chart to see on donut chart
 - ↳ compare proportion
 - ↳ see num. of cases
- brush selection to view detail / overview
 - ↳ select year range
 - ↳ zoom in on overview

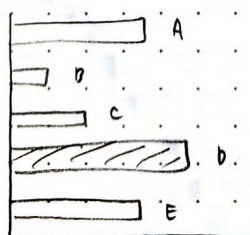
② FOCUS

crime category



display total crime number over years

highlight malaysia



display country name next to bars

④ DISCUSSION

PROS

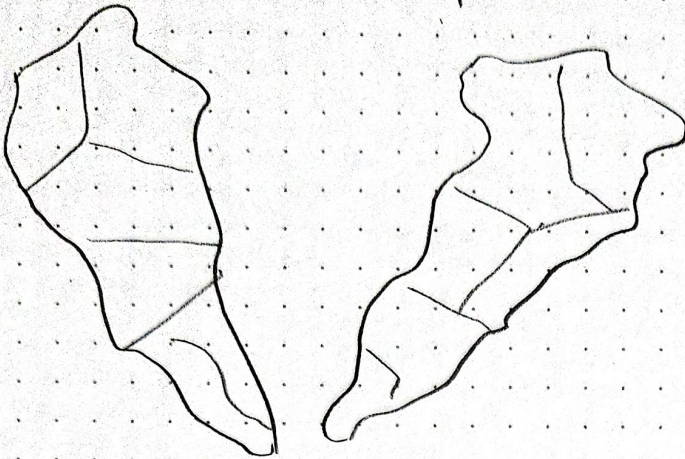
1. Shows many aspects
2. Intuitive design

CONS

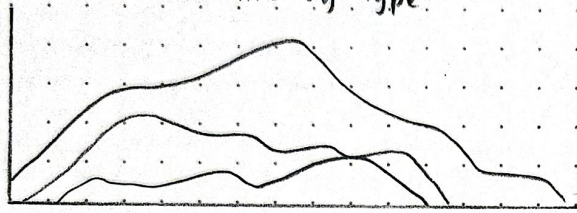
1. Need to scroll to view
2. Hard to implement

① LAYOUT

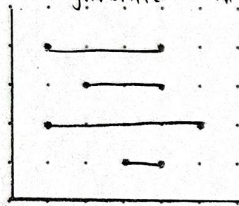
crime in Malaysia



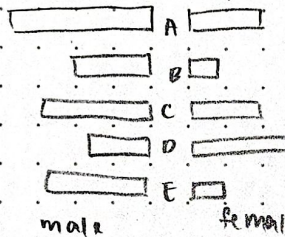
crime rate by type



juvenile crime

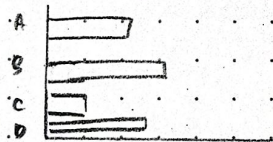


prisoner by state

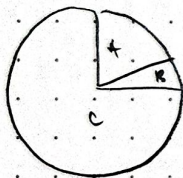


male female

global crime index

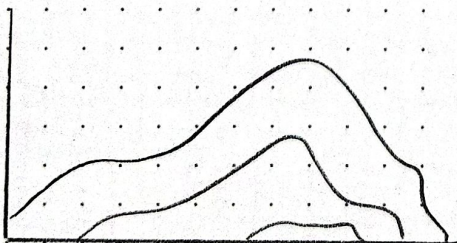


crime categories



② FOCUS

overview



zoom in on
selected range



detail



brush
selection



TITLE: A deep dive into
Malaysian crime
AUTHOR: Samantha Khoo
DATE: 09/10/24
SHEET: 5
TASK: Final design of data
visualisation 2

③ OPERATIONS

- overview + brush detail
 - ↳ view crime rates over the years in detail
 - ↳ selected year range will be displayed on overview graph
- info button
 - ↳ display data sources
 - ↳ extra credits
- filter by year
 - ↳ dumbbell plot
 - ↳ butterfly chart

④ DETAIL

- Time of development
 - ~ 5 days (estimated)
- Datasets from data.gov.my
- Dependencies:
 - ↳ VS Code
 - ↳ vegalite library and extension
 - ↳ Gitlab
- Datasets need to be cleaned
- colour scheme
 - ↳ colour-blind friendly