

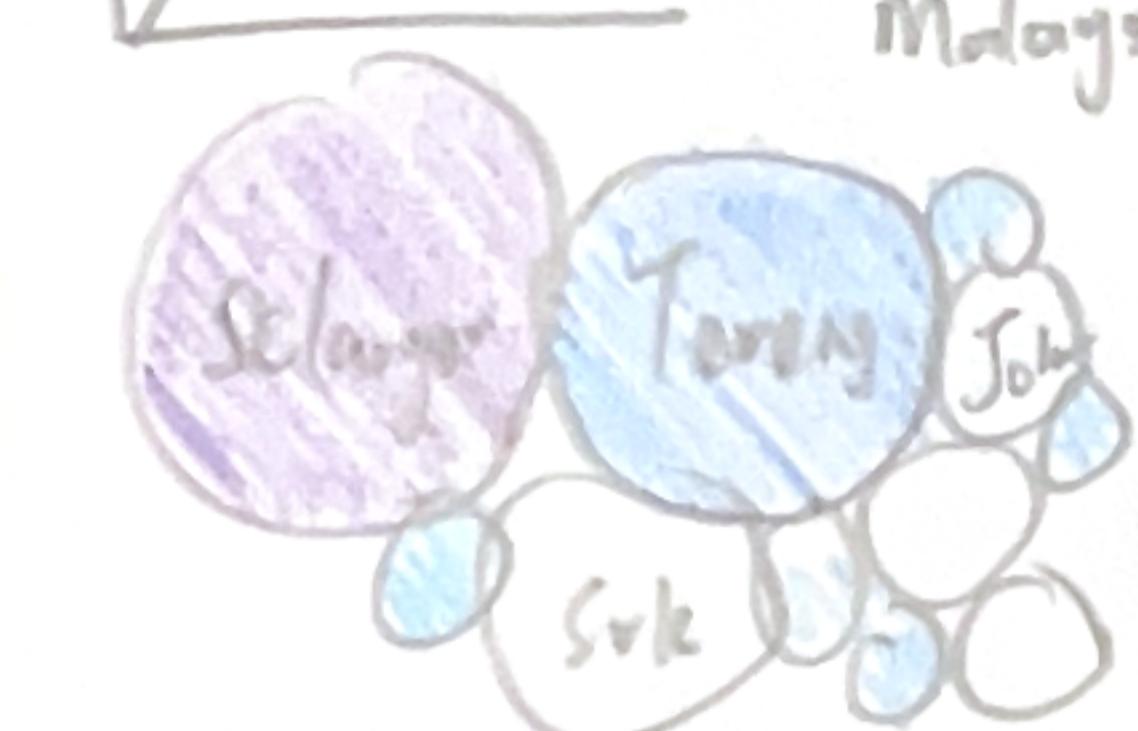
## 1 Ideas

Heatmap for number of drug addicts (state)



Choropleth map

↳ Number of drug addicts depending on state

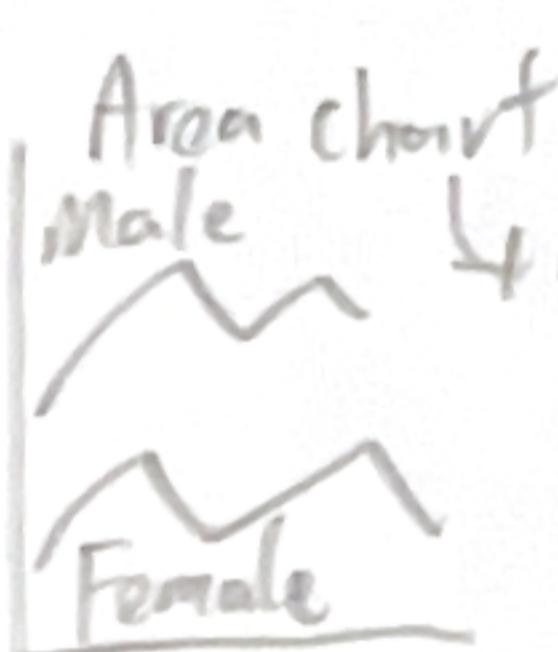
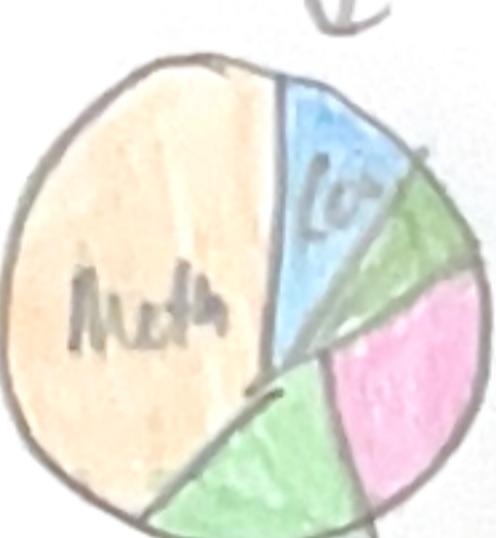


Bar chart → types of drugs?

can be in row as well

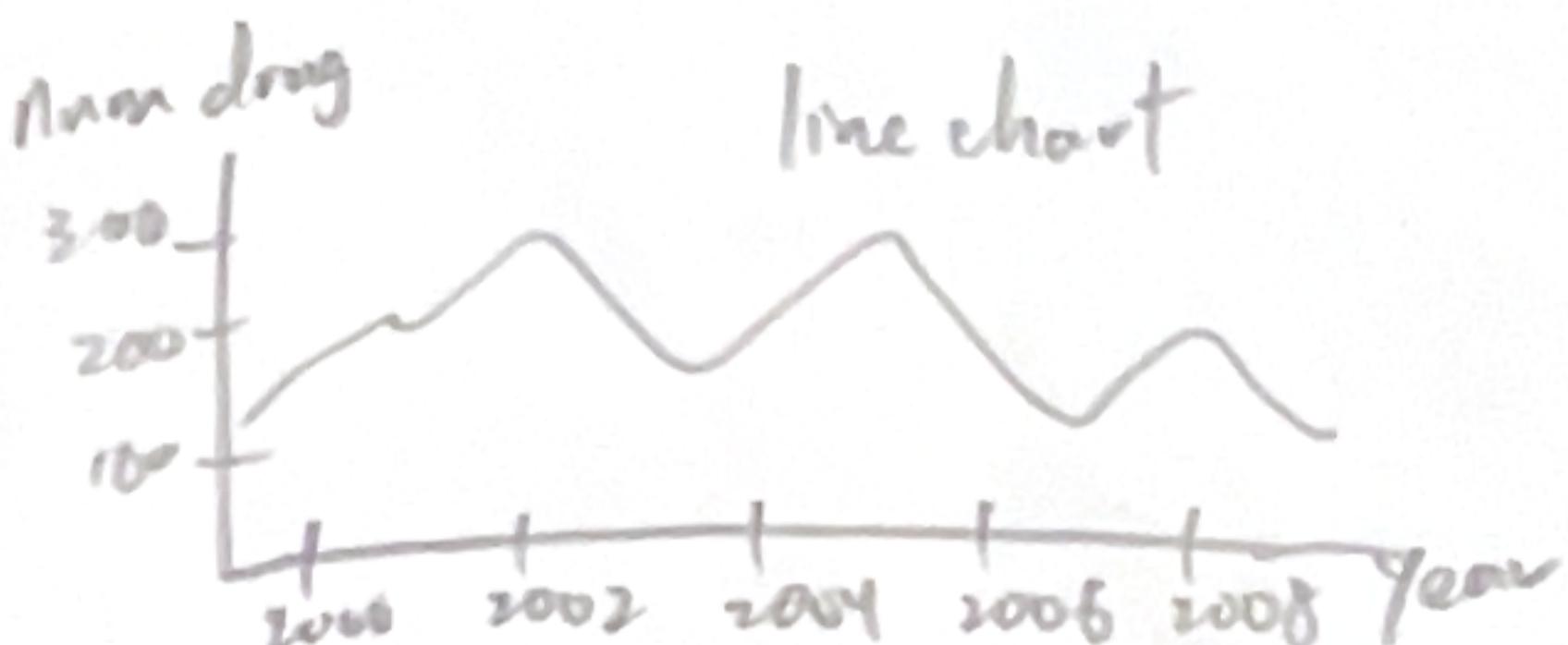


Pie chart (drug type)



↳ gender of drug addicts

choropleth map



Name = Jasmine Koh  
Student ID = 33454876

Design Sheet = 1  
Task : AS2 : 1-5 design sheet

## 2. Filter

① Choropleth Map (must)



Pie chart

③



(drug type)

②



line chart



Bar chart

## 3. Categorize

Drug Addiction in Malaysia

Category:  
By state  
(normalized)  
per 100,000

By drug types  
↳ over years  
↳ see how it performs  
↳ which is most common

By age → what age groups use the most

By gender = if gender matters.

## 4. Combine & Refine

combine : colour to distinct with



which state has the highest density of drug addicts.

## 5. Questions

- Is visualisation doable to implement w/ code (Vega-lite / HTML)?

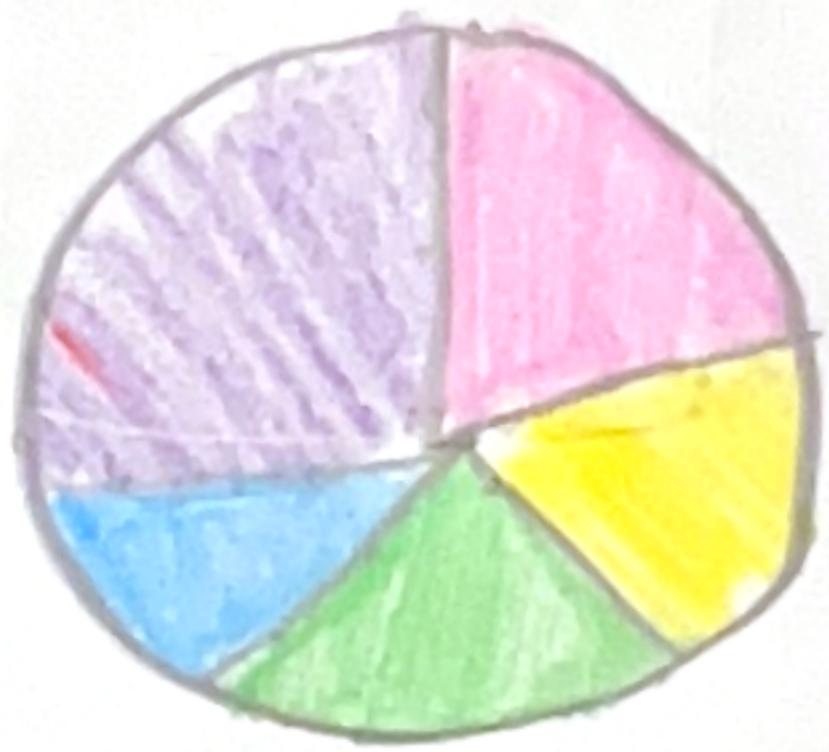
- Can I find datasets needed to complete the visualisation?

- Does above visualization provide insightful information to readers?

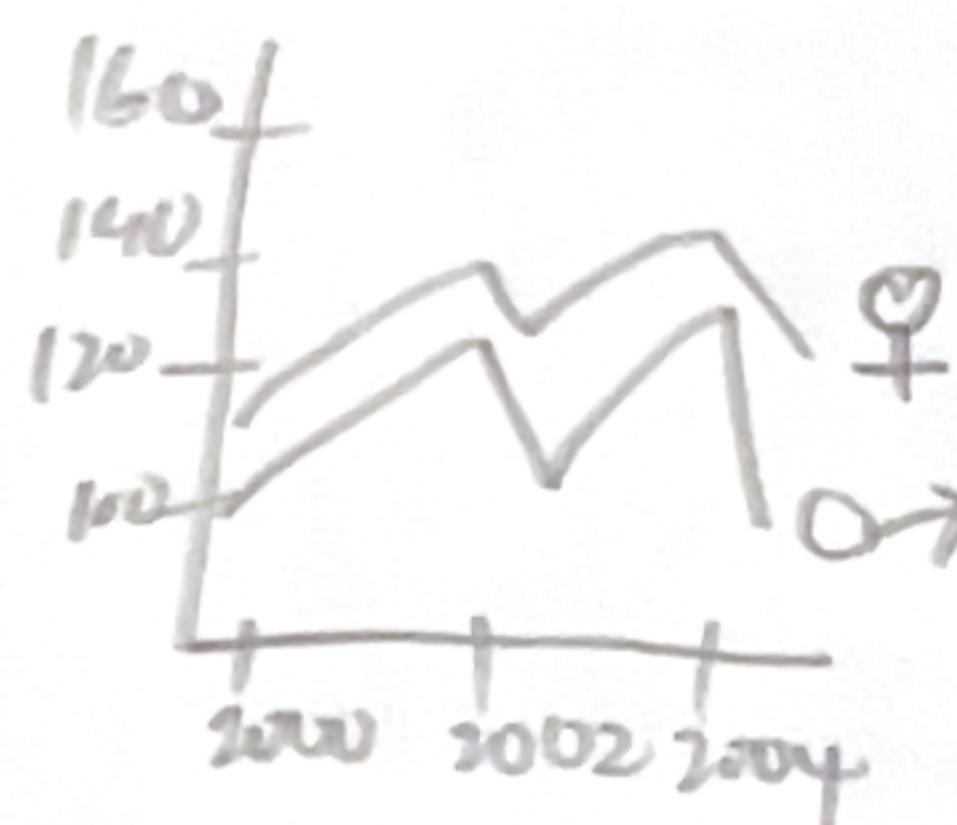
# Layout



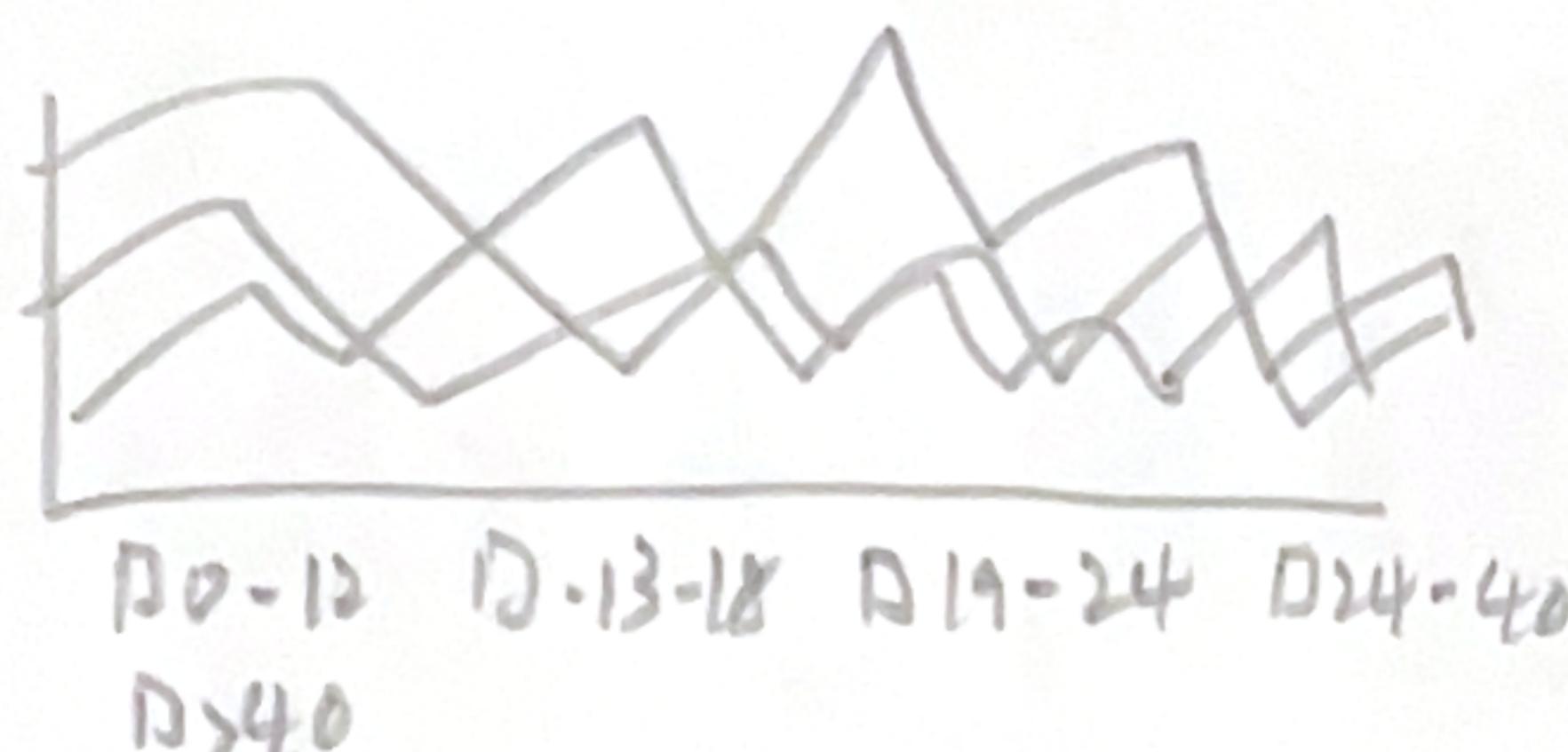
Drug Types in M.Y.



Does gender play a role

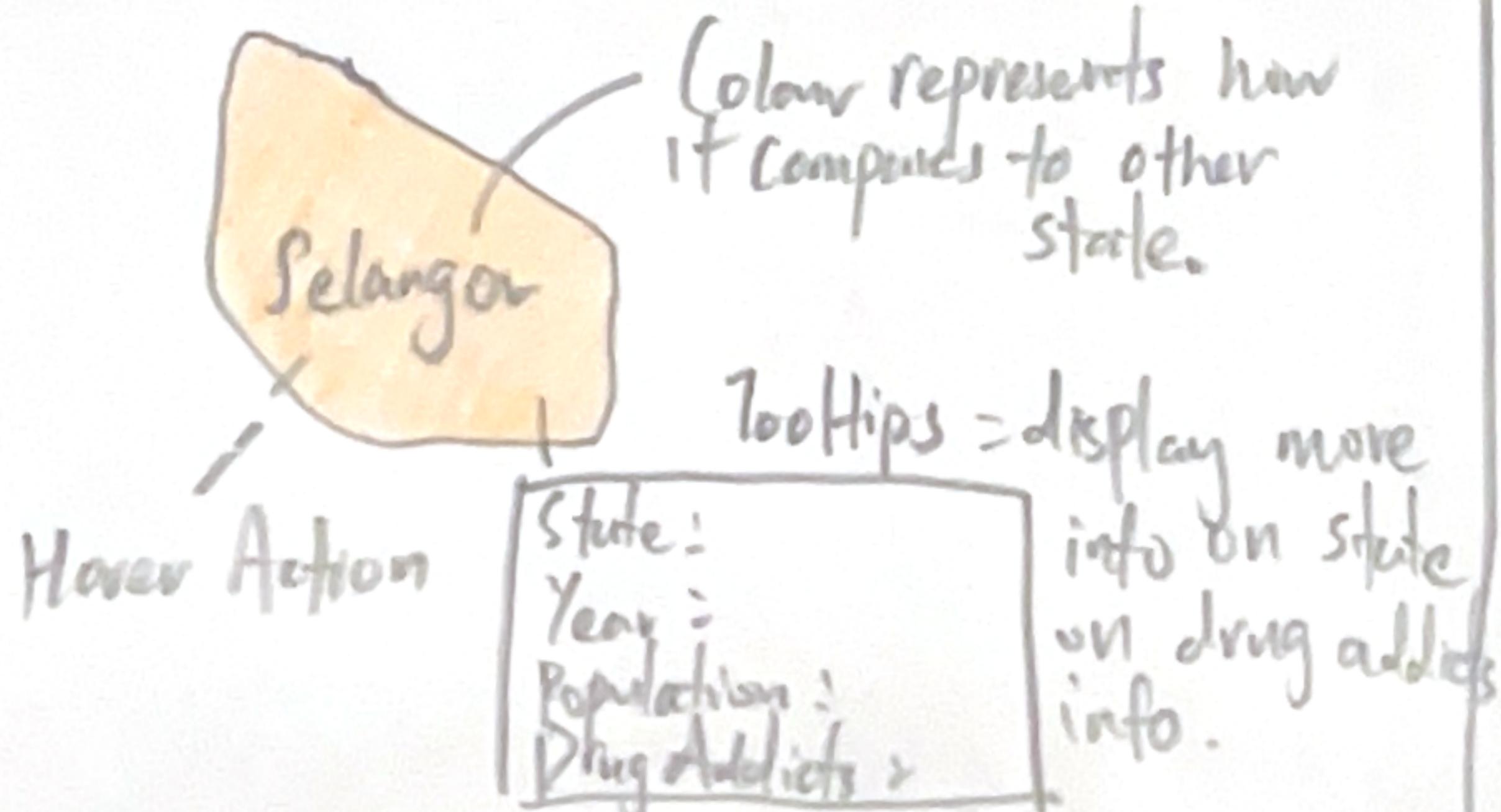


Age group



# Focus

Focus would be on choropleth map, the map is on the normalised data of drug addicts per state. Ex:  
Drug addicts per 100,000 population.



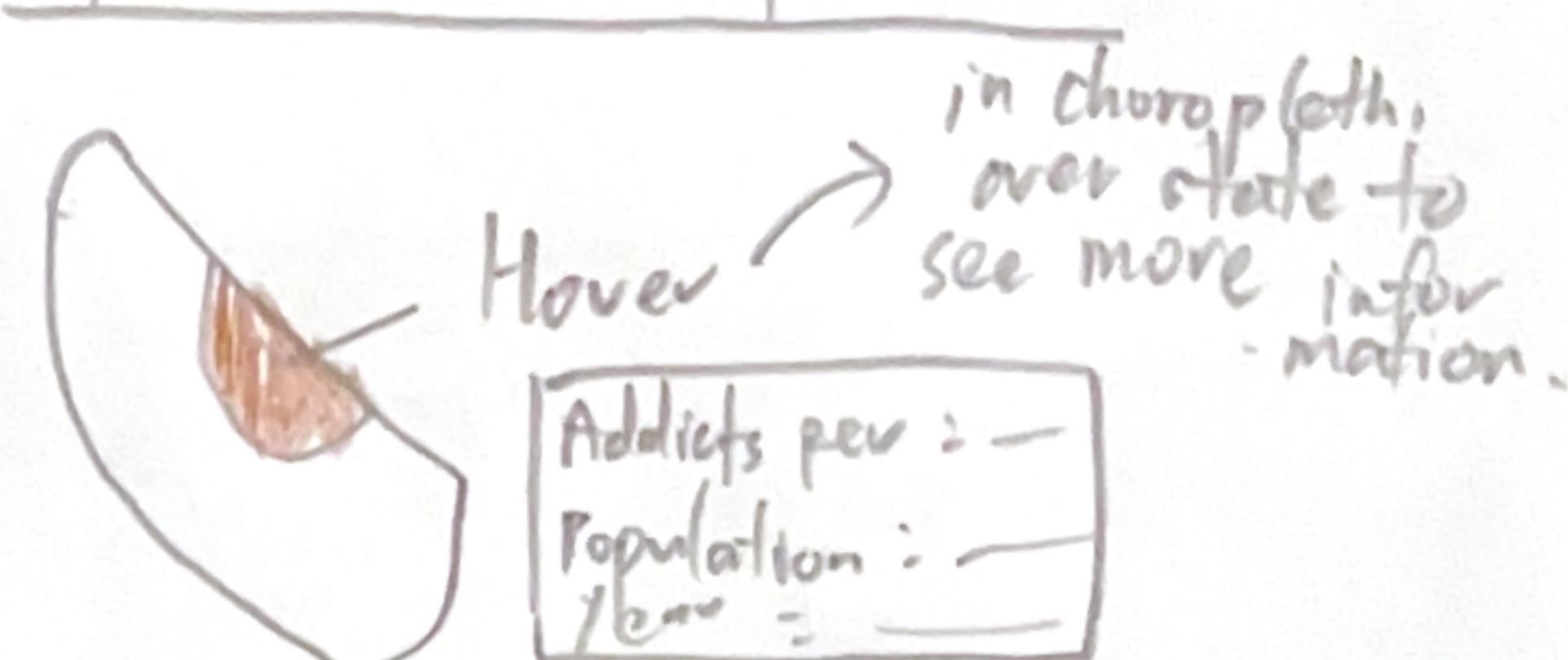
Title : AS2 5 design Sheets .

Design Sheet : 2

Name : Jasmine leoh

Student ID : 33454876

# Operations / Components



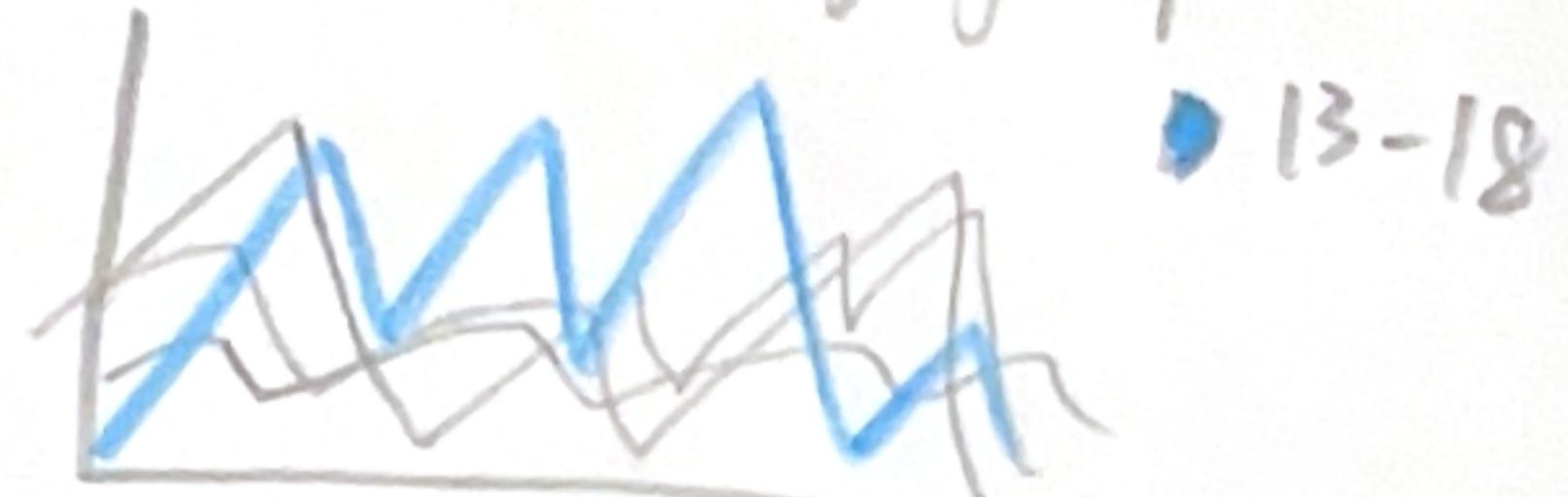
Year: ① 2000 2021

Slider year to see info on specific year.

Pie chart, selection of legend  
~~changes~~ focus on the specific ones.



same function for age group



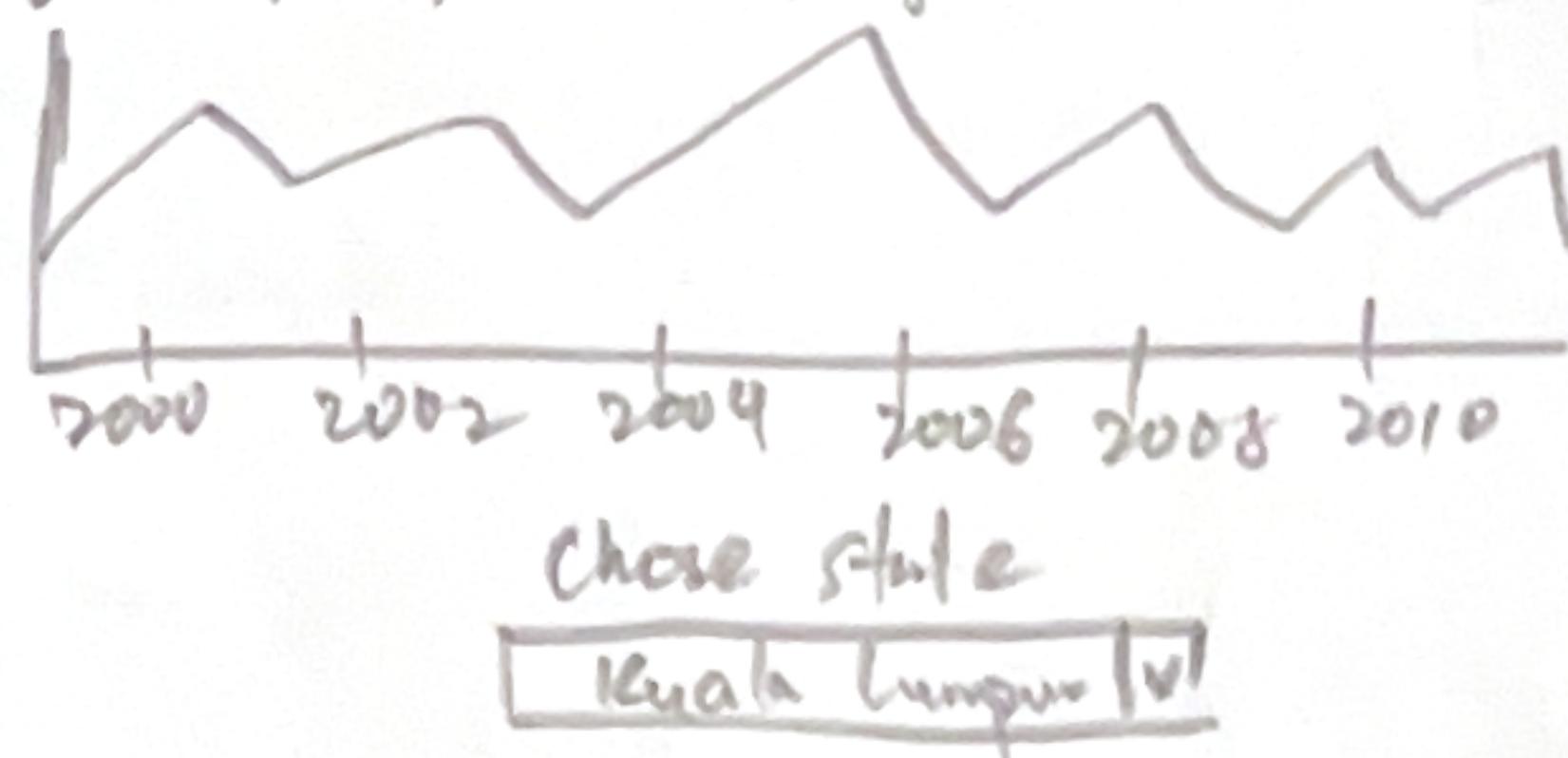
# Discussions

- Too little information / annotation ?
- Too boring ?
- Does visualization has good balance of data - ink ratio ?
- Too little graph ?

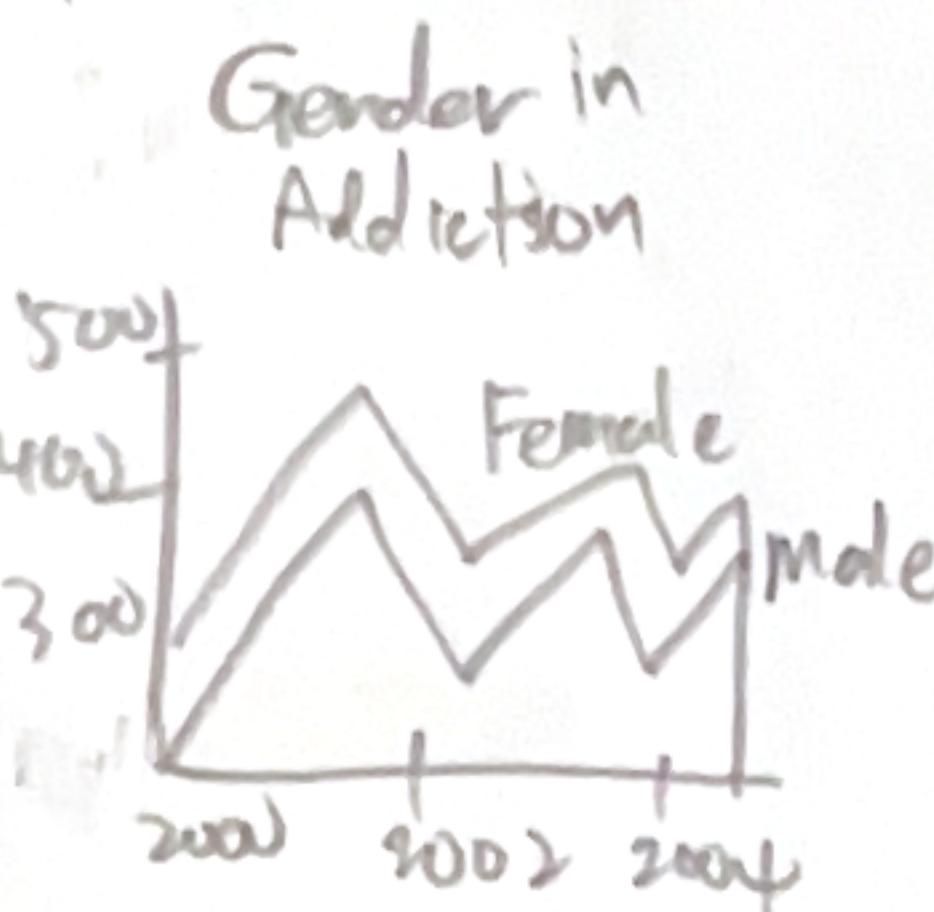
## Layout

### Drug Addiction

#### Over The Years (Drug Addicts)



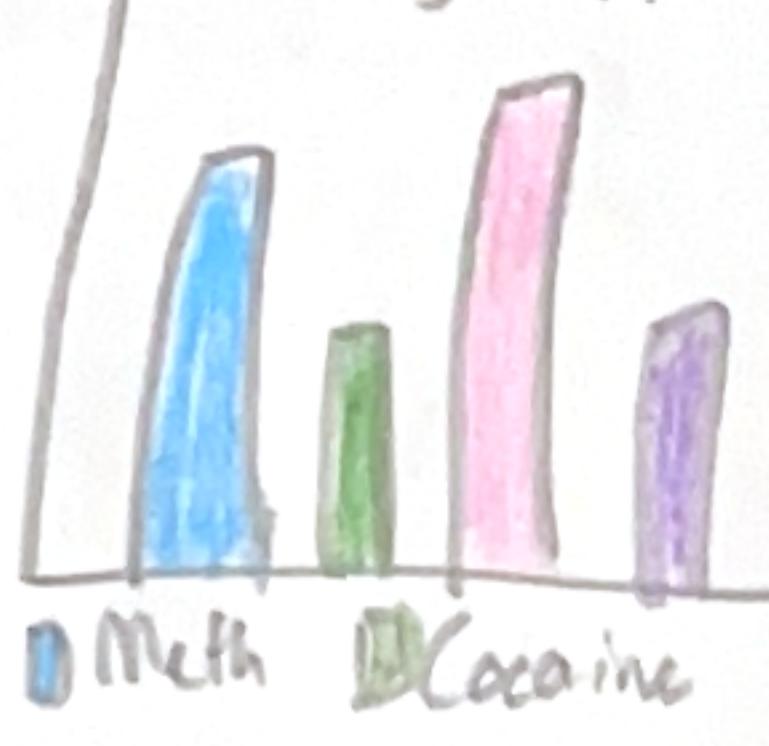
How it compares with others



Age Group



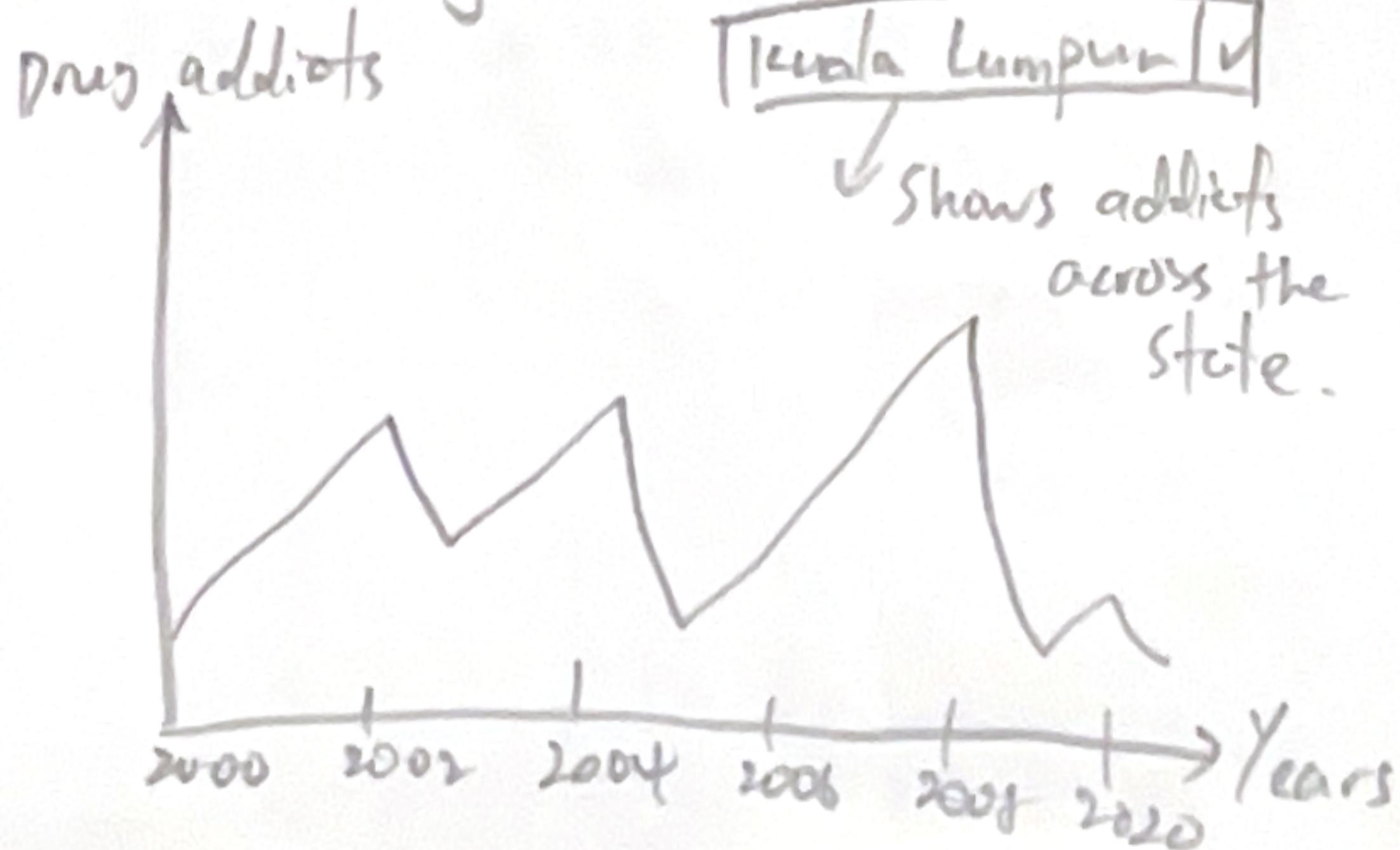
Drug Type



## Focus :

Line chart representing the number of drug addicts of each state over the years.

If no state chosen, shows total drug addicts of country.



Title : AS2 5 design sheets

Design sheet = 3

Name : Jasmine Koh

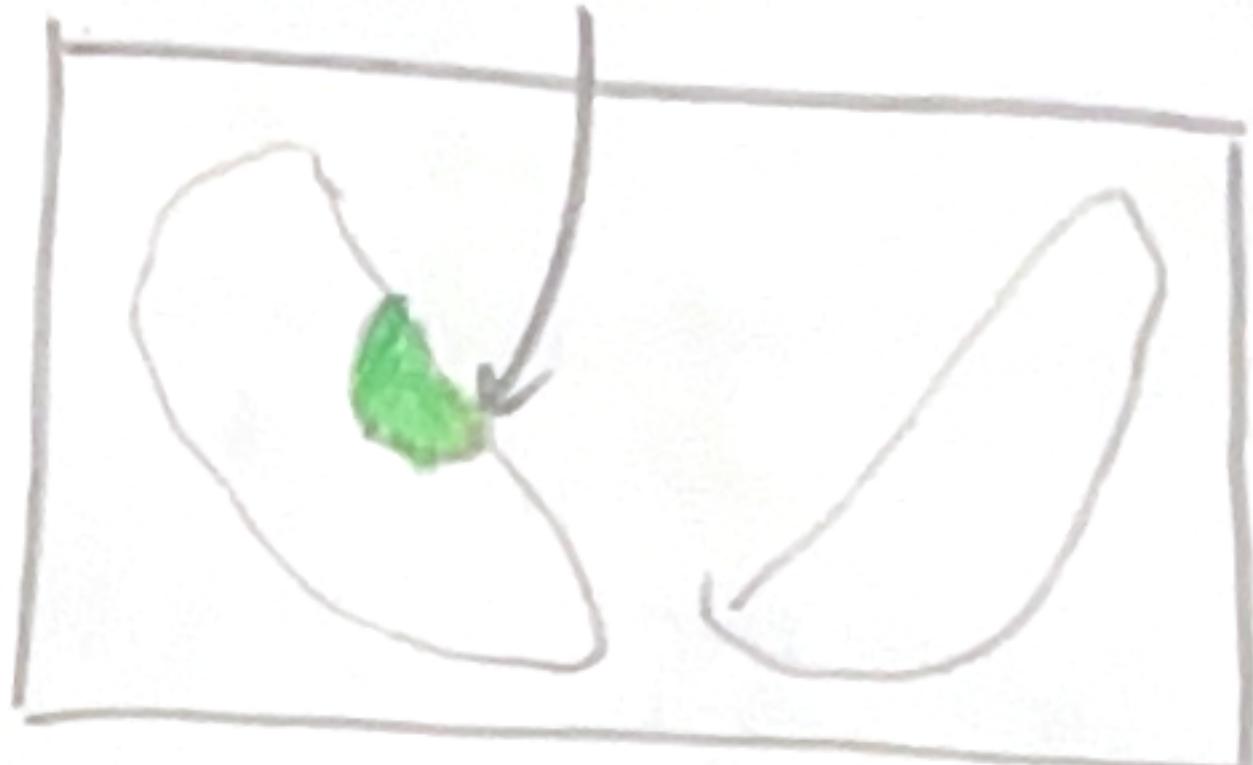
Student ID = 33454876

## Operations / Components :

State	IV
Kuala Lumpur	
Sarawak	
Selangor	
Seremban	

State dropdown to see line chart over the years.

Once chosen, line chart changes accordingly, then focus on the state in choropleth map



## Discussions :

- Maybe more storytelling involved would be better.
- Could be a little confusing for the reader if they don't choose the state.
- Could be hard to implement inside Vegalette.

## Layout

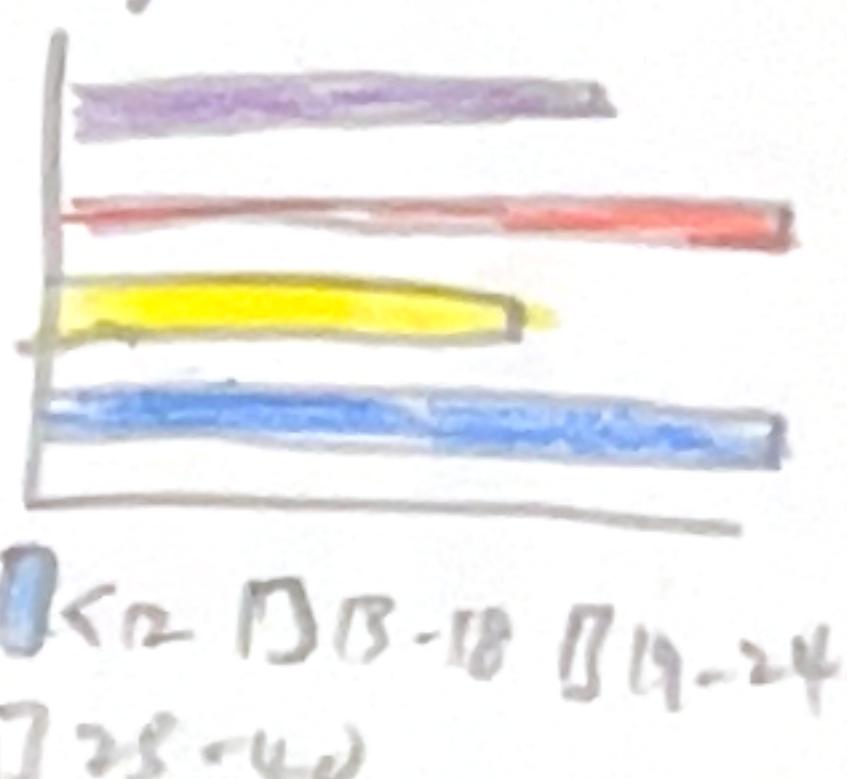
### Drug Addiction

How Addiction change overtime?

→ Gender

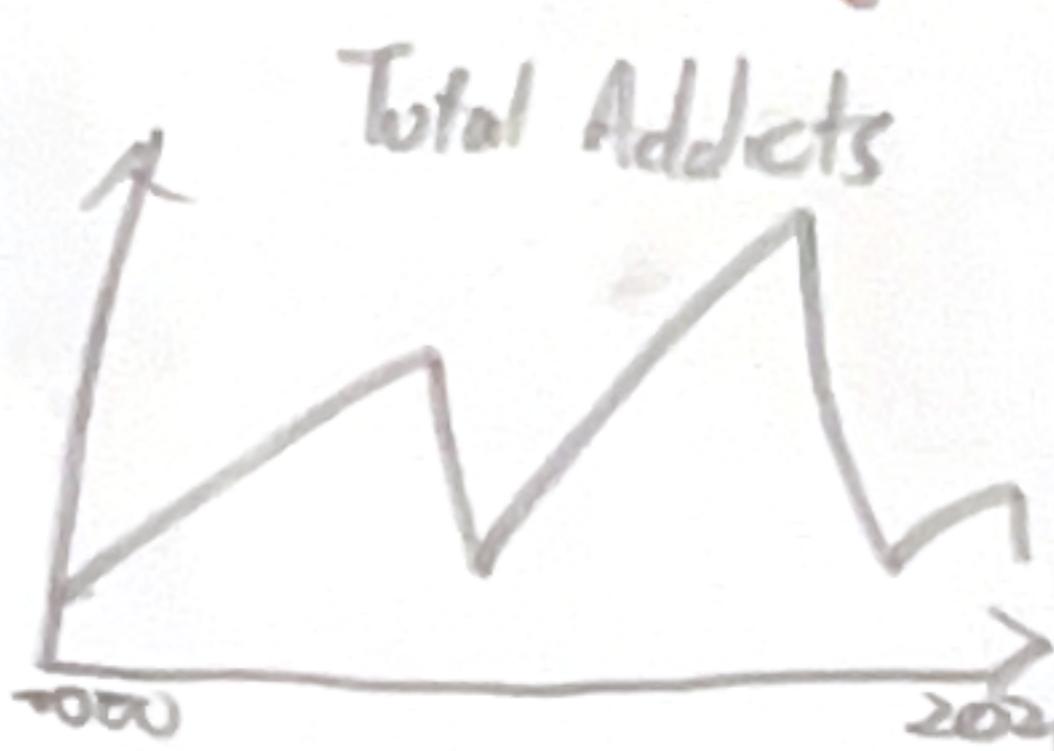


Deeper look:  
age



0-12 13-18 19-24  
25-40

### Types of drugs

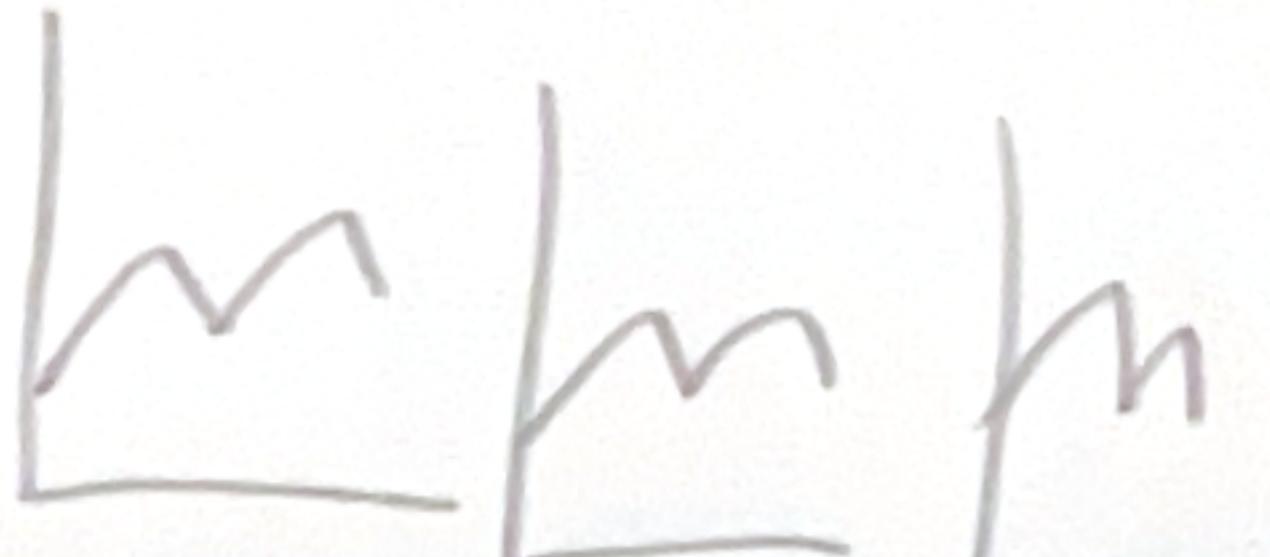


## Focus

- All graphs carry the same weight of focus in this visualisation.

But if there has to be a focus,  
it would be the top few graphs.

① Gender



Title = AS2 5 design Sheets

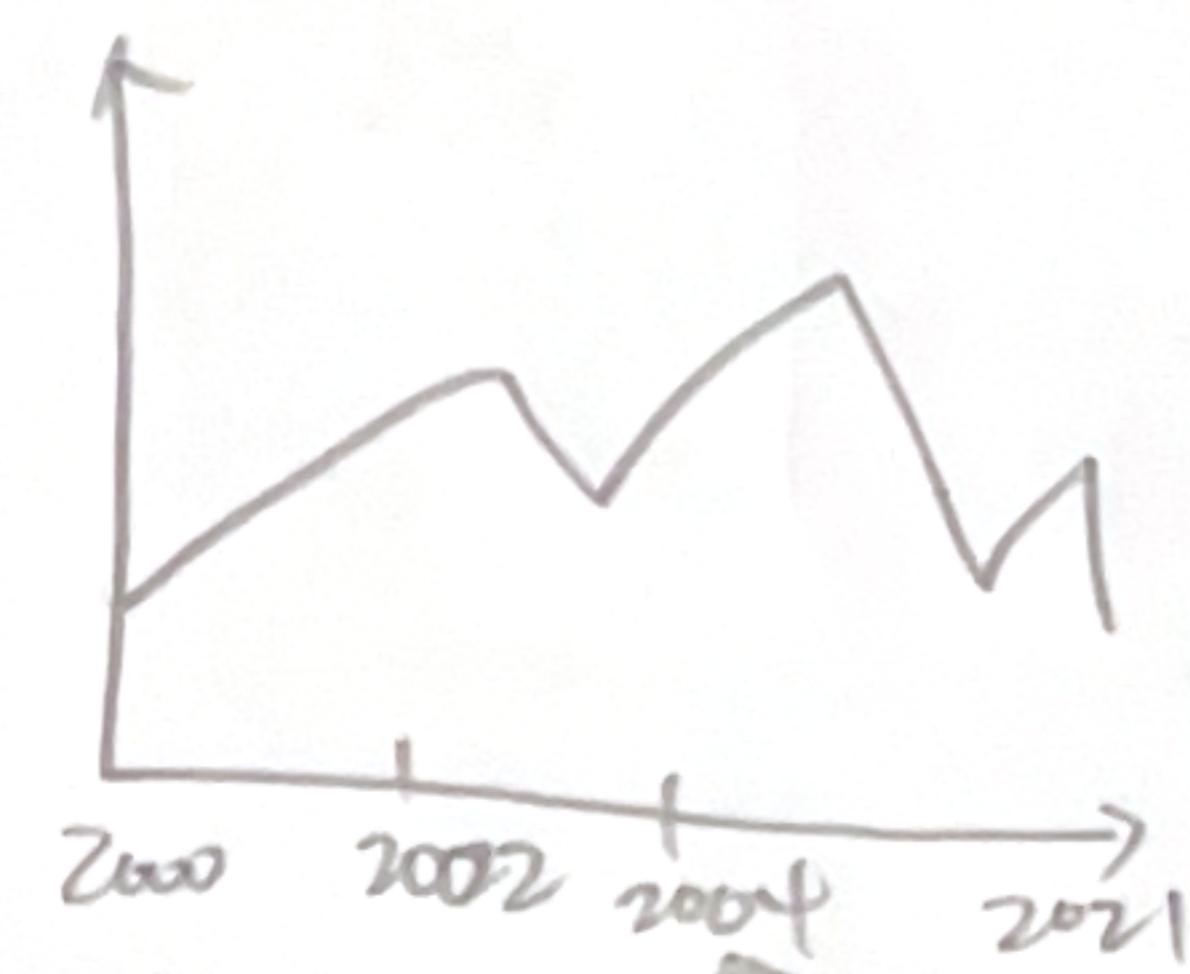
Design Sheet #4

Name = Jasmine Icoh

Student ID = 33454876

## Operations / Components

Total Addicts



2000 2002 2004 2021

↑

→ x axis clickable, when checked on, the choropleth map will change to the year, and show the situation of the country.



Results of  
2004

## Discussions

- Too many graphs, readers don't know which one to focus on.

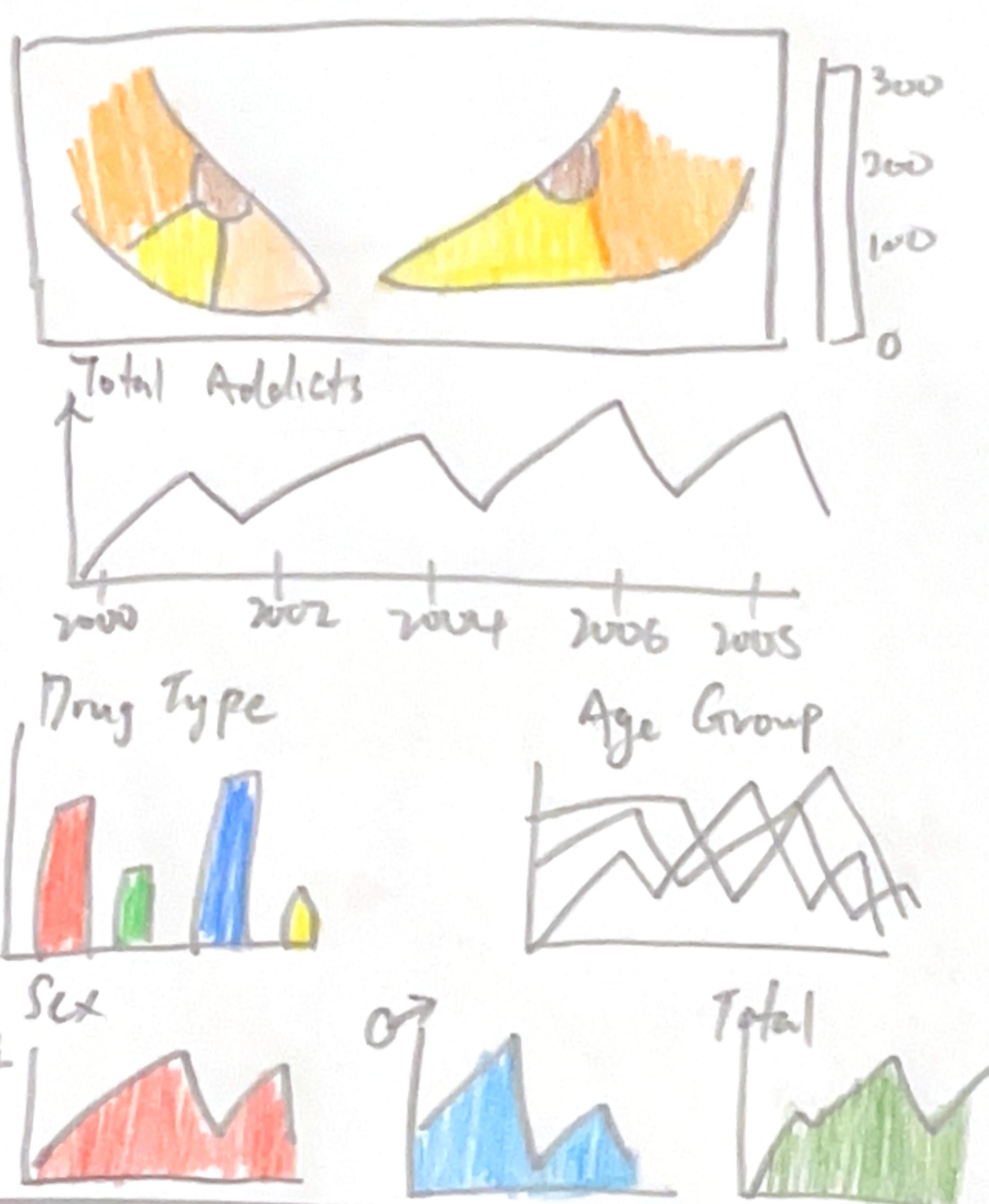
- Data ink ratio a little too high?

- Overloaded information.

# Layout

Drug Addiction

Map Types Age Gender



Focus =

- Focus would be same as design sheet 2.

Title: AS2 5 design Sheets.

Design Sheet = 5

Name: Jasmine Koh

Student ID = 3345486

Operations / Components:

Interactivity towards choropleth map. When clicking on a state, line chart changes to show the total addicts of the state over the years.



Details

\* Database can be excel / csv.

↳ Preprocessing might be needed with python.

\* Time needed: ± 1 week

↳ 1 day data clean up

↳ 1 day for html / css formatting.

↳ 2 days for choropleth map

↳ 1 day for age group

↳ 1 day for sex & type

↳ 1 day interactivity.

\* Tools: JS, html, css, python