

# IDEAS

① Geographic analysis

ⓐ Proportional symbol map



ⓑ Choropleth map

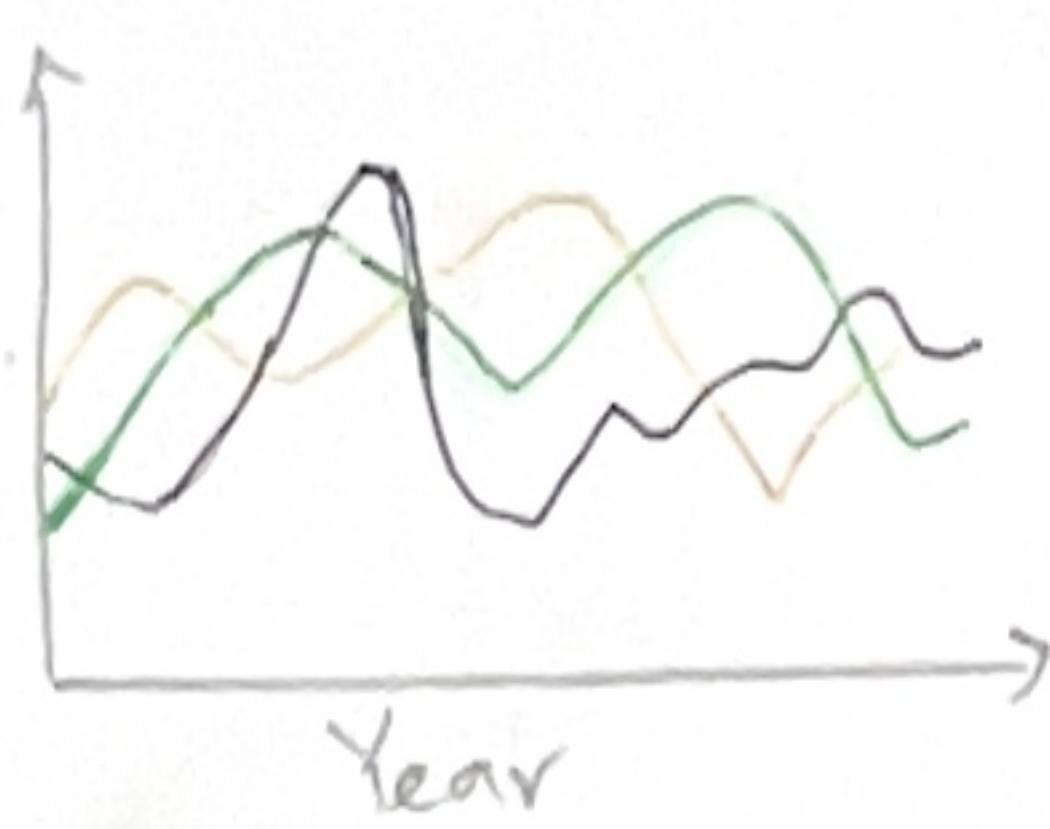


ⓒ Flow map

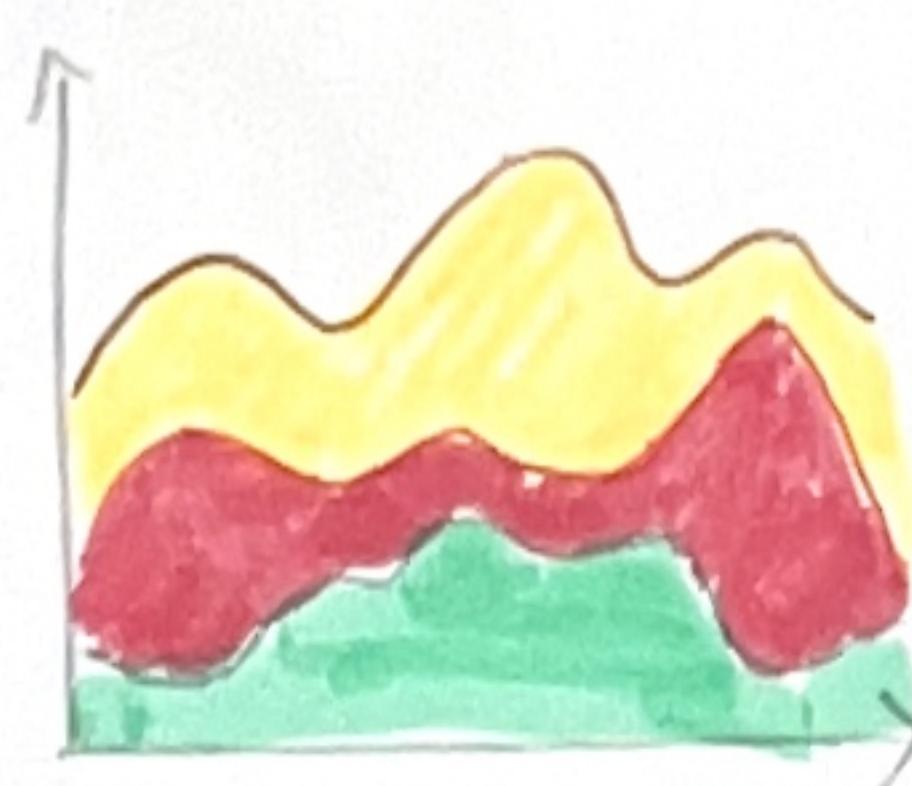


② Time Series Analysis

ⓐ Line chart



ⓑ Stream Graph  
Stacked Area

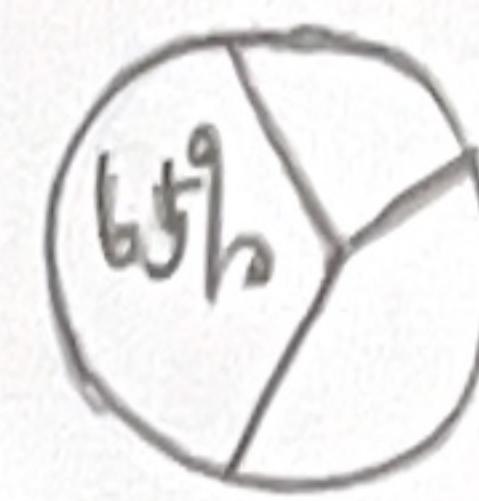


ⓓ Bar chart

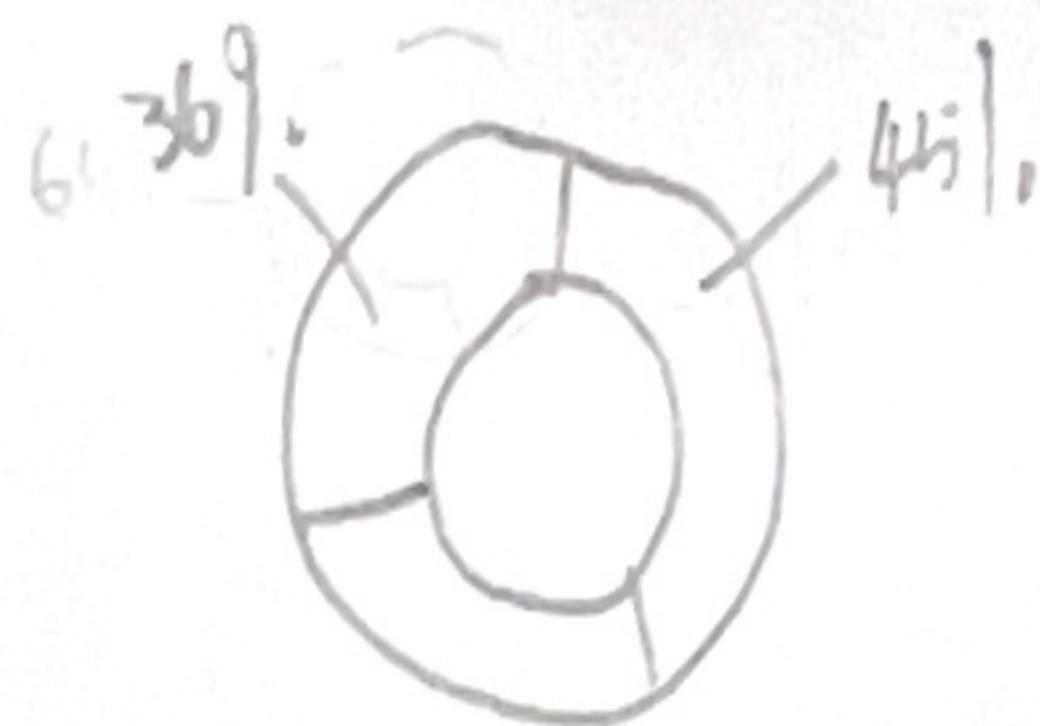


③ Percentage comparison

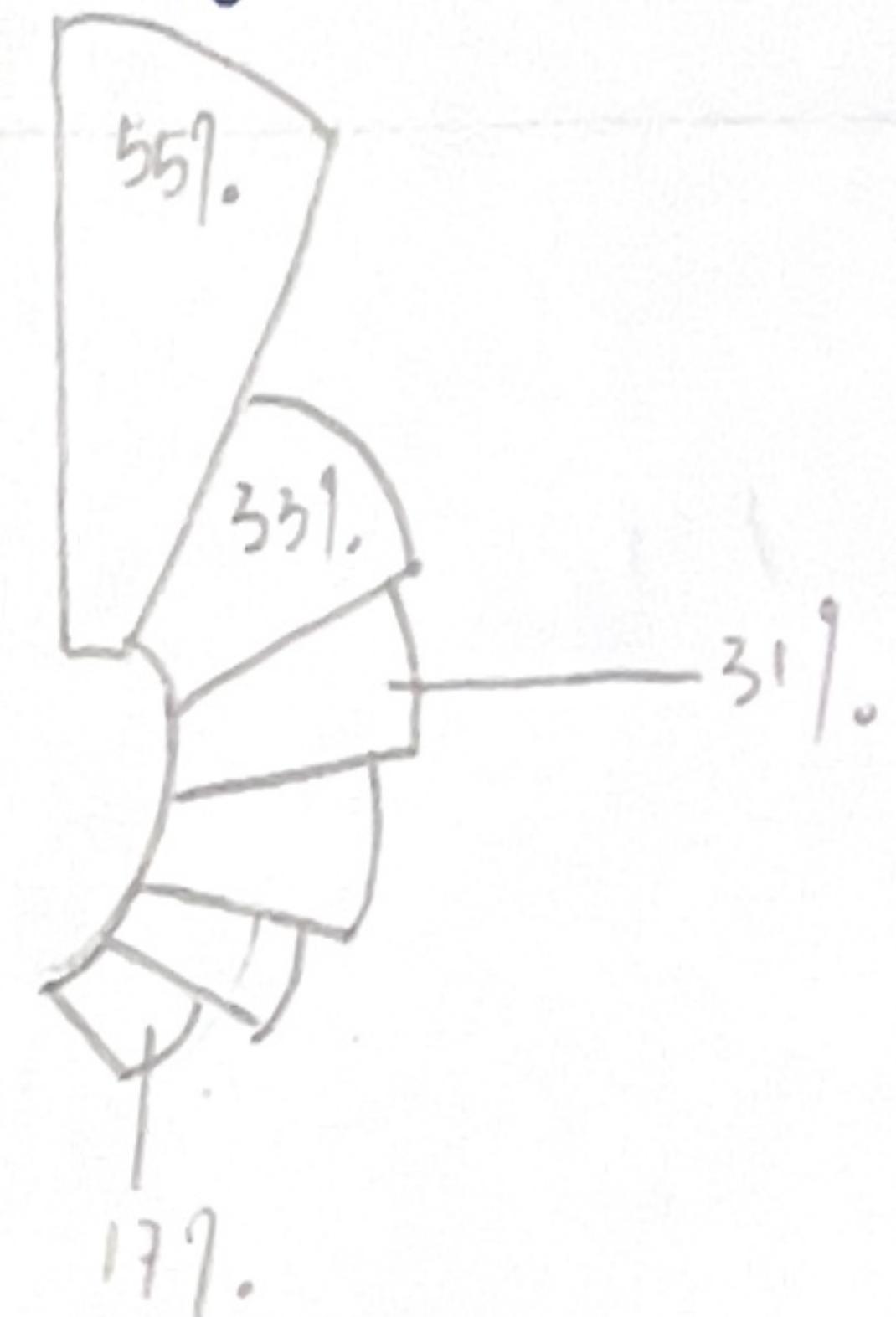
ⓐ Pie chart



ⓑ Donut chart



ⓒ Nightingale Rose Chart



## FILTER

①b Choropleth map

→ Need normalized data

→ My data does not include all (not even almost) countries, will have many empty spaces

②b Stack Area Graph

→ Harder to read than line chart

③a Pie Chart

→ Easy to create

→ Better options?

• Donut chart

## CATEGORISE

### ATTRIBUTES

#### Categorical

- Countries
- Products
- Type of accommodation
- Type of transports

#### Quantitative

- Year
- # Tourists
- Expenditure

### QUESTIONS

- Any other pov to analyse different aspects of tourism in Malaysia?
- Do I need extra data?

## COMBINE & REFINER

• ①c is selected over ①a, as it is more attractive, but harder to create in Vega-Lite. It can also show flow from origin country to Malaysia.

• ②c will be preferred to show the percentage of data, as it shows the cohesive view where the shorter area has smaller views.

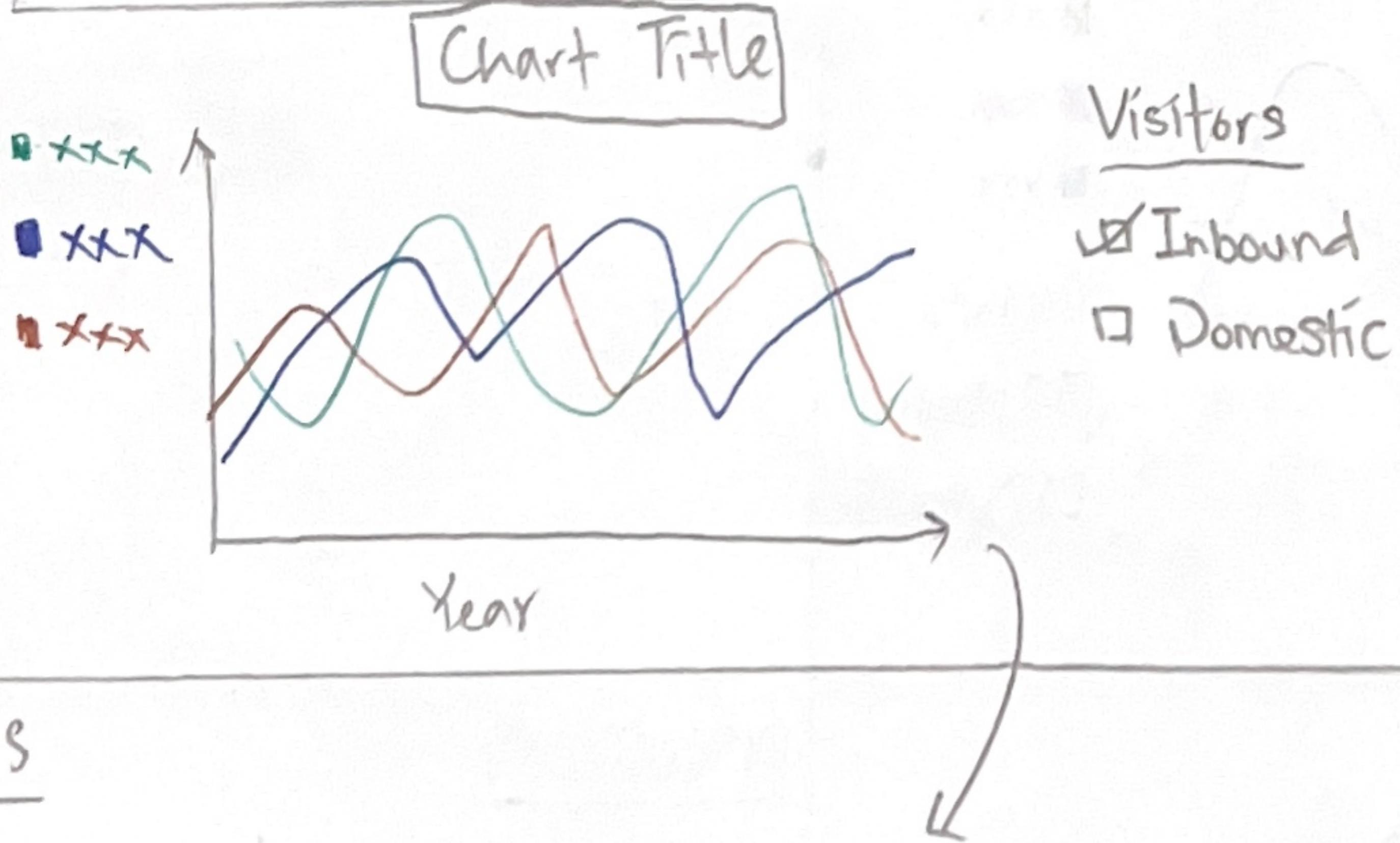
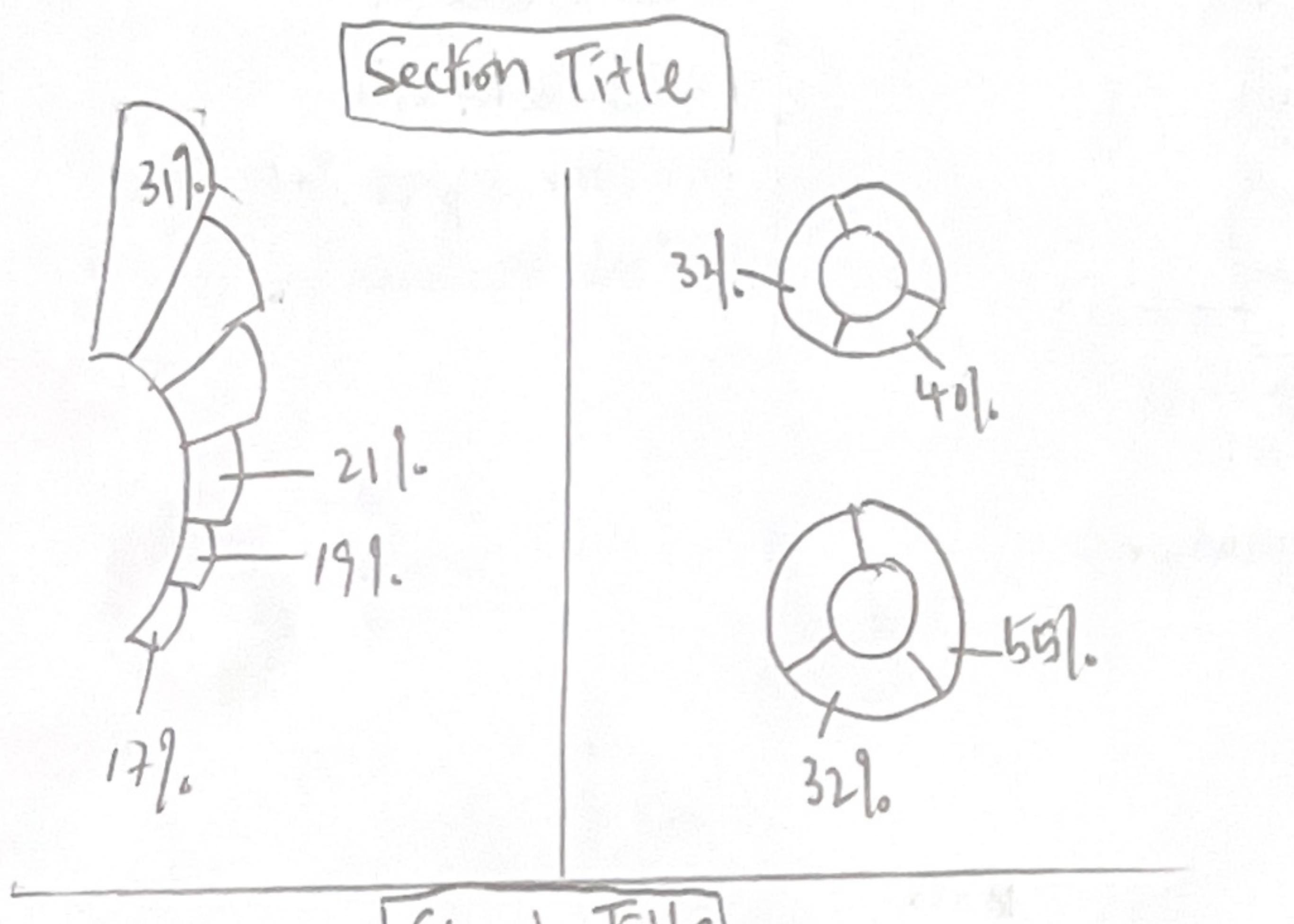
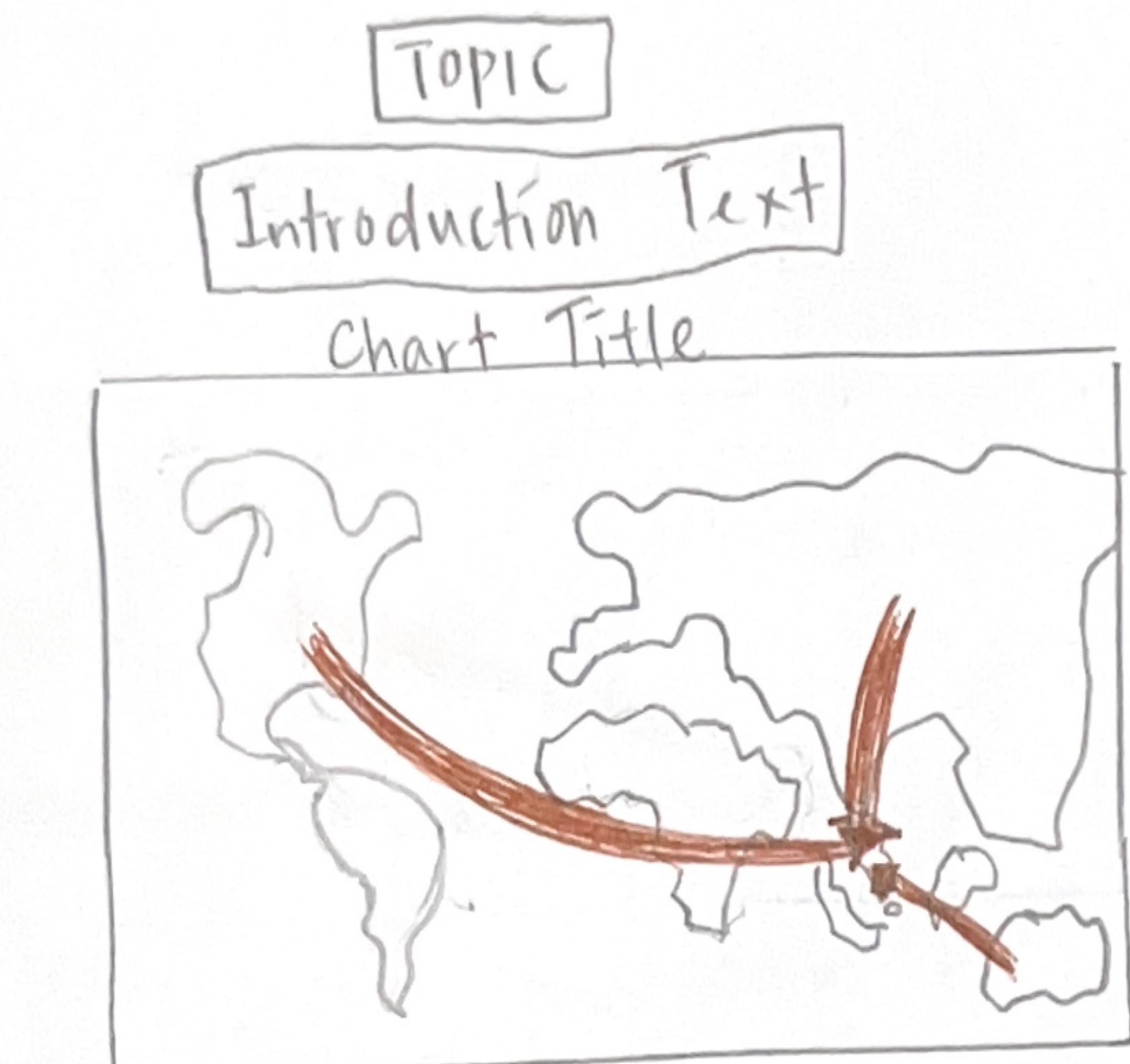
Author: Wan Siew Wei

Date: 25/09/2024

Sheet: 1

Task: Initial Design of Data Vis II

## LAYOUT



## FOCUS

- ① Allow trend analysis
- ② Can select desired visitors type
- ③ Easily compare expenditure for different products.

Author: Wan Siew Wei  
Date: 25/09/2024  
Sheet: 2  
Task: Tourism in Malaysia.

## OPERATIONS

1. Select desired visitors type
    - Inbound
    - Domestic
- Click to show the data of different visitor type.

## DISCUSSIONS

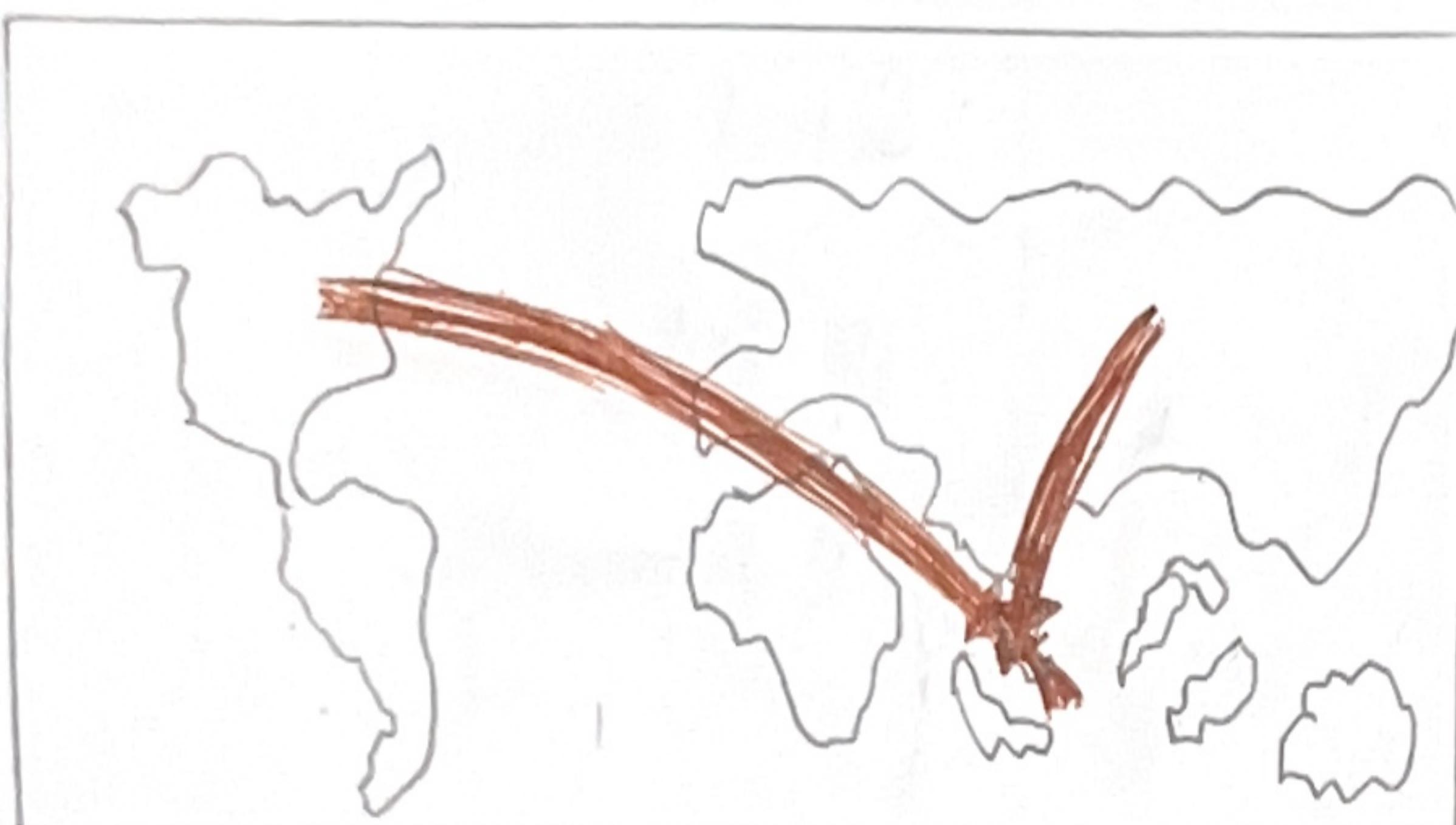
- Add more text annotations
- Compare between expenditure of different visitor types then select desired products?

## LAYOUT

### TOPIC

Introduction text .....

Section Title



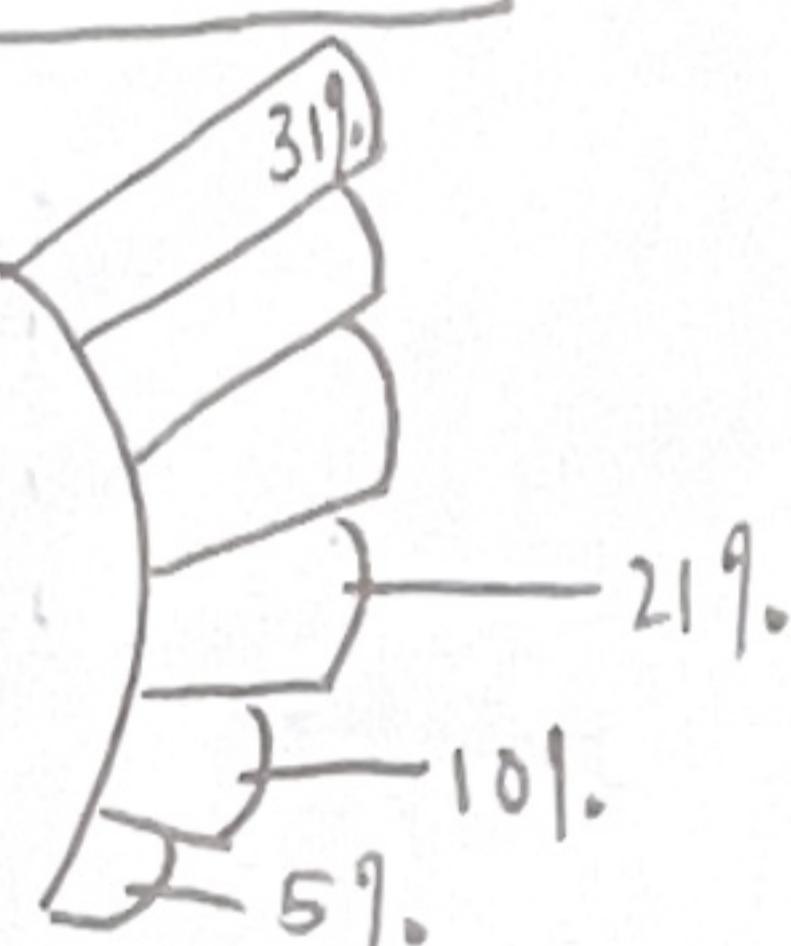
Section Title

Section Title

- XXX
- XXX
- XXX

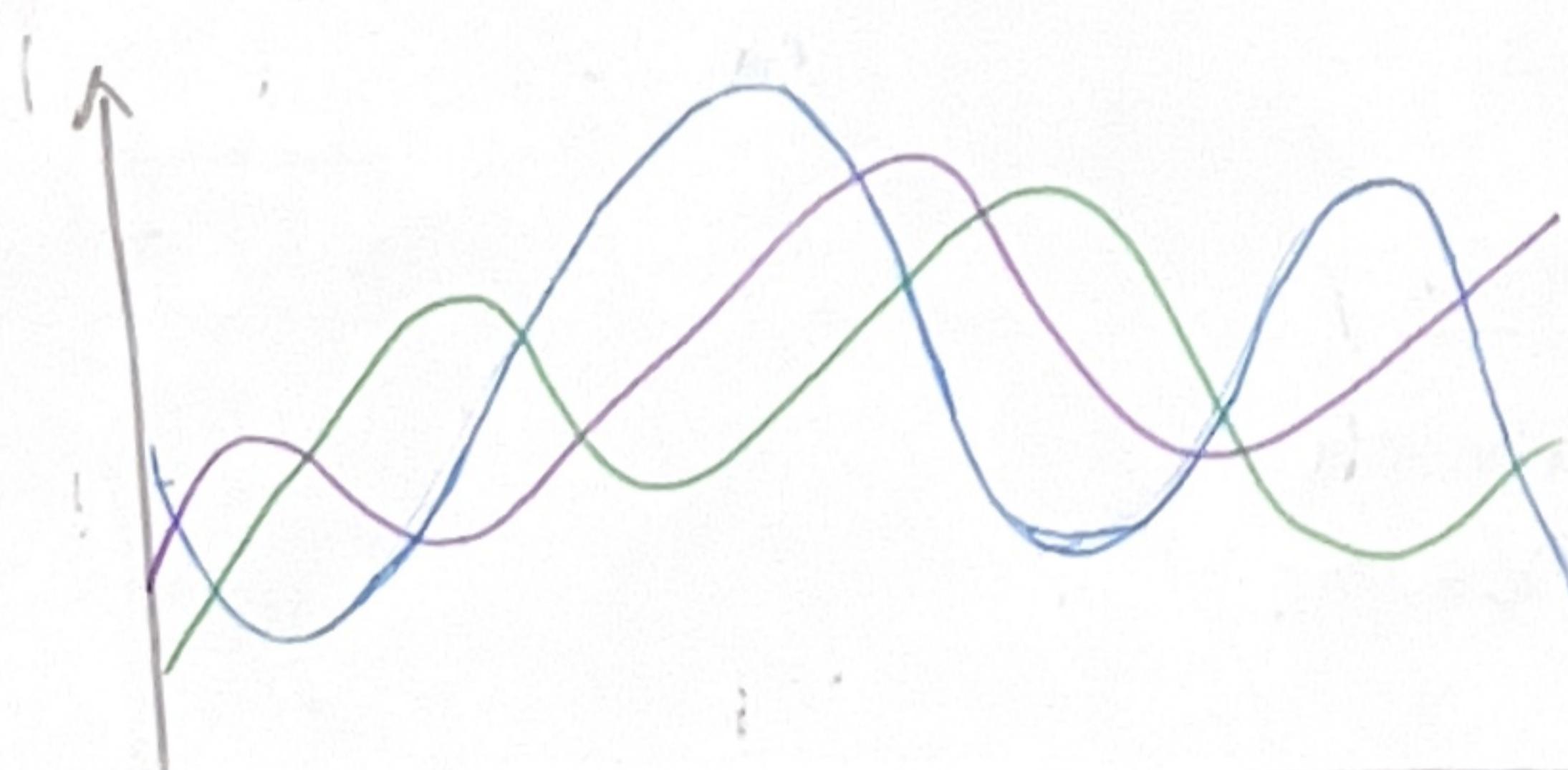
> 2015

Text annotations



Text annotations

Section Title



Text annotations

- XXX
  - XXX
  - XXX
- Visitors
- Inbound
  - Domestic

## FOCUS

- Both sections show different analysis on categorical data
- Can have year selection to filter data

Author: Wan Siew Wei

Date: 26/9/2024

Sheet: 3

Task: Alternative Design I

## OPERATIONS

①

> 2015

→

V	2015
	2016
	2017

- Year selection to filter data

② Visitors

Inbound

Domestic

→ Visitor types selection  
tick to select

## DISCUSSIONS

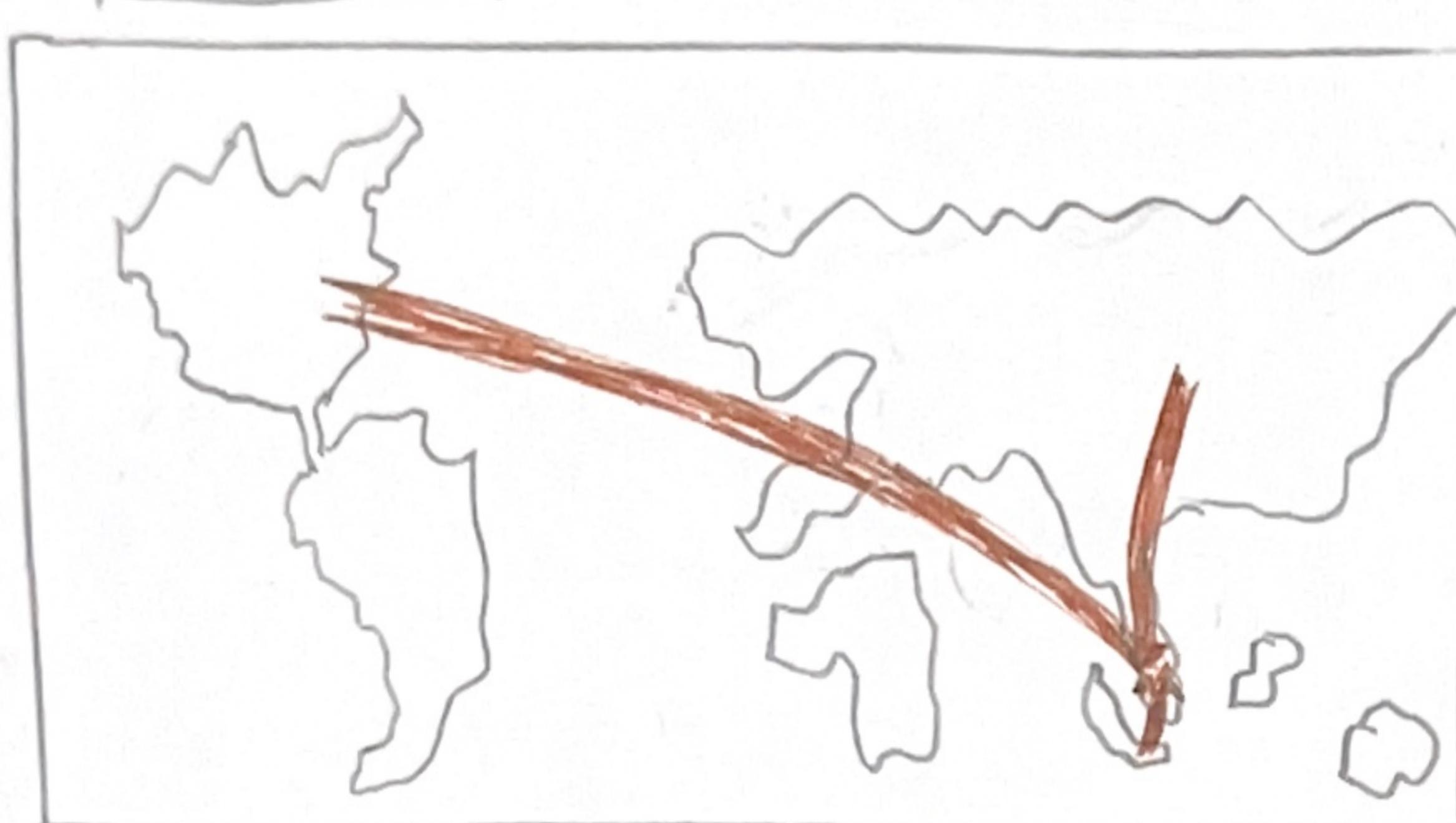
- Can add annotations on donut chart?
- How to link multiple graphs?

## LAYOUT

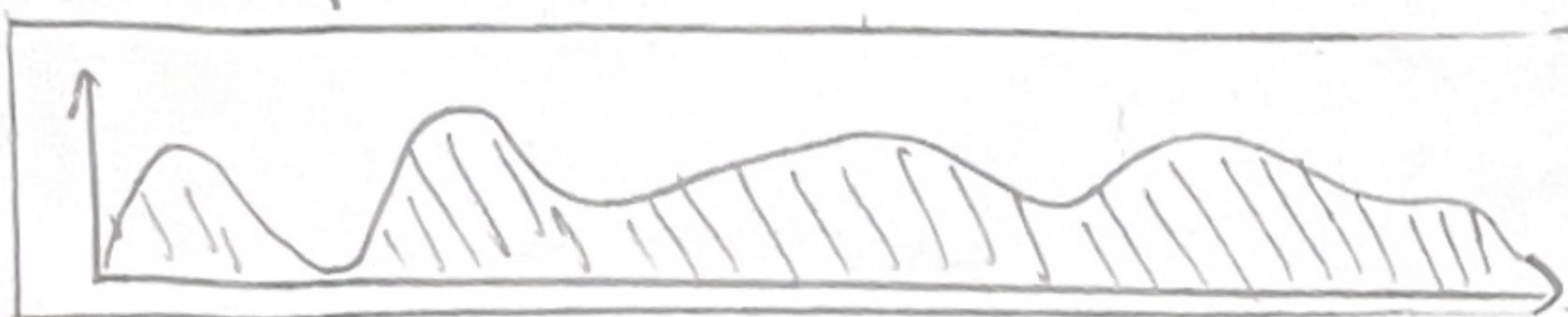
### TOPIC

Introduction Text...

#### Section Title



Text explanation



#### Section Title



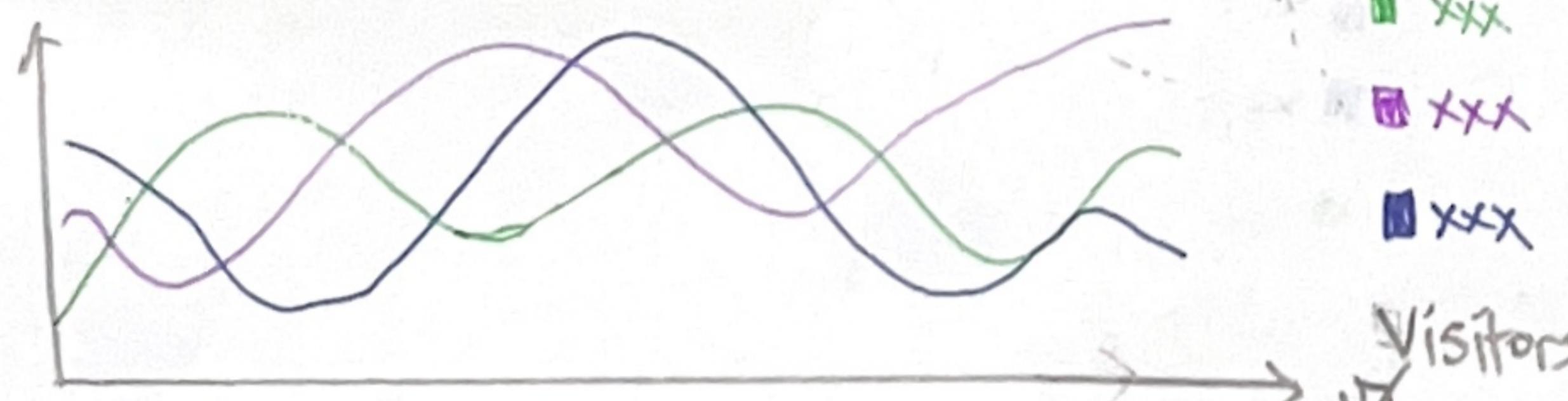
Text

#### Section Title



Text

#### Section Title



Text

## FOCUS

- Click on the area chart will apply changes to the flow map
- Apply vstack in vega lite
- Allow more comprehensive comparison & analysis

Author: Wan Siew Wei

Date : 26/9/2024

Sheet: 4

Task: Alternative Design II

## OPERATIONS

- ① Linking area chart with flow map



click to see changes in flow map

- ② Visitor Selection



Tick to select

- ③ Year Selection

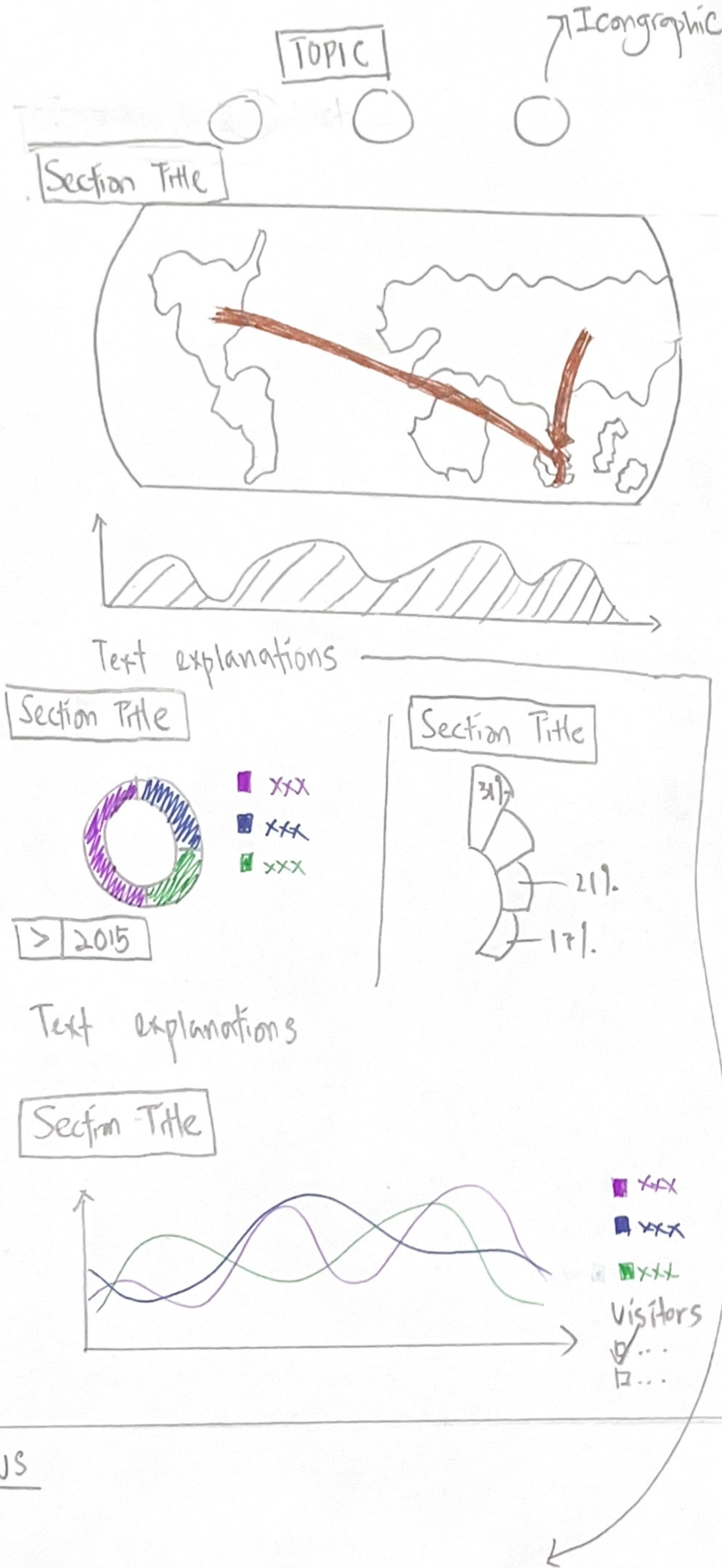
> 2015

Drop-down menu to select

## DISCUSSIONS

- What interesting data can be used for area chart?

## LAYOUT



## FOCUS

- Text is moved downwards to allow easier comparison for the flow map and area chart
- Infographic is added

Author: Wan Siew Wei

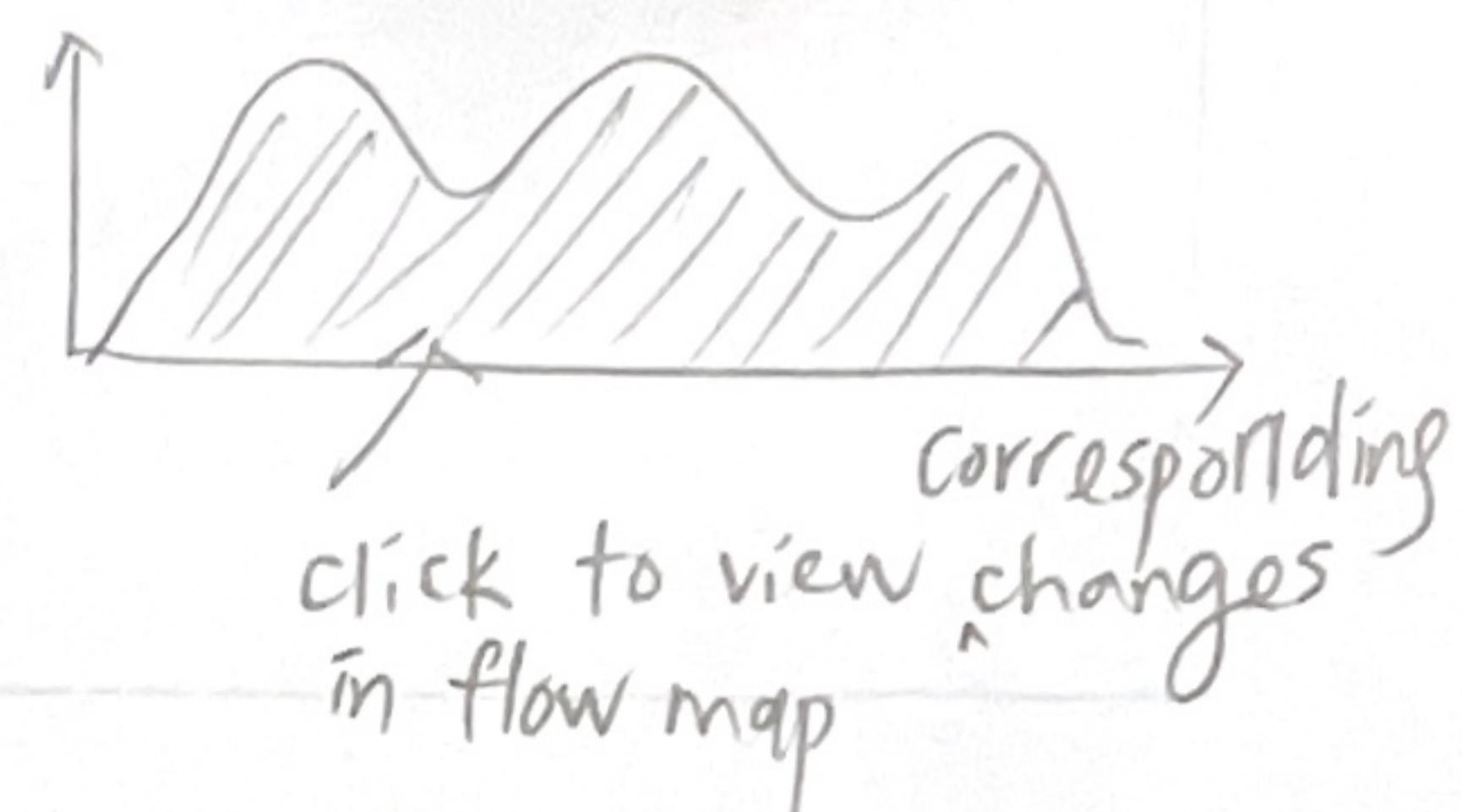
Date: 26/9/2024

Sheet: 45

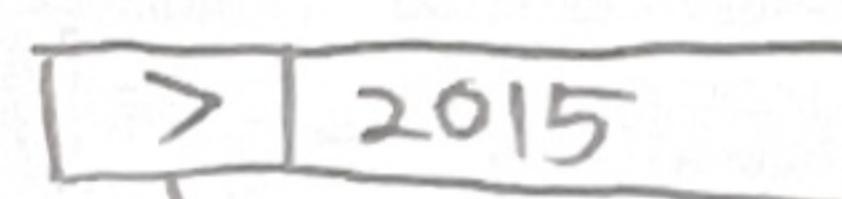
Task: Final Implementation Design

## OPERATIONS

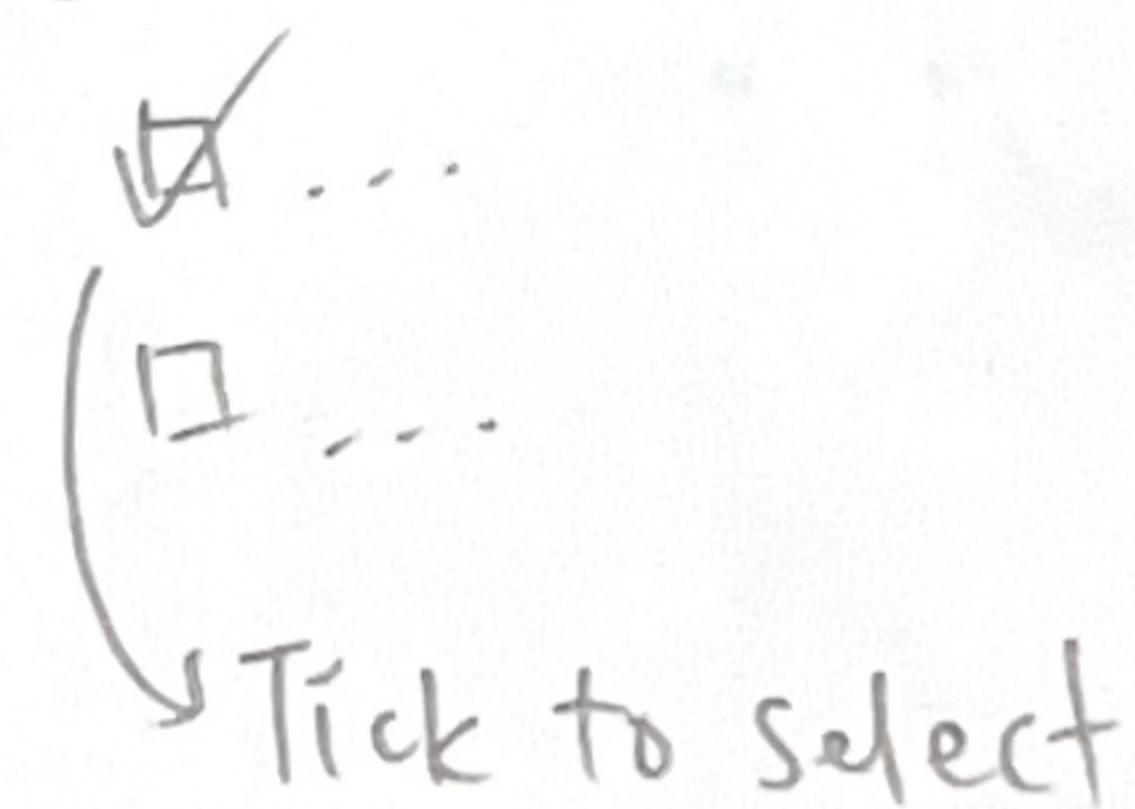
- ① Linking area chart with flow map



- ② Year selection



- ③ Visitor selection



## DETAILS

- Estimated time: 10 days (visualisation + report)
- Add text annotations on line chart
- Use interesting title & non-standard typeface.