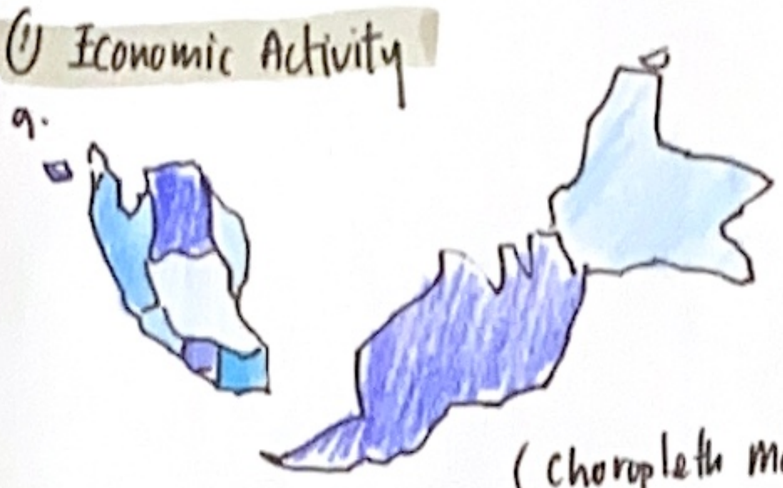
IDEAS

① Economic Activity

a.



(choropleth map)

- Gross output per state
- value added per state

b. value added

→ bubble size: no. of establishment

→ Gross output

(Bubble Chart / Scatterplot)

- Gross output vs value added

② Transport Establishment

c.

(proportional symbol map)

- number of establishment per state
  - ↳ circle size = no. of establishment

d.

no. establishment

(line chart)
- penang
- selangor

→ year

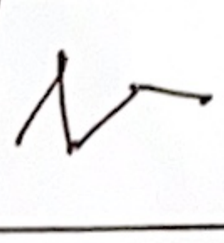
- Growth in number of establishment over years.
  - ↳ line chart per state.

③ Employment & Workforce

(choropleth map)

- total person engaged per state
- average salary per employee

e.



employment

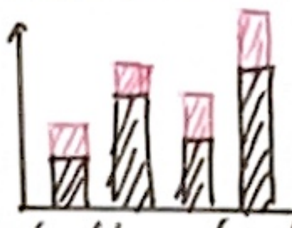
total no. persons engaged.

→ year

(line chart)
- yearly employment trend.

④ Financial Indicators

g.



- value added
- intermediate input

→ state

(stacked bar chart)
- intermediate input vs value added by state [Ratio of input vs output]

h.

- value added
- Salaries & wages

→ year

(Bar Chart)
- compare value added vs salaries & wages.

⑤ Airport

i.

Type
- small airport
- medium airport

(point map) → Interactive Map.

j. (Bar Chart)

No. airports

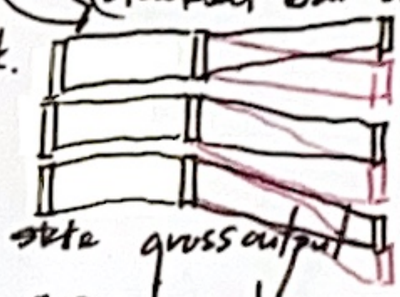
→ state / type

lollipop chart.

- Airports by state.
- Airports by type

(Stacked bar chart)

k.



intermediate input

value added.

state gross output

- (Sankey diagram)

FILTER

①a.

- Gross output per state
- value added per state.

b. value added.

→ Bubble size: no. of establishment

→ Gross output

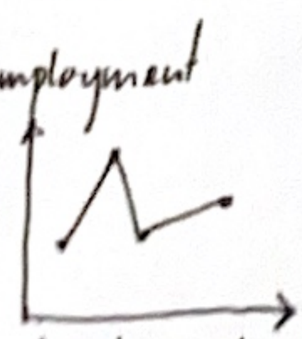
- Gross output vs value added

②

- number of establishment per state

circle size = no. establishment

③ employment



year

- Yearly employment trend

④

- value added
- Salaries & wages

→ year

- compare value added vs Salaries & wages

⑤ point map & barchart

CATEGORISE

Economic Activity
↓
Financial Indicators
↓
Transport Establishment
↓
Employment & workforce
↓
Airport.

QUESTIONS

1) Is the implementation of visualisation doable?
2) Does it bring insights to provide solution?
3) Does the visualisation tell a clear story and answer the purpose?
4) Does it clearly identify the statistics of how transportation & logistic sector grown over time?

COMBINE & REFINE

①b. can be refine by adding colours by state interactive feature: shifting through years.

②d. is not selected as too many categorical (states) to plot in multi-line chart.

③f. Data refinement → Normalize (show % growth, help compare States with different scales)
- Add baseline (e.g. 2010=100 index) so trends are comparable.

④ Add data labels on top of each bar.
g. not selected as if is difficult to compare amounts.

Author: Ng Li Xian
Date: 23 September 2025
Sheet: 1
Task: Planning Visualisations

Layout

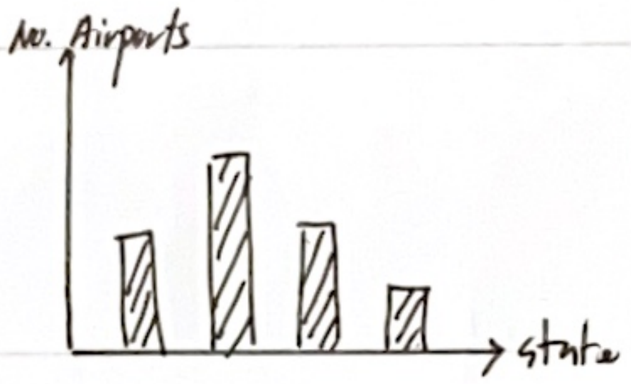
Storytelling Dashboard

Transportation & Logistic Industry in Malaysia.

⑤ Airport

[text]

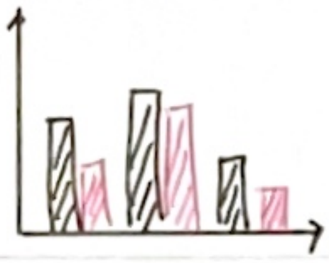
[text]



① Economic Activity

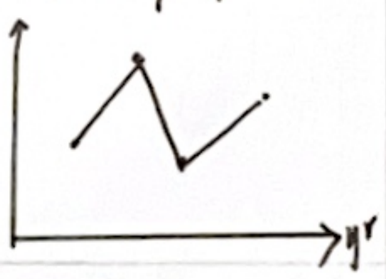
[text]

② Financial Indicators



[text]

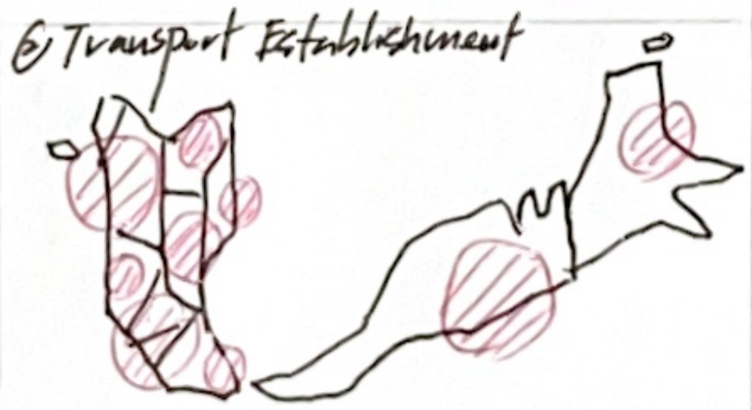
③ Employment



[text]

[text]

④ Transport Establishment



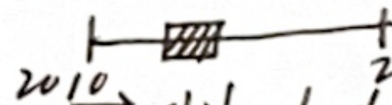
Title : Storytelling Dashboard.
Author : Ng Li Xian
Date : 23 September 2025
Sheet : 2
Task : Design an dashboard

operations

⑤ Point map
↳ Interactive Map.

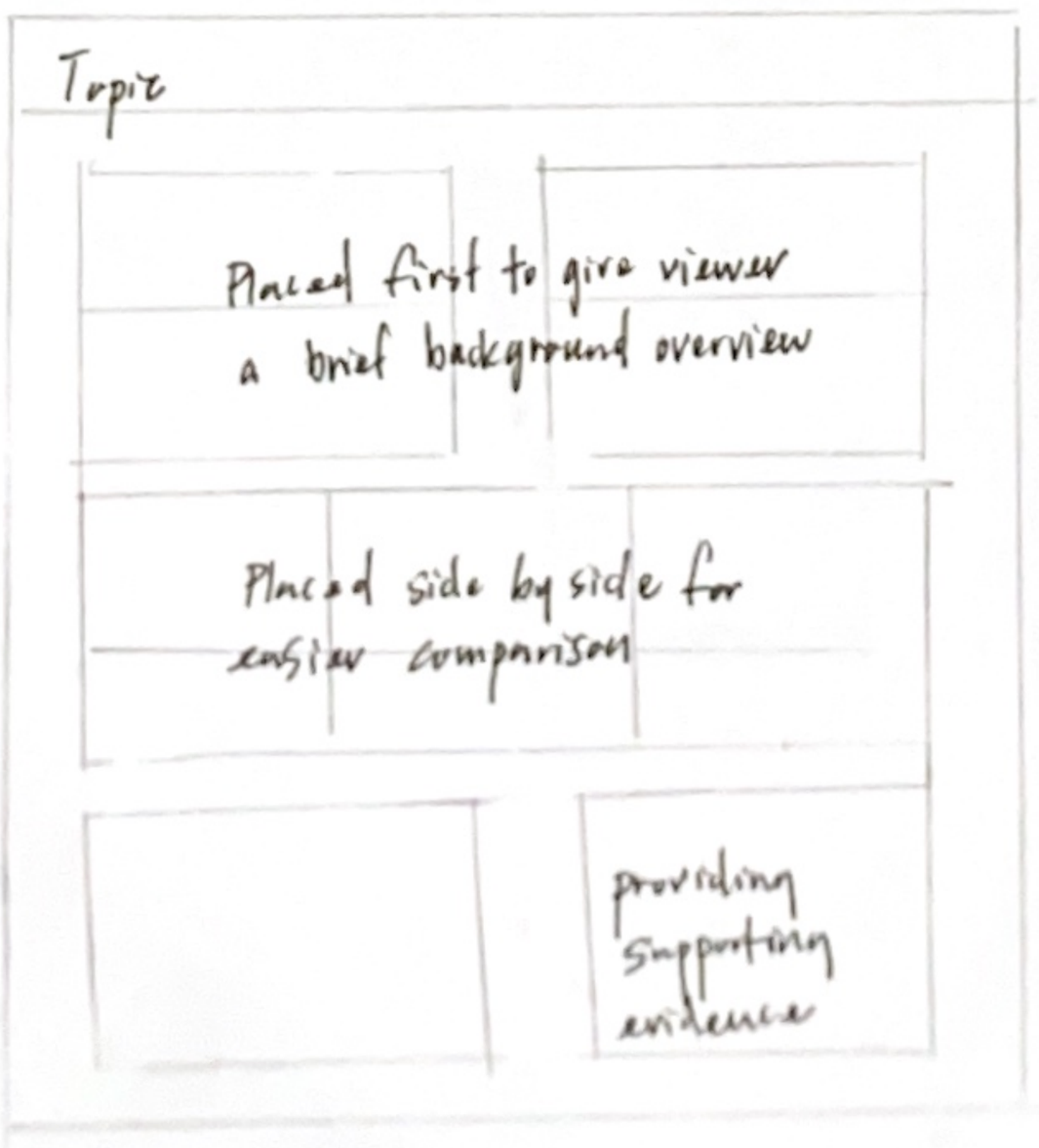
Filters / Dropdown on Airport Type.

①



→ slider to change yrs.

Focus



Discussion

- Is the information good enough ?

Big picture → Breakdown
Takeaways ↙

- At glance insights.
- information overload.

Layout

Transportation & Logistic Industry in Malaysia
[Background]
Navigation.

① Economic Activity

[1x1]

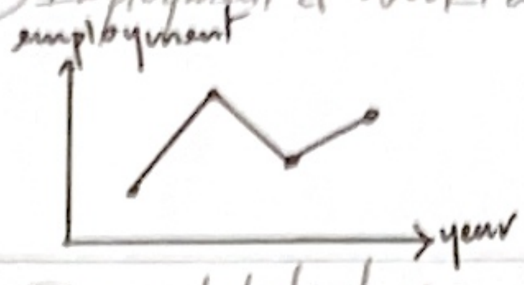
① Economic Activity

[1x1]

② Transport Establishment

[1x1]

③ Employment & Workforce



[1x1]

④ Financial Indicators

[1x1]

⑤ Airport

[1x1]

Title: Geographic Storyboard
Author: Ng Li Xian
Date: 23 September 2025
Sheet: 3
Task: Design a Storyboard.

operations.

Annotations & labels are added to highlight peaks outlier

Toggle legends / options for hide to avoid taking up space.

Tooltips
- hover on data points
- name of airport

Focus

Easy Access to Sections.

highlight the economic activity map.

Supporting visualization for comparison

Ease for comparison by placing side by side and more balanced layout.

for interpretation and storytelling elements.

Discussion.

Pro:
- Engagement & Storytelling
- motivation to explore
- Users can see spatial relationships.

Cons:
- technical limitations
- complexity & overload.

Layout

Transportation & Logistic Industry in Malaysia

[Background Information]

[Icon]

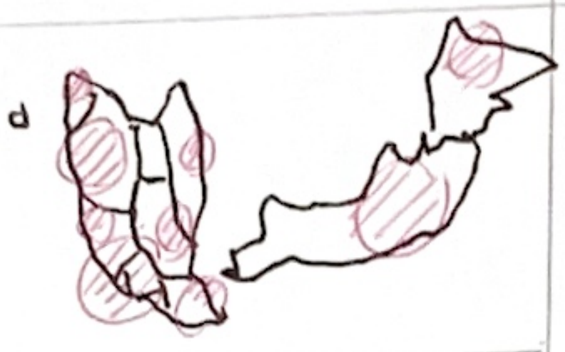
(Sankey diagram)

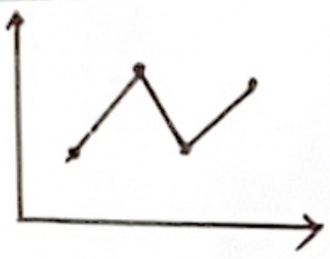
① Economic Activity

[text]

② Transport Establishment

[text]



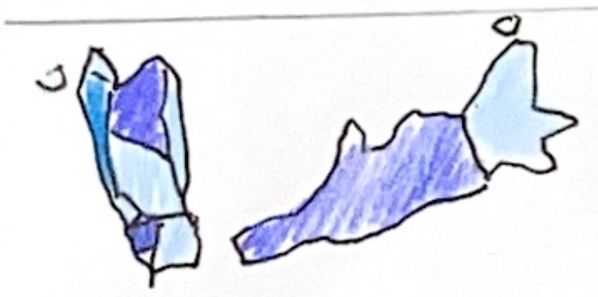


③ Employment & workforce

[text]

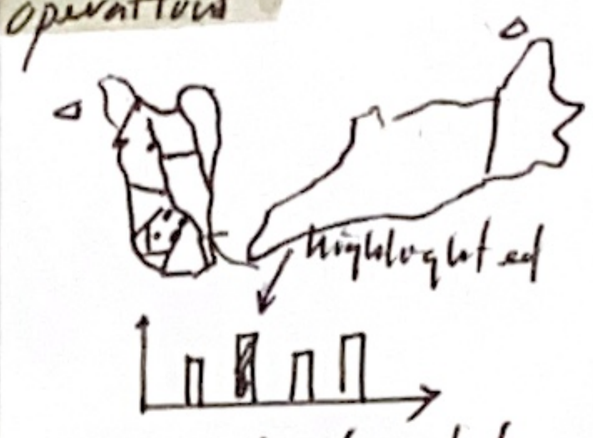
④ Financial Indicators

⑤ Airport



Title: Vertical Scroll layout
Author: Ng Li Xian
Date: 23 September 2025
Sheet: 4
Task: Design an vertical layout

Operations



When particular state is selected, the bar and dot points on map will be in darker colour.

To Aid audience in comparing between different sections of visualisations.

Focus

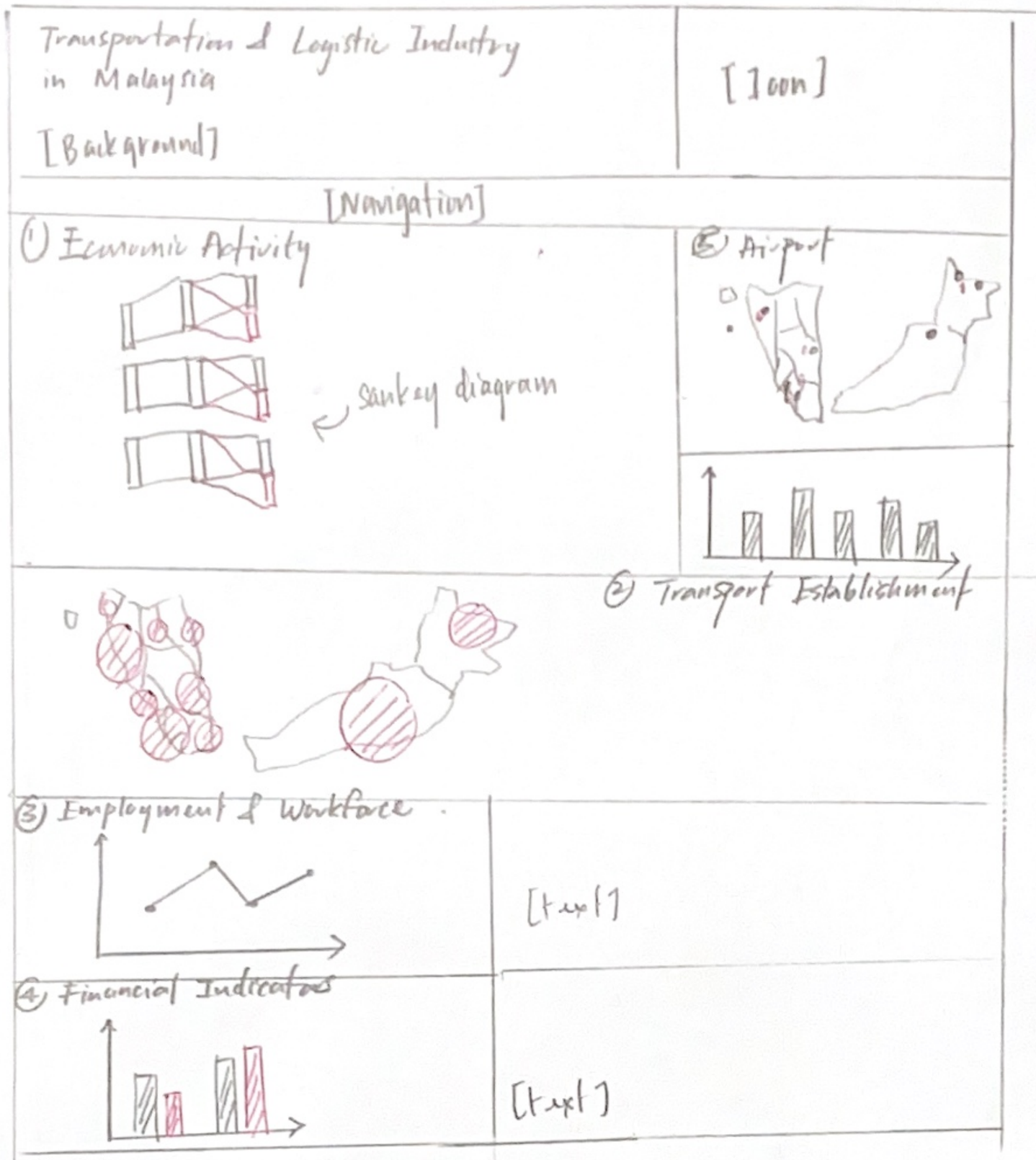
Title and Introduction	→ General Background
Economic Activity	→ connects trans
Transport Establishment	
Employment & Workforce	
Financial Indicators	
Airport	

Discussion

pros - feels intuitive
- Each visualisation has their own space
- Looks Clean

cons - longer dashboard
- too much scrolling
- context loss

Layout



Title: Final layout
Author: Ng Li Xian.
Date: 23 September 2025
Sheet: 5
Task: Design the final layout
Components / Operations.

Tooltips
- hover on data points
- name of airport

Annotations & labels are added to highlight peaks, outliers.

Toggle legends or option to hide avoid taking up space.

Parti / Focus

Layout is vertical scrolling view with paragraph contains of summary key insights

① placed to give background context
② Placed at ~~e~~ visual centre for emphasis
③ & ④ Side by side comparisons

- Annotations are added to highlight key insights.
- consistent font in text

Details

Dependencies:
- merging
↳ Tableau public saves & R for data cleaning.

Estimated time & effort:
3 days for visualisation
↳ each section per day
2 days for report + referencing + research.

Specific Requirements:
- merge & clean dataset needed
- choose appropriate normalization to handle large disparities.