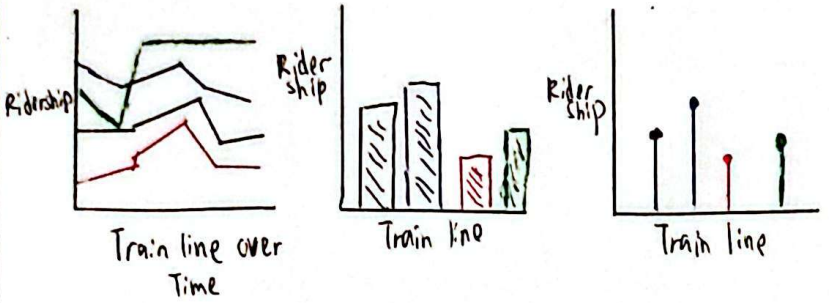
IDEAS

Author: Soh Chee Sheng
Date: 19/09/2025
Sheet: 1
Task: Planning Visualisations

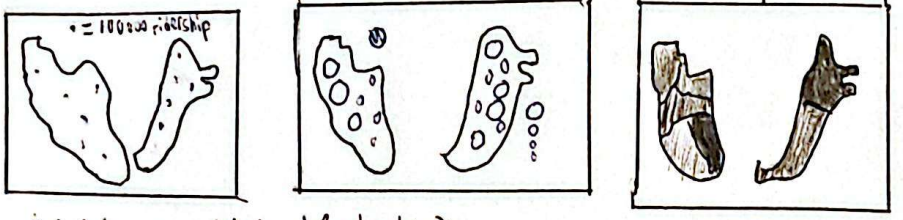
- Ridership (overall)

① Line Chart ② Bar Chart ③ Lollipop Chart



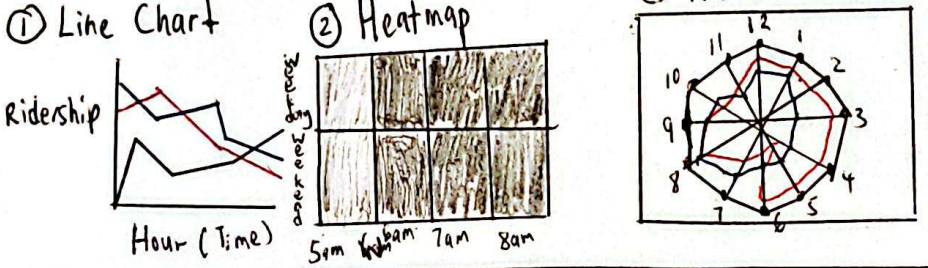
- ~~Heat~~ Station Map

① Dot Map ② Proportional symbol map ③ Choropleth map



- Weekday v.s. Weekend (ridership)

① Line Chart ② Heatmap ③ Radar Chart



FILTER

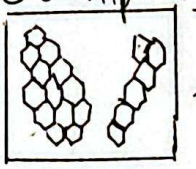
- Ridership

④ Pie chart ✗ (1 slice = ridership per year / percentage)

→ Hard to compare sizes when values are close
→ Doesn't scale with time

- Station Map

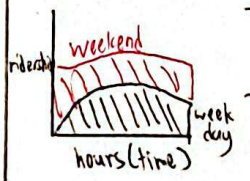
④ Bin map ✗



→ 1 bin could contain multiple stations
→ Doesn't show train lines

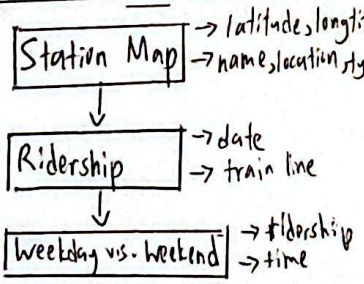
- Weekday vs. Weekend

④ Stacked area chart ✗



→ Creates meaningless total (weekday + weekend)
→ Disrupts weekend pattern

CATERGORISE



COMBINE & REFINE

- Could combine Station Map ③ with Weekday v.s Weekend ②
  → After clicking symbol on map, show heatmap (for specific station)

- Could combine Ridership ① with ② (and station map ②)
  → Line chart shows entire timeline
  → Bar chart and map show specific timeline

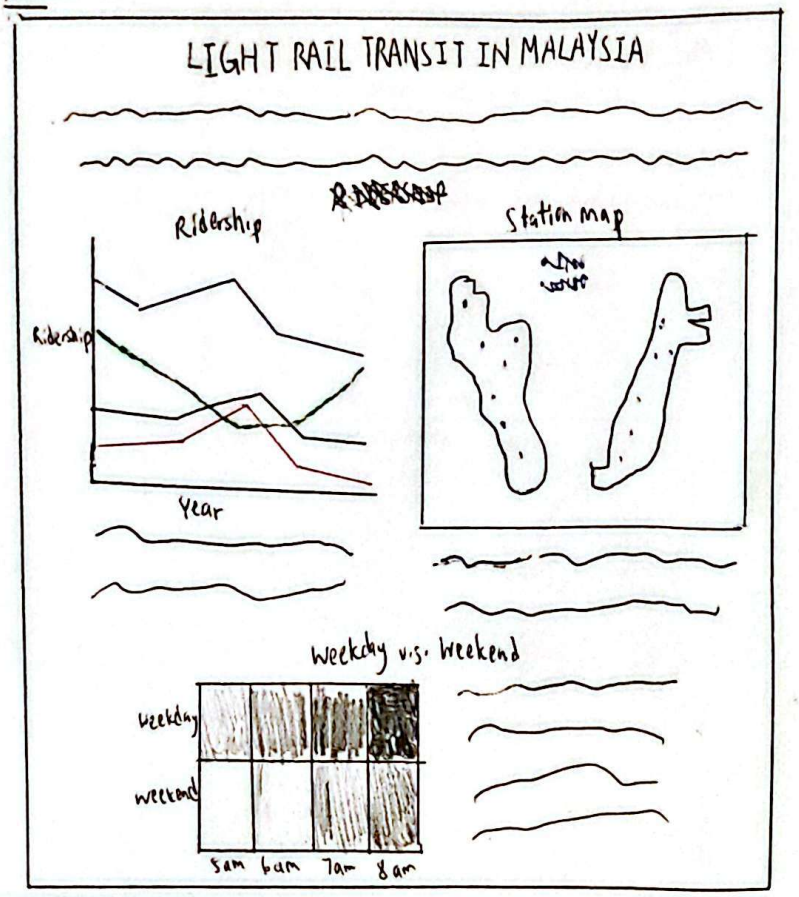
QUESTIONS

- Will the visualisation tell the right story? (show hotspots or carry bias?)
  → need log scale

- ~~What if data~~ Will there be enough data to tell the story? (only relying on ridership)

- How to show connected lines between stations?

LAYOUT



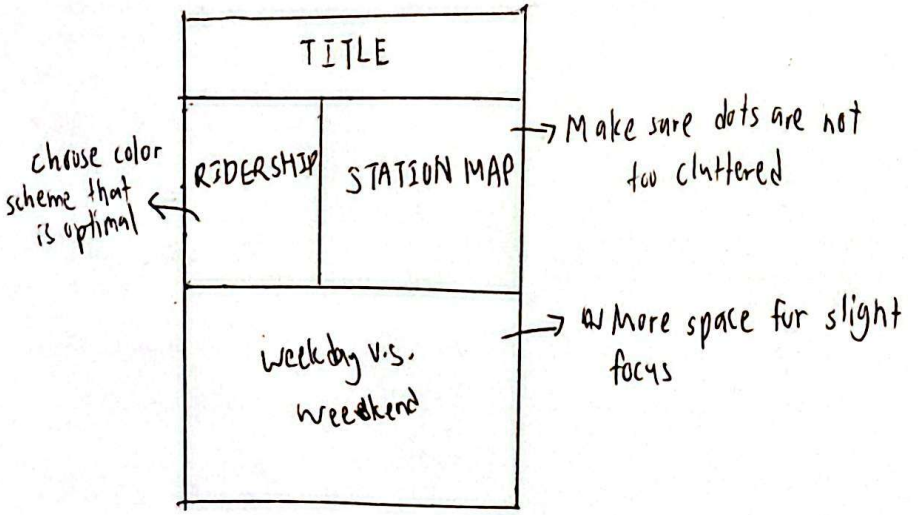
Title: Partitioned Poster
Author: Soh Chee Sheng
Date: 21/09/2025
Sheet: 2
Task: Design an infographic poster

FILTER OPERATIONS

- Add annotations on the chart to highlight features
- Could add legend to filter stations for all the charts
- Consider allow zooming in/out map

FOCUS

- No main focus, slight focus on weekday v.s. weekend

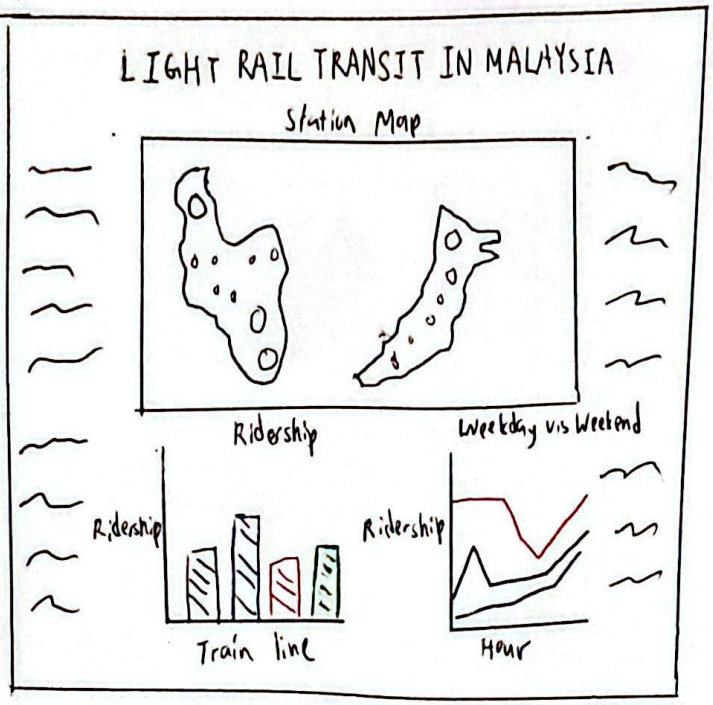


DISCUSSION

Pros: 1) Sufficient space for explanation text
2) Good separation between sections
3) Easy to implement user interactions

Cons: 1) No main focus, sections may look disjointed
2) Stations are fixed in place, dots may clutter at one place
3) Requires good explanations for storytelling

LAYOUT



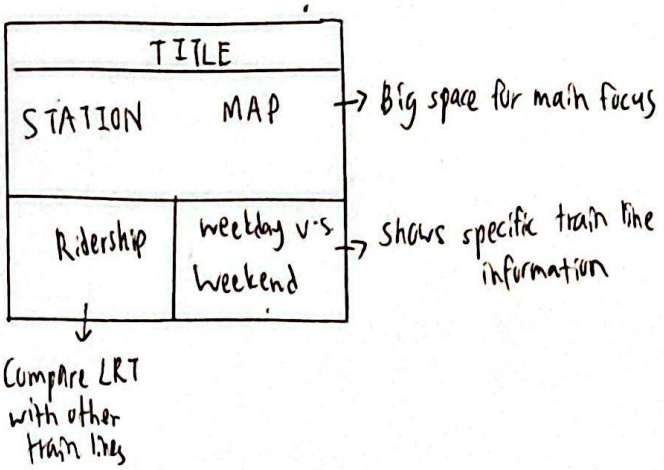
Title: Magazine s.g.
Author: Soh Chee Sheng
Date: 21/09/2025
Sheet: 3
Task: Design an infographic poster

OPERATIONS

- Consider allow zooming in/out map
- Filter station/train line by color
  → Buttons / drop down
- Add annotations on line chart and bar chart to highlight features
- Hover interactions should display:
  Map: station Name:
  City:
  Latitude:
  Longitude:
  Others: Train Line:
  Ridership
  Type:

FOCUS

- Main focus on station map

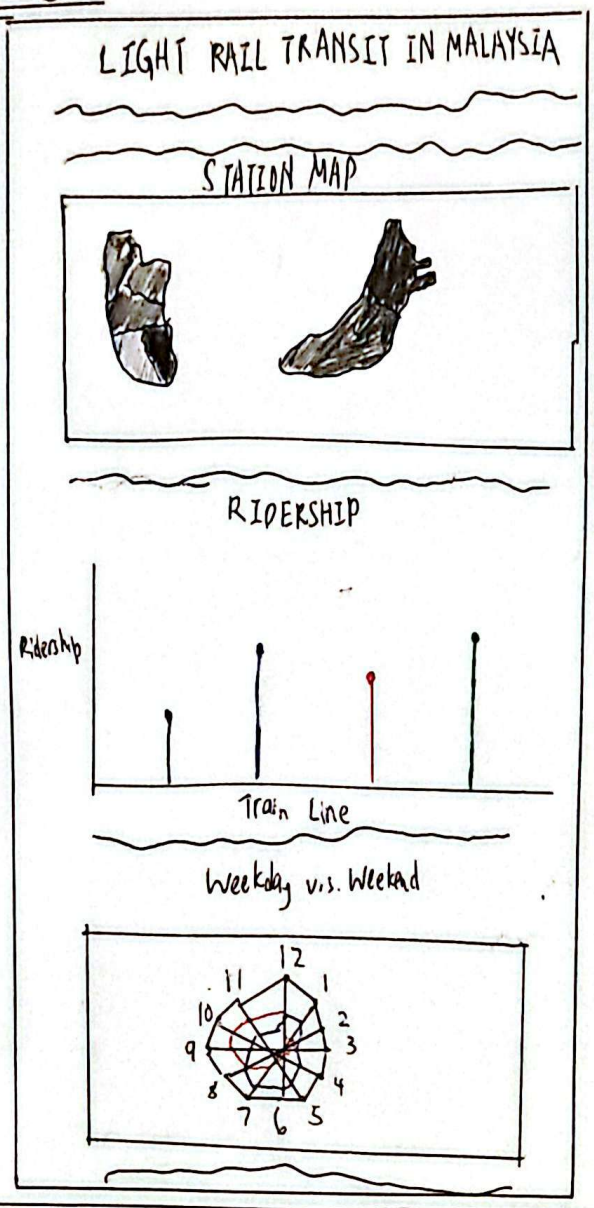


DISCUSSION

Pros: 1) Has main focus, better storytelling
2) Well-structured
3) Aesthetically appealing

Cons: 1) Limited space
2) May be difficult to link information between Ridership's bar chart and Weekday v.s. Weekends's line chart
3) Too much text may be boring to audience

LAYOUT



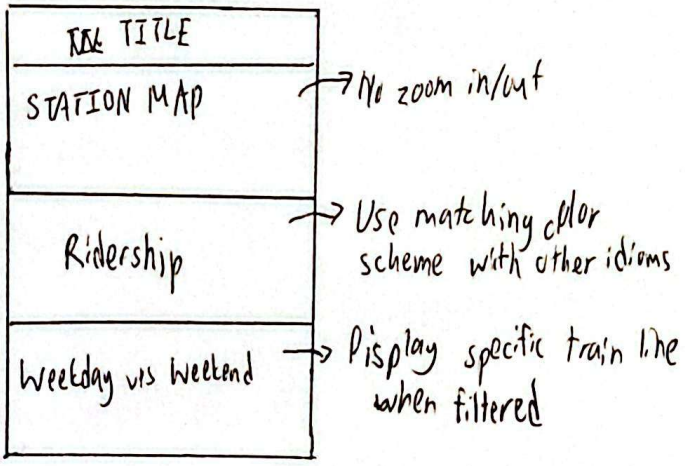
Title: Partitioned Poster #2
Author: Soh Chee Sheng
Date: 22/09/2025
Sheet: 4
Task: Design an infographic poster

LAYER OPERATIONS

- Corresponding legends to filter train lines (LRT, MRT, etc)
  → Button/dropdown
- Annotations on map and lollipop chart when necessary
  → Static map, no zoom in/out
- Tooltips
  → Map: Station Name, City, Latitude, Longitude
  others: Train Line, Ridership, Type
- Radar chart to display specific train line only

FOCUS

- All sections are equally focused

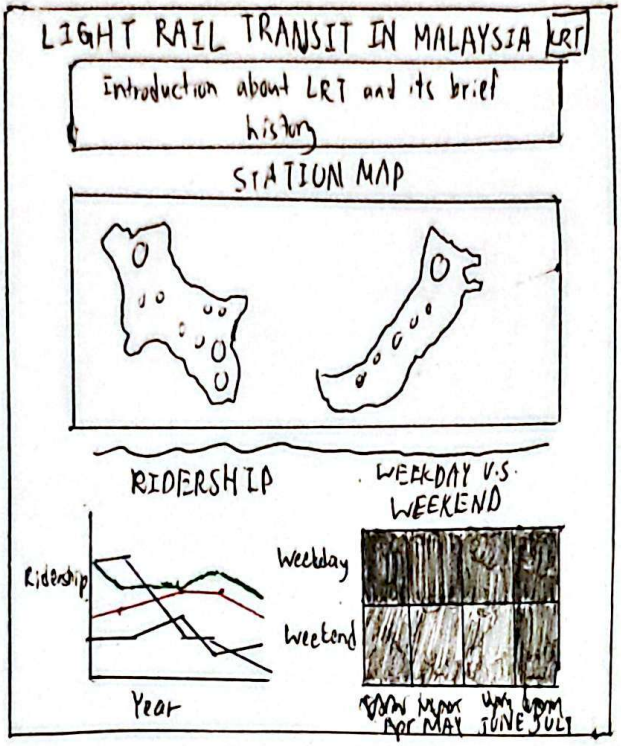


DISCUSSION

Pros: 1) All sections are focused
→ well-defined story
2) Equal space for each section
→ can use all kinds of visualisations
3) Simple and has user interaction

Cons: 1) Might be too simple in design
2) Needs to be well-separated (sight lines, white space)
3) Needs time to think what train lines to filter

LAYOUT



Title: Final Design Sheet
Author: Soh Chee Sheng
Date: 23/09/2025
Sheet: 5
Task: Design the final design layout

OPERATIONS

- Size legend for map
  → bigger shape: higher ridership
- Can zoom in/out of map
- When stations are filtered (through map or legend), display them on line chart and heat map
- Colour-coded filter bar (grouped by states)
- Tooltips
  → Map: Station Name, City, State, Latitude, Longitude
  → Others: Train Line, Ridership, Type
- Annotations
  → Add on line chart (and map) where appropriate

FOCUS

- Station map is main focus
  → To show the train lines and how LRT compares with other train lines
- Line chart shows ridership of different train lines (LRT, MRT, KTM)
- Heat map adapts to user selection/filter
  → shows ridership of specific train lines based on filter
- Both charts to support station map

DETAILS

- CSV files from Kaggle and data.gov.my
- Dependencies: CSS, Vega-Lite, HTML, R
- Estimates of time to build: 1 day for research and data cleaning
  +
  1 day for station map
  1 day for line chart and heat map
  1 day for improvements, final checking and submissions
- Specific requirements:
  1) Scrollable visualization
  2) Zoomable station map
  3) Colours that ease eyes