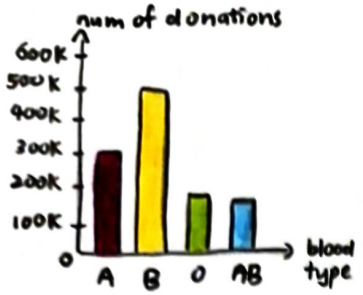
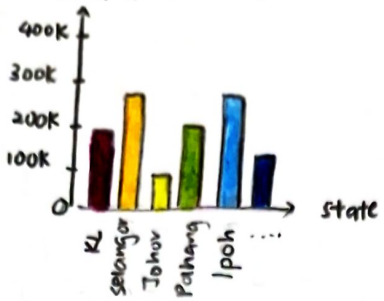
IDEAS

Author: Chew Xin Ning
Date: 18/8/2024
Sheet: 1
Task: Brainstorm ideas

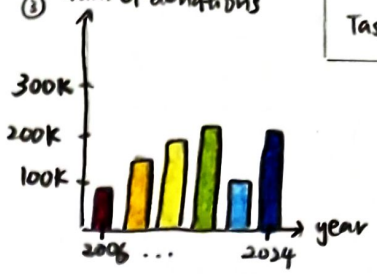
① num of donations



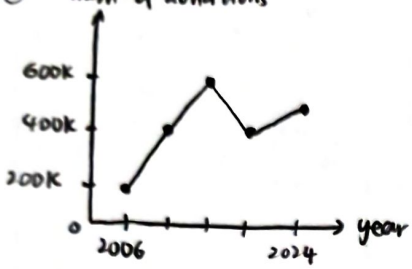
② num of donations



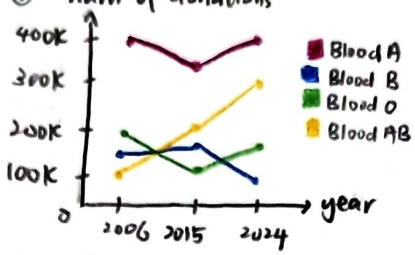
③ num of donations



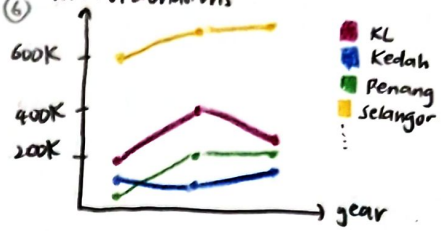
④ num of donations



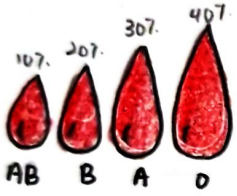
⑤ num of donations



⑥ num of donations

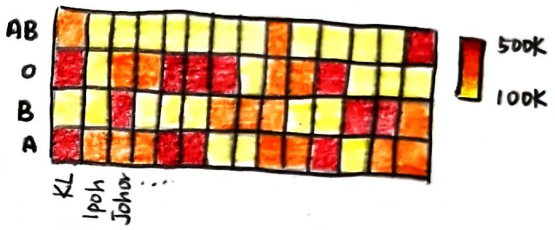


⑦

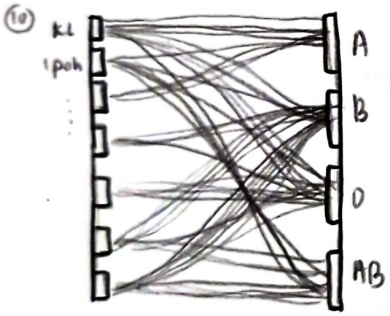


⑧

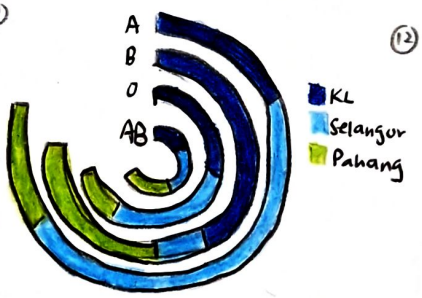
⑨



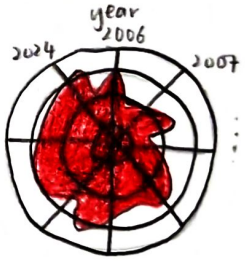
⑩



⑪



⑫



FILTER

Charts to be removed:

③ → duplicated with ④, ④ gives a better representation of trend over time.

⑪ → not feasible as there are 13 states, too many categories, therefore it's hard for the viewer to see.

⑫ → duplicated with ③ and ④, less readable than them

CATEGORIZE

Comparison between categorical data
↳ ①, ②

↓

Trend over time
↳ ④, ⑤, ⑥

↓

Distribution
↳ ⑨

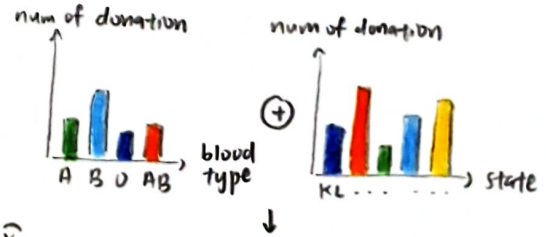
↓

Flow/ Contribution/ Proportion
↳ ⑦, ⑧, ⑩

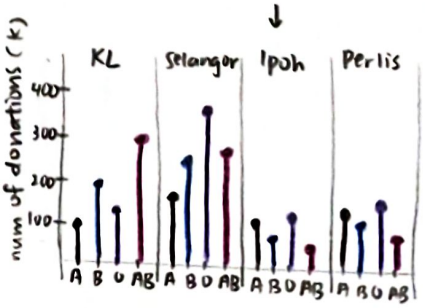
COMBINE & REFINE

→ ① and ② can be combined into a grouped lollipop chart

→ x-axis = blood type, y-axis : donation count, group by state



↓



QUESTION

→ is this implementation doable?

→ does it meet the audience need?

→ is the sankey diagram too messy for the viewer?

Title: Interactive Poster

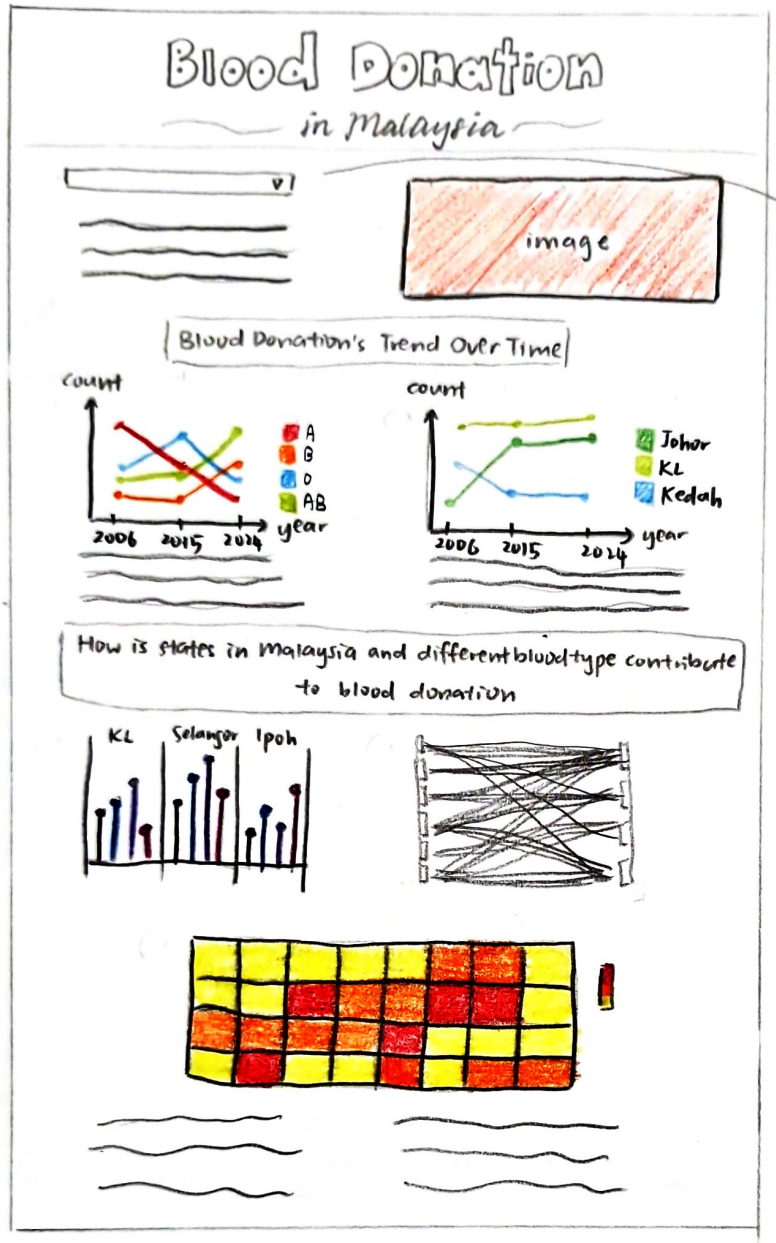
Author: Chew Xin Ning

Date: 18/8/2024

Sheet: 2

Task: design a story-like poster.

LAYOUT



→ clear sections for visualizations

OPERATION

① Filtering option at the top

↳ filter by blood types or states, charts will change accordingly.

② Hover for tooltip

↳ information about the line / point / grid will be shown in tooltip

↳ eg:

Year: XXXX
num of donations: XXX

different charts have different tooltip

③ click to filter

↳ same as operation ①

↳ user can click on the line / point / grid, the charts will change accordingly to show the associated data

FOCUS

① line chart

→ x-axis = year

→ y-axis = num of donation

→ multi-line to show different blood types / states, use colours to differentiate

→ choose a reasonable range and interval to avoid misleading chart.

② sankey diagram

→ each line flows from one state to one blood type

→ left = state, right = blood type

→ colour by states

→ each line is a donation

DISCUSSION

Advantages:

→ informative and interactive, high engagement with viewer

→ clear and strong story telling, with clear flow of viewing

Disadvantages

→ need to be careful of sight line and use of white space, otherwise would be messy

→ flow of visualization need to be well taught before implemented, if not storytelling is bad.

Title: Partitioned Poster

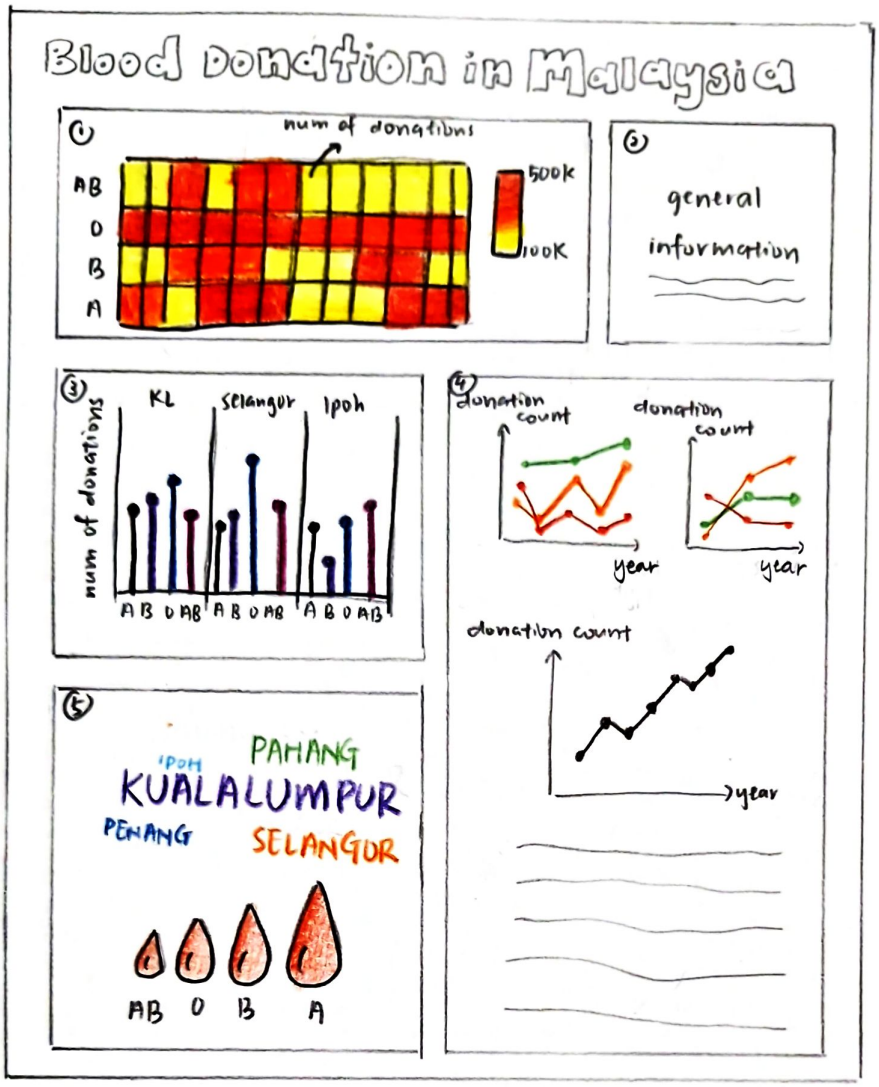
Author: Chew Xin Ning

Date: 18/8/2024

Sheet: 3

Task: Design an infographic poster

LAYOUT



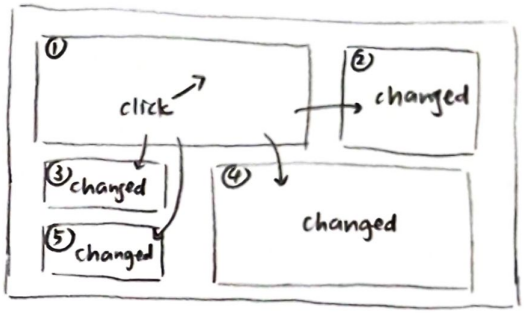
→ infographic style

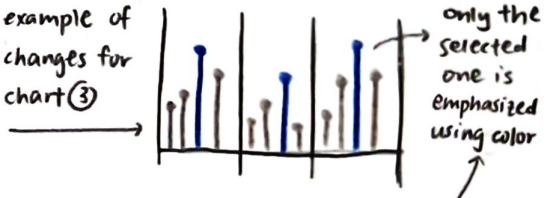
→ all visualizations are put together, no subsections or subheadings.

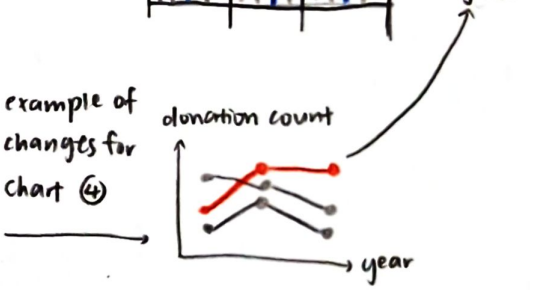
OPERATION

① hover for tooltip to display information

② click on the data, other visualization change to focus on that data attribute



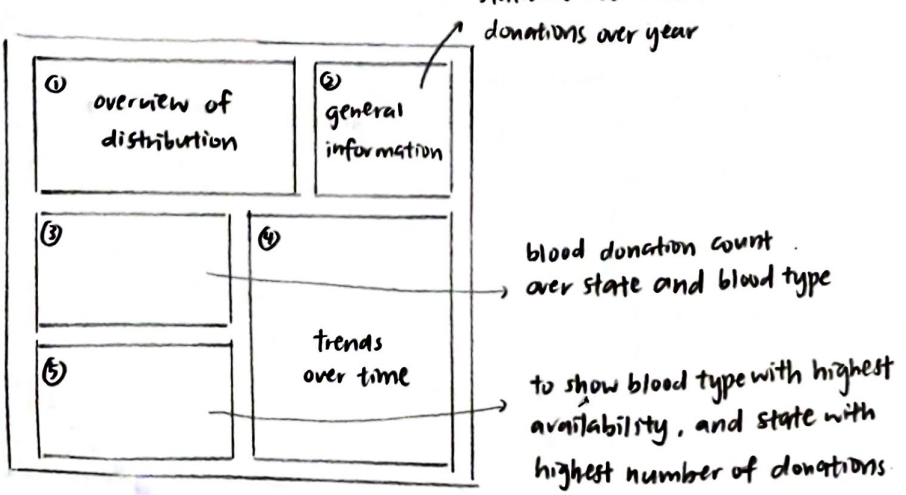




FOCUS

→ everything is focused, all charts share relatively equal amount of space

→ overall poster arrangement:



DISCUSSION

Advantages:

→ easy to implement

→ easy to operate as there is no complex operation

Disadvantages:

→ overload with charts

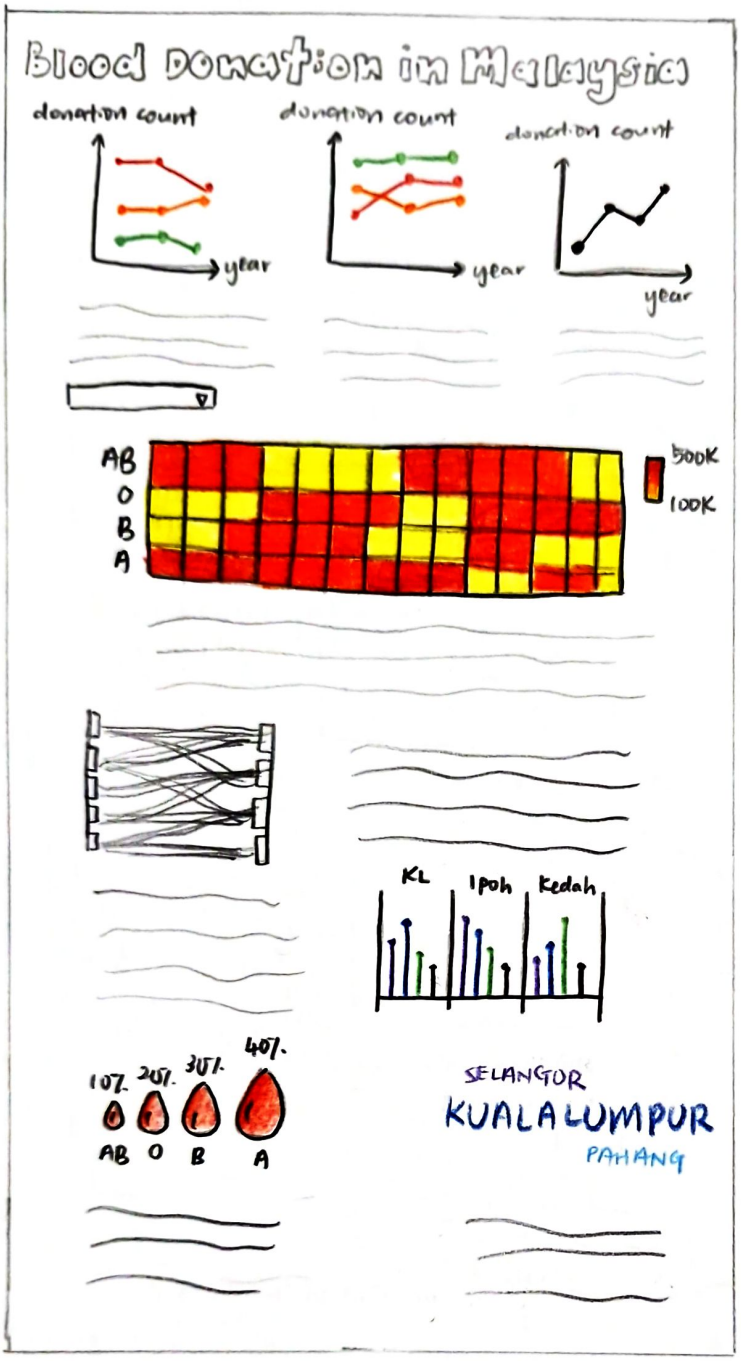
→ no main focus, no visual centre

→ all segments are disjointed, no storytelling

→ might have too many sight lines and poor layout

→ not interactive, no engagement with viewer

LAYOUT



→ provide detailed explanations for each chart

Title: Partitioned Poster #2

Author: Chew Xin Ning

Date: 18/8/2024

Sheet: 4

Task: Design an informative partitioned poster

OPERATION

① filter by state or blood type or both

↳ either click or use drop-down

② Tooltip

↳ hover over line chart:

Year: XXXX
Donation Count: XXX

↳ hover over heatmap, word cloud, pictorial chart, lollipop chart:

Donation Count: XXX
<relevant information>: ...

↓

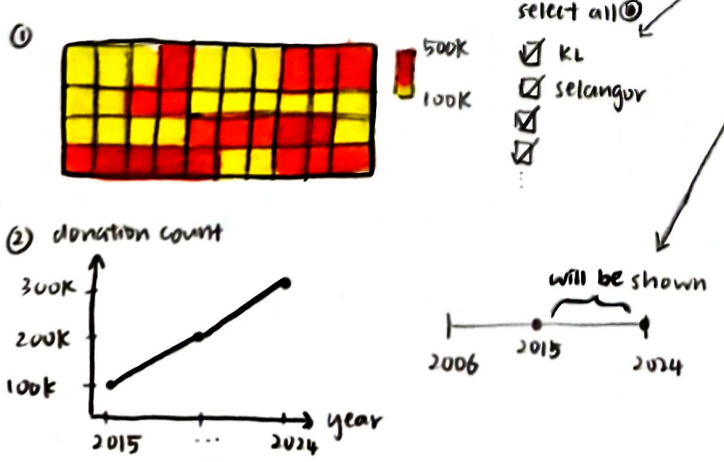
can add in additional information related to the chart

③ filters for heatmap and line charts

↓ filter by states

↓ filter by years

FOCUS



DISCUSSION

Advantages:

→ clear explanations alongside the charts

→ viewer can focus on one chart at a time

→ additional slider feature to narrow down year of focus

Disadvantages:

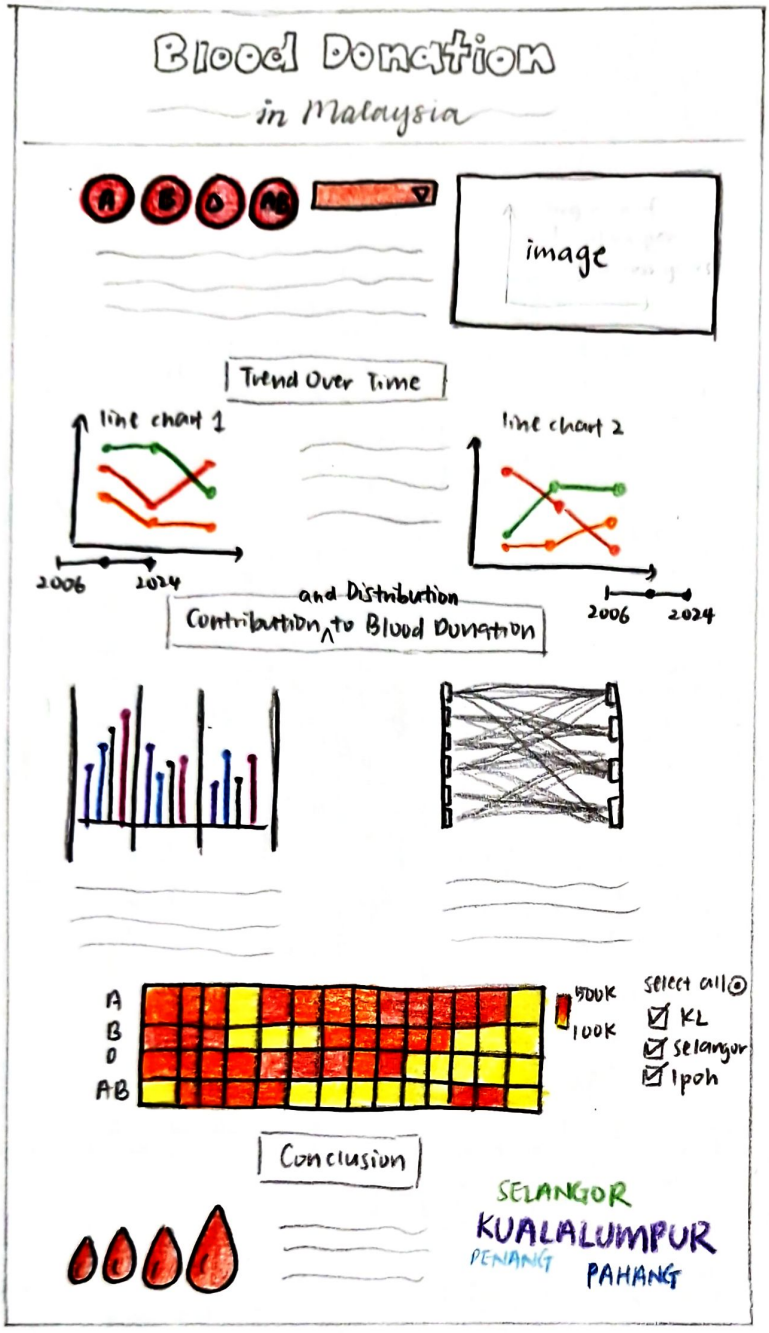
→ too many words, information overload

→ no clear segmented section, poor storytelling

→ flow needs to be well thought before implementing, otherwise would be hard for viewer to follow.

Title: Final Design Sheet
Author: Chew Xin Ning
Date: 18/8/2024.
Sheet: 5
Task: Final implementation design.

LAYOUT



OPERATION

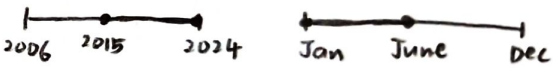
① Filter by blood type or state
↳ click or use drop down

↳ charts will change accordingly
↳ the statistics description changes as well

② Hover for tooltip
↳ for line chart 1: year + blood type + count
↳ for line chart 2: year + state + count
↳ for heatmap: count

③ multi-select filters for categorical attribute
↳ for sankey and heatmap diagrams

④ slider for year / month



⑤ option to show trend by year/month
↳ for line chart
↳ ◉ month
○ year

FOCUS

poster arrangement:

- general information
- trend over time
- contribution
- conclusion

* no main focus, all graphs are equally important
* visual hierarchy in text and tooltip
* colour code in title to represent legends
* annotations to mark interesting points in charts
* consistent colour throughout poster

DETAILS

Dependencies → Tableau Public server

Estimated time & effort
↳ 3 days to create all idioms
↳ 2 days to write descriptions / explanations
↳ 2 days to arrange and finalize visualizations

Specific requirements
↳ high pixels screen to view details of each point or line, especially for sankey diagram and heatmap.