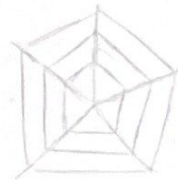


FILTER

→ too many states
put all in one circle
is hard to distinguish



the types of hospital
is insufficient to
build a radar chart

CATEGORIZE

→ Trends of population and hospitals' beds.

→ Clearly visualize population distribution across different regions.



→ Proportion of ethnicity



→ Per Capita hospital beds
(11000)
by state.

COMBINE & REFINES



QUESTION 9

1. How to use a clearer method to represent Hospital Beds Per Capita?
2. Not enough information?

LAYOUT



TITLE: Dashboard View

AUTHOR: Shiyi N.

DATE: 4/10/2025

SHEET: 2

TASK: Initial Design

OPERATION

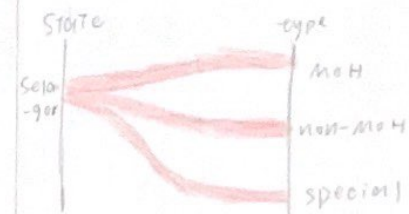
age bot



age 18-25



click to shift year



click to show the selected state or selected type

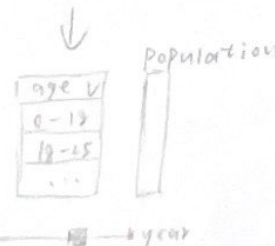
FOCUS

The intensity of the color indicates the proportion of a specific age group within the total population.



The age structure can be clearly discerned

Can choose different age groups

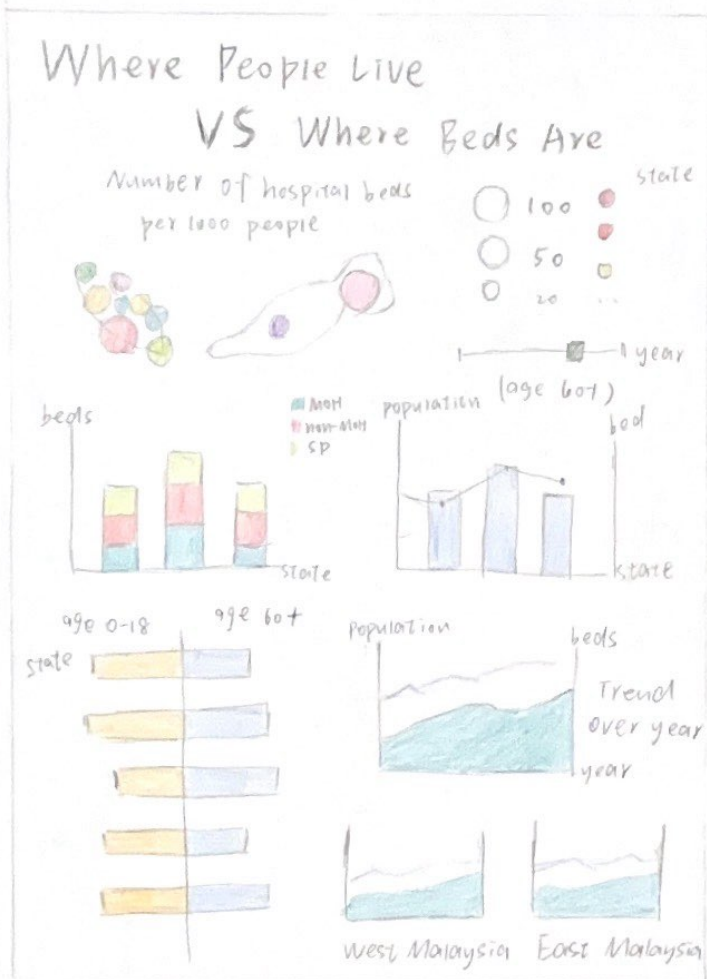


Shifting over years

DISCUSSION

- Too much content about age structure?
- Hospital beds are insufficient?
- Should combine the two a bit more?

LAYOUT



TITLE = Dashboard View

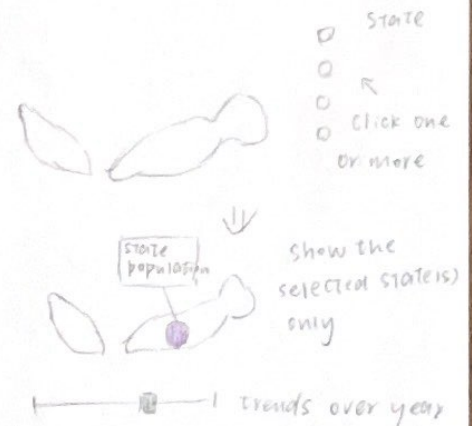
AUTHOR = Shiyi Ni

DATE = 7/10/2025

SHEET = 4

TASK = Initial Design

OPERATION



FOCUS



By combining bubble chart with map, the size of each bubble represents the average number of hospital beds per thousand people. That allows users to identify which state has the highest average bed count clearly.

By comparing the elderly population (60+) and the 0-18 age group in each state, this data reveals each state's demographic structure, enabling users to identify which state face severe aging population and which states have a larger young demographic.

DISCUSSION

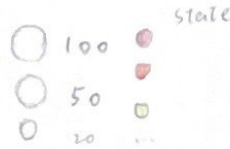
- Does it provide sufficient info regarding the relationship between population and hospital beds?
- Focus too much on population structure?
- Is there some duplicate information?

LAYOUT

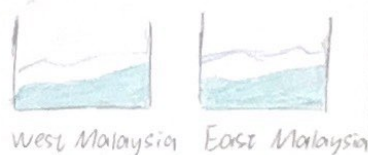
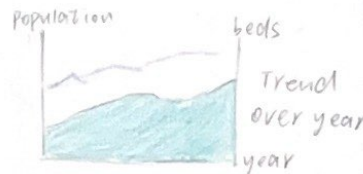
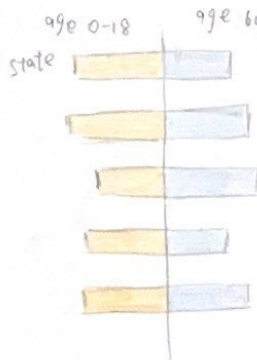
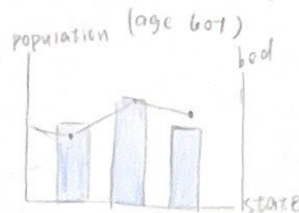
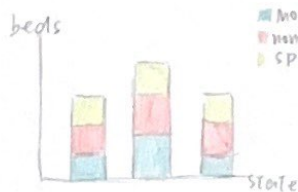
Where People Live

VS Where Beds Are

Number of hospital beds
per 1000 people



1 year



TITLE = Dashboard View

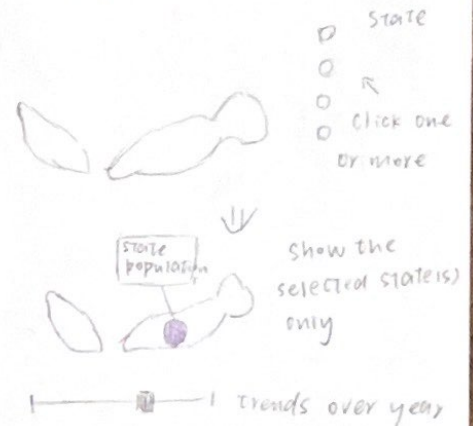
AUTHOR = Shiyi Ni

DATE = 7/10/2025

SHEET = 4

TASK = Initial Design

OPERATION



FOCUS



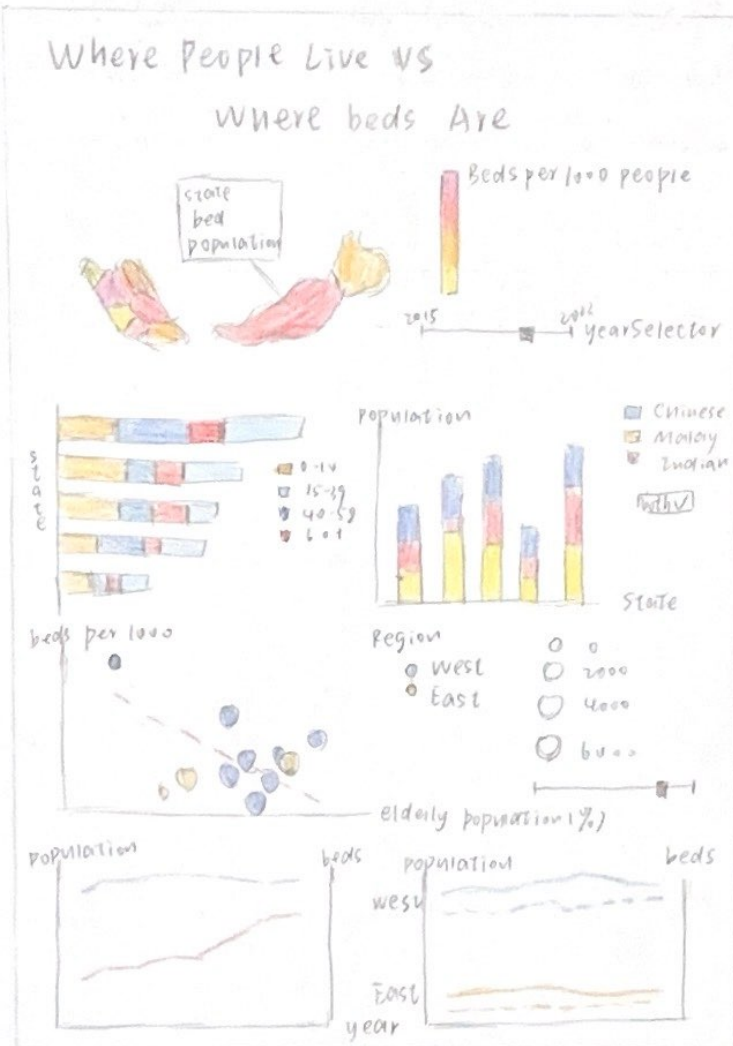
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By comparing the elderly population (60+) and the 0-18 age group in each state, this data reveals each state's demographic structure, enabling users to identify which state face severe aging populations and which states have a larger young demographic.

DISCUSSION

- Does it provide sufficient info regarding the relationship between population and hospital beds?
- Focus too much on population structure?
- Is there some duplicate information?

LAYOUT



TITLE: Final Design Sheet

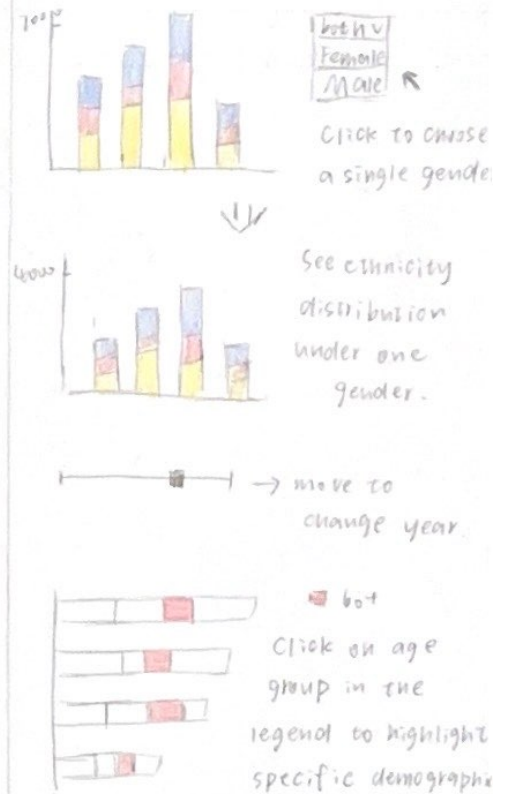
AUTHOR: Shiyi N:

DATE: 15/10/2025

SHEET: 5

TASK: Design the final layout

OPERATION



FOCUS



Mainly focus on the map to show the distribution of hospital beds per 1000 people across Malaysian states. The color intensity represents the bed-to-population ratio, with the red colors indicating higher bed availability.

DETAIL

- Dependencies: Vega-lite for generating graph, html and css for layout and R for data mining.
- Estimated time & effort: at least 3 days to build all charts & 3 days more for final layout.
- Specific requirement: arrange each visualisation to the appropriate size.