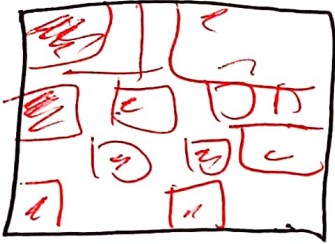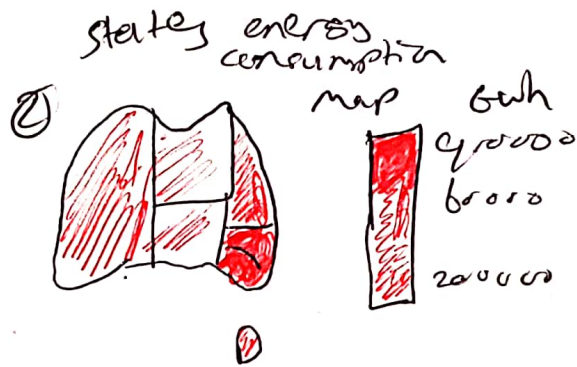# IDEAS

Energy consumption stats
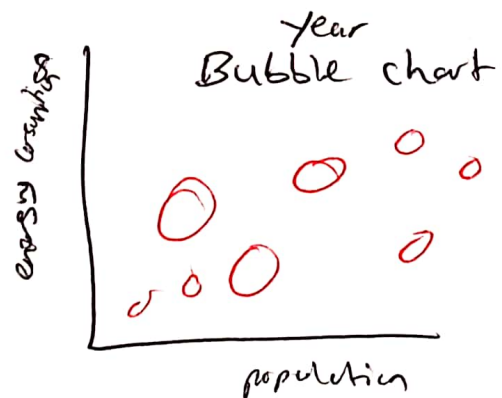
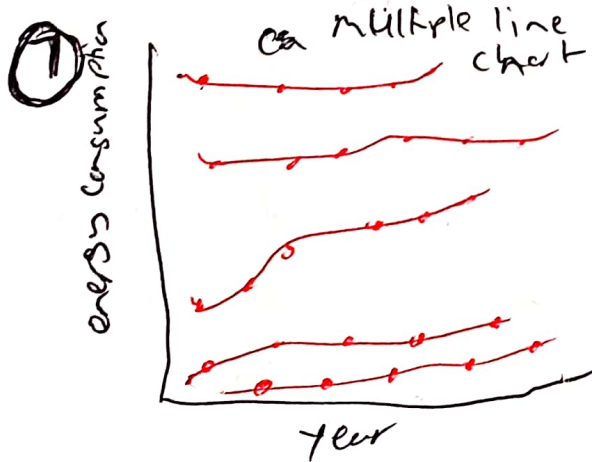① population

State population
Heat map

② States energy consumption map

Gwh
4,00000
60000
200000

③ Energy consumption

per capita

④ Line graph

energy consumption

population

⑤ Bar chart

States

energy consumption

⑥ area chart

energy consumption

year

⑦ energy consumption

Multiple line chart

Year

Bubble chart

energy consumption

population

Filter

Author: Albino
Date: 4/10/24
sheet 1.
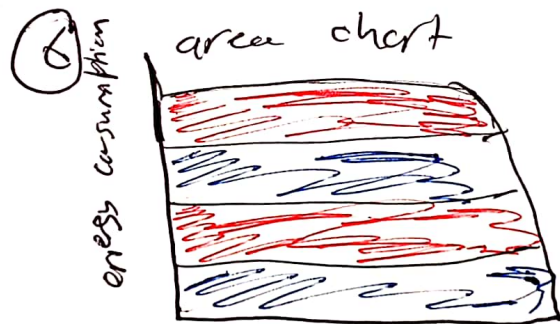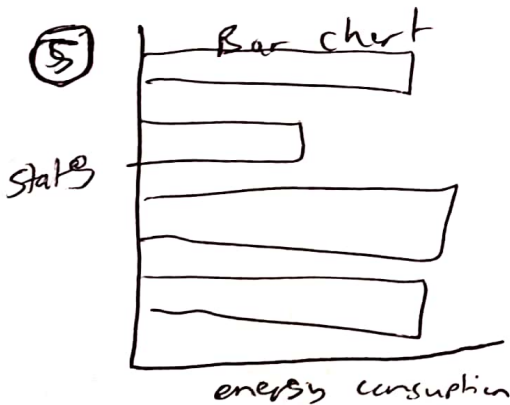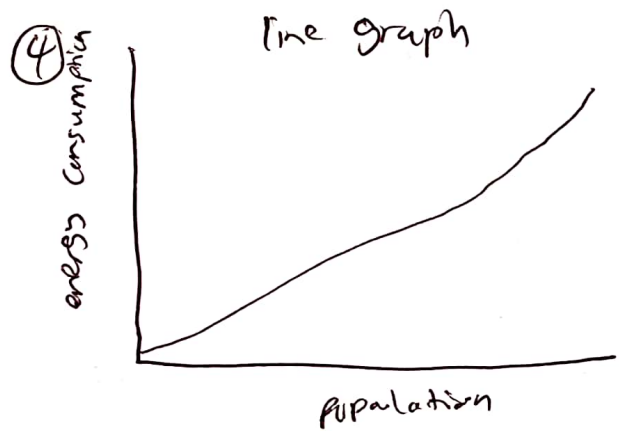
Remove

Take out the Heat map as it is unnecessary seeing that I will have 2 maps. It will make things look strange on the dash bard.

~~Joe~~ line graph vs multiple ~~the~~ line chart. The line graph would juste be able to show 1 state but with the multiple line chart I can see more states and overall it makes a good chart as all the states would be seen.

Make the bar chart more Interactive and not ~~set~~ just a plain bar chart~but add a slide at the bottom of the graph to make a better use of the graph and to be able to see through the years rather than have all the yees clustered in one chart.

Categorize

— Distribution and Comparision

— Map — energy consumption break down
— Stacked area chart
    — highest state
— bar chart — population break down.

— Comparative analysis
— Map — population vs energy consumption
— cumulative frequency distribution — frequences of energy consumption by state

Combine and Refine

— combine the bubble chart with the line graph to allow for a better comparison

LAYout
Australian states energy consumption

Auther - Albino
Date - 04/10/2024
sheet 3

GWh

slider
2010 - 2023

→ This desing visualise the geographic state distribution of the energy consumption across Australian states, with states highlighted based on their consumption over 2010 to 2023.

Focus

⇒ geographic distribution

→ The Importance of this design focus on energy consumption on each state on a map is to highlight the difference of each state based on their energy consumption.

Components

- Year selector - slide that
- uses can use to see the energy consumption over the years for the states
- Legend - a clear scale indicating energy consumption intensity.

operations

users can hover ers the map and see the state name, energy consumption and year.

pros

provides a clear visual representation of the states
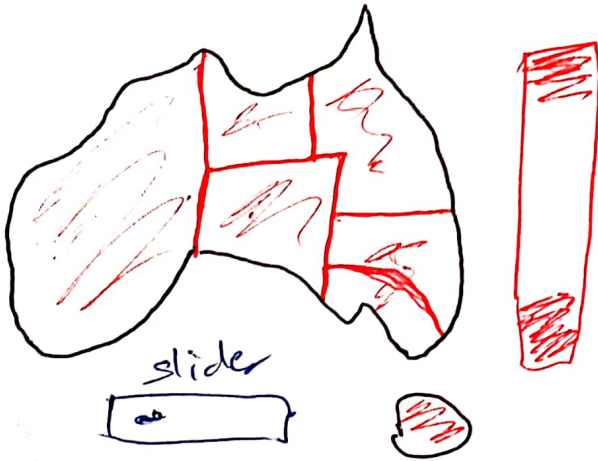- Easy to see which state are highest consumer

cons

Migh generalise state

- Requires a legend to understand whats shown.

LAYOUT

Author - Albino
Date - 04/10/2024
Sheet - 4

slider

→) This visulisation aims to show the relationship between energy consumption per and population of each state

Focuss

→ main focus is to explore and explain how the states population can sway the energy consumption to get the per capita.

Components

Map - main visulisation that represents the states population and consumption.

- colour coding - a legend that allows the user to see the Intensity of the per capita per state.

- A slider that allows the user to be able to search through the different years

Pros

- provides a detailed insight into the energy consumption per capita for each state.
- Allows a detailed analysis of the states per capita consumption

Cons

- users require a legend to understand how to read the map

LAYOUT

Interative bukle
chat

state.

Energy Consumption
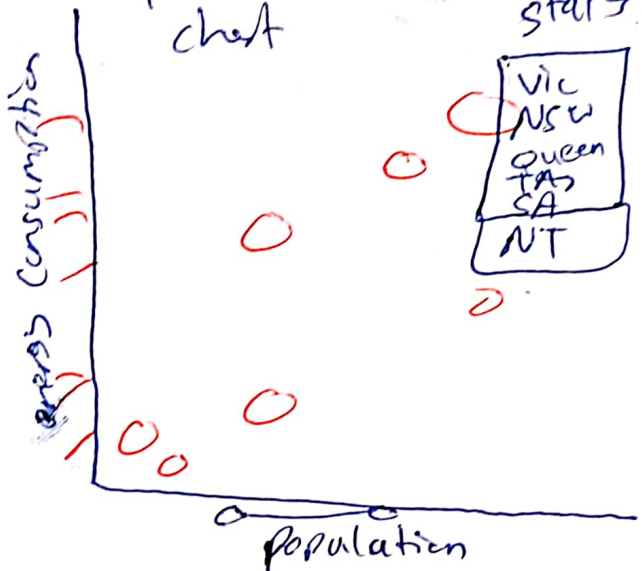
population

This visualisation aims to show the relationship between population size and energy consumption across Australian states.

Focus

⇒ The main focus is to show that higher populated states are going to have a higher energy consumption. This crucial to understand why napl was high interests of for NSW and Aus VIC.

Components
- bubble chat
  - main visulisation where dotz represents energy consumption.
  legend - share the colour for each bubble or a state
- slider - can slide through the years.

operations

uses can slide through the years 2010 - 2023.

Pros
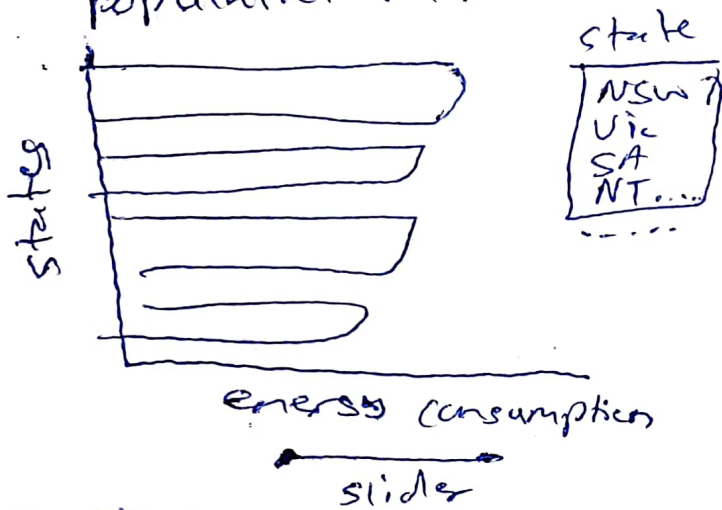
- provides Insight Into the correlation between state popla population and energy consumption

- uses can easily slide through to other years to see rather than just a clustered years.

cons

- the bubbles do not really neve that much

LAYOUT

Bar chart with Interactive population filter.

Author — Albino
Date — 04/10/24
Sheet 6

state

NSW
Vic
SA
NT....

states

energy consumption

slider

→ This visulisation aimg to show the relation between populations size and ~~population~~ energy consumption. Allowing users to filter through using population.

Focus

- The main focus of this is to focus on energy consumption by state based on their population size.
→ It focuses on bringing insight into how population levels influence the energy needs of thoate state.

Components.

bar chart — The main visual where the g: states are represented by a bar size depending on the energy consumption based on ther population.
- legend shows the states color coded bars.

Components contin.

→ Slider
— users can slide through the population and adsut the bar of each state.

operation

Users can slide through the population to adjust the bar of each graph depending on their energy consumption.

pros

- Provides insight into how energy Consumption can be influenced by population.
- A slider for euickly seeing which population numbs has the highest energy consumption.

Cons

users & need the ~~trend~~ legend to see which state is which.