IDEAS

A Renewable/Non-Renewable — categorical

B by state — categorial — Map

C by time — ordinal

D by Industry — categorial

E by Fuel — categorial

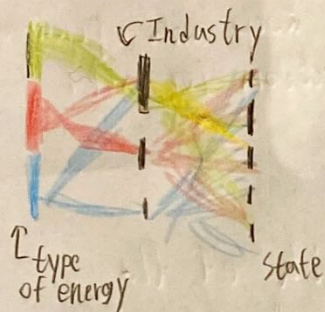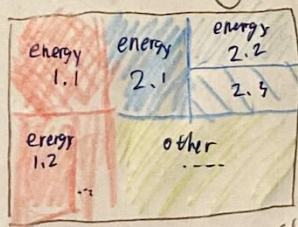Sheet ①
YuShanLin
Date: 10/10/2024

Data:
- Value → energy consumption (EC)
  → energy production (EP)

Category

Know how energy used

- Sankey/Flow ①

Industry
└ type of energy
State

- category ②

energy 1.1 | energy 2.1 | energy 2.2 / 2.3
energy 1.2 | other ----

→ simple →

state 1 2 3 4
ene energy energy
Heat map?

We want to know **trend** ③

Usage or Production
time

color-type ④

Usage or Production
time

Type1 Type2
A
B
C
D

more type

what Region ⑤ → world wide?

energy usage each stat
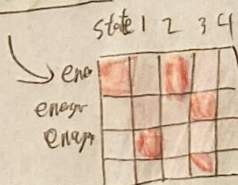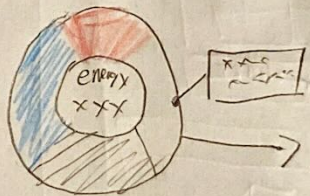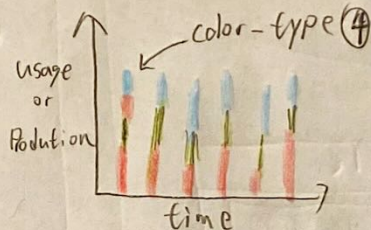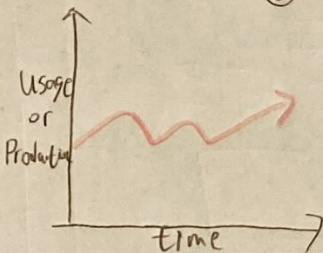
Compare?

geo-information — Bin

⑥ scatter

show position?

Usage
time

Radar
type1
6 ... 2
5 ... 3
4
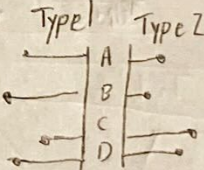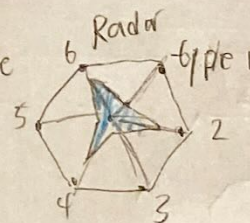
FILTER

① Sankey/Flow
- Not really Suitable in this topic, since the main goal is to show consumption. Not Intuitive to use

② Tree map
- same problem with ①. Not Intuitive to see

CATEGORISE

Trend -
- C ③
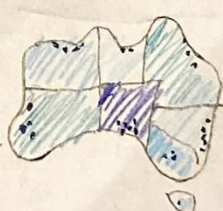- C ④
  C and scatter

Map
- B & C
  ↳ ⑤ → ⑥

Category
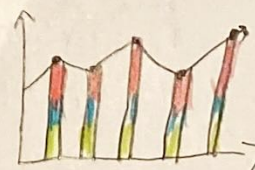- A, D, E
- Heat map • Pie
- comparison bar • Radar
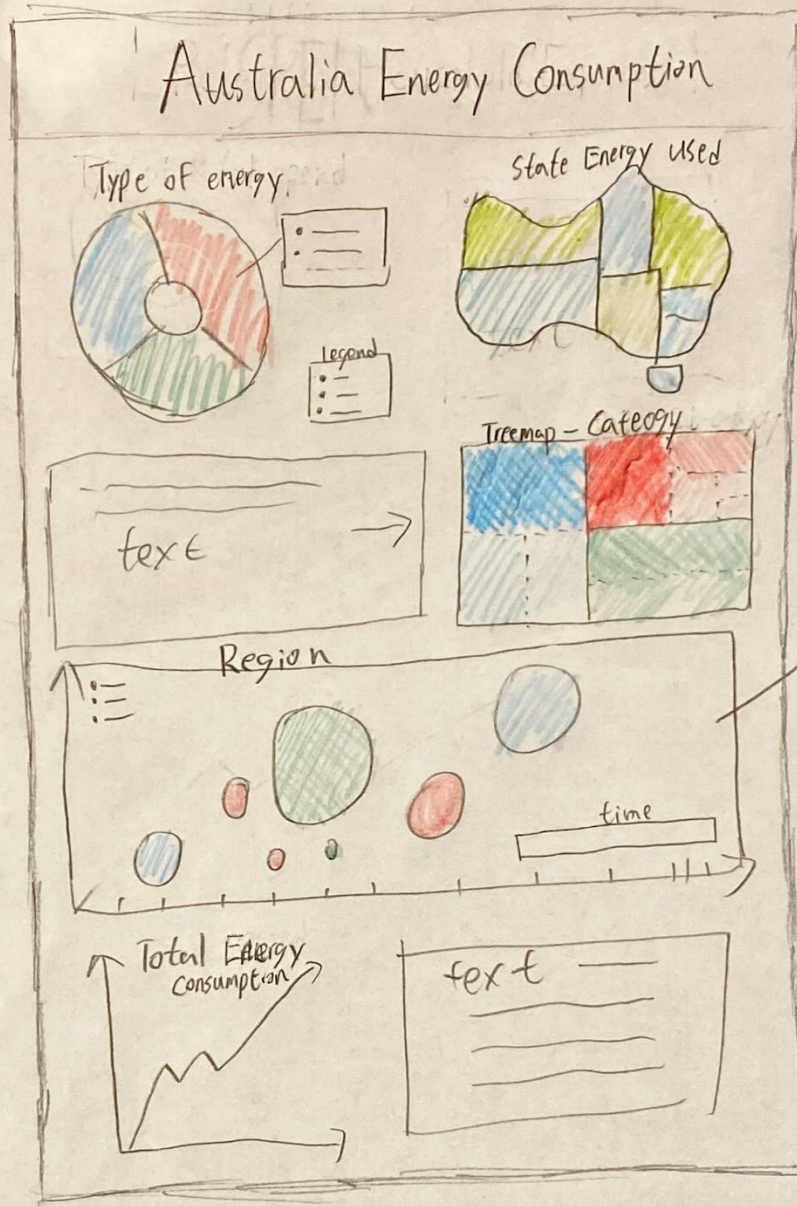
COMBINE & REFINE

⑤ + ⑥
Showing Both Choropleth and Bin

③ + ④
can show both total Trend and know category
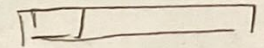
LAYOUT

Australia Energy Consumption

Type of energy

State Energy used

Legend

Treemap - Cateogry

text

Region

time

Total Energy consumption

text

Operations:

button

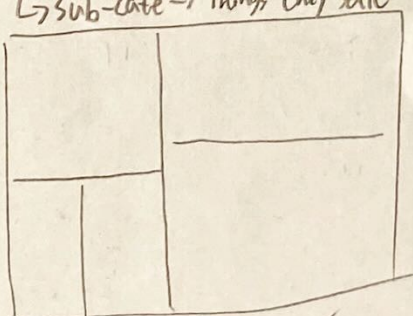user can adjust the bar to change the time show for bubble

- Tree map
  → click on a part to show even smaller category
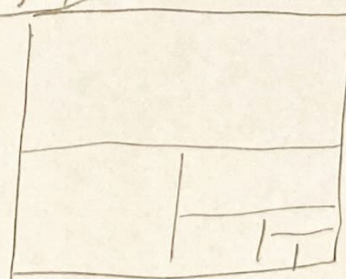
Focus
Color—Retail industry
  └→ Sub-cate → Things they sale

User can select only 1 or up to all category

→

☑ C1   ☑ C2   ☑ C3

☑ C1   ☐ C2   ☐ C3

- This is abel to tell story of where people will spend money on,

  But There is lack of more comparason graph

- Too many text

LAYOUT

Australia Energy Consumption

Title

Legend

sub-informn

slider

state

x x ~~~ text

Title

Legend

select

Title renew

non-renew

Title

Operation

the map and
the line graph
are both interative

select time on
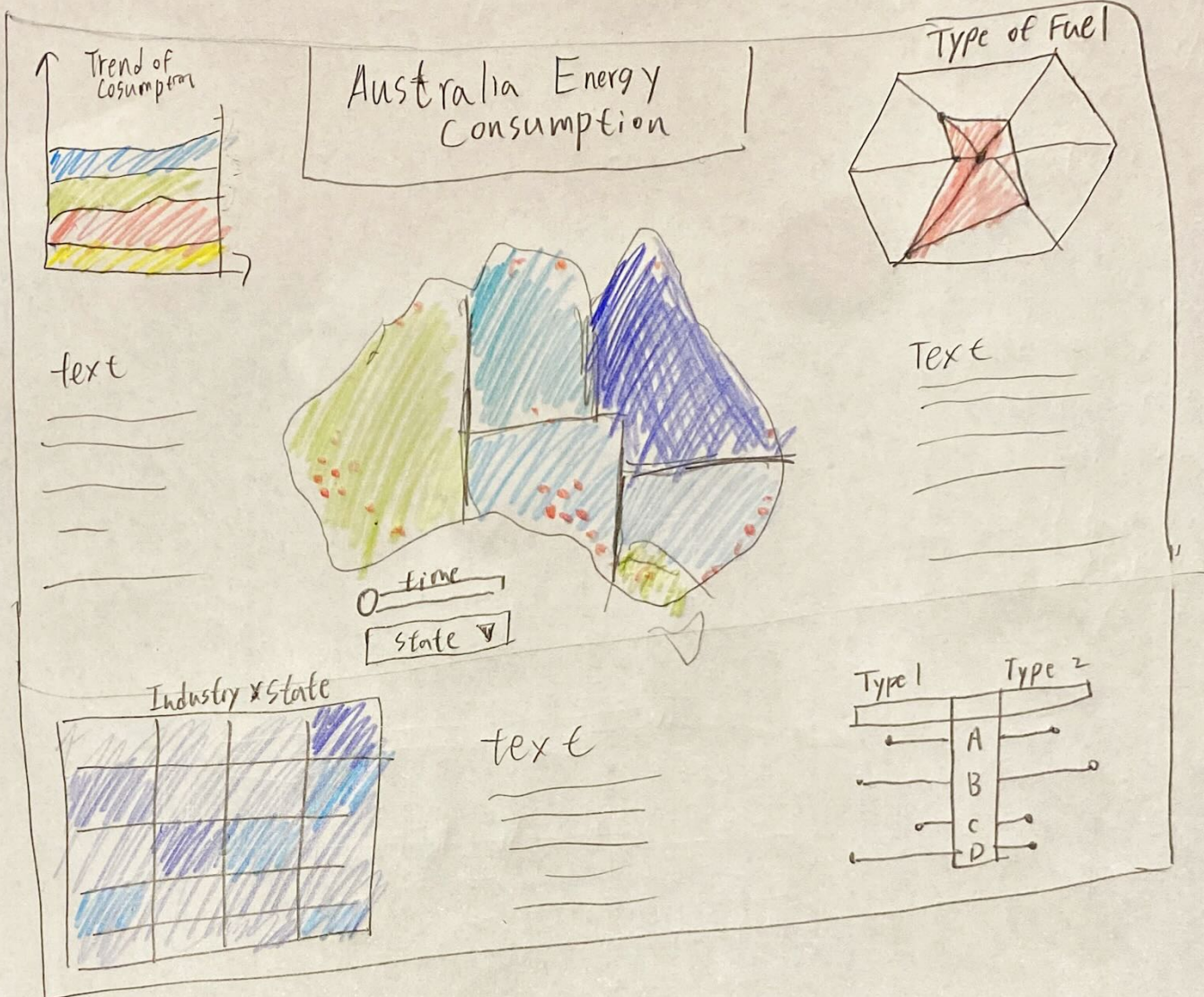any graph will
change time on other

Fiter category

- Will using too much space
  on the map?

- is the text not enough?

- the text should be on
  the side instead belowe?

FOCUS

show both useage and overall time trend
all graph has time slider

LAYOUT

Title: Australian ENERGY
consumption
Author: Yushan Lin
Date: 10/10/2024

Trend of
Consumption

Australia Energy
Consumption

Type of Fuel

text

Text

O —time

State ▽

Industry × State

text

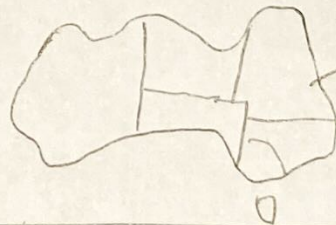| Type 1		Type 2
	A	
	B	
	C	
	D	

Operation

- user can click on each area
of state to select the state
↳ then all other map will
also ~~interact~~ filter the data

- time slider will also interact
to all graph

- Detail can be seen use tooltips

Focus

- this is to focus on different perspective
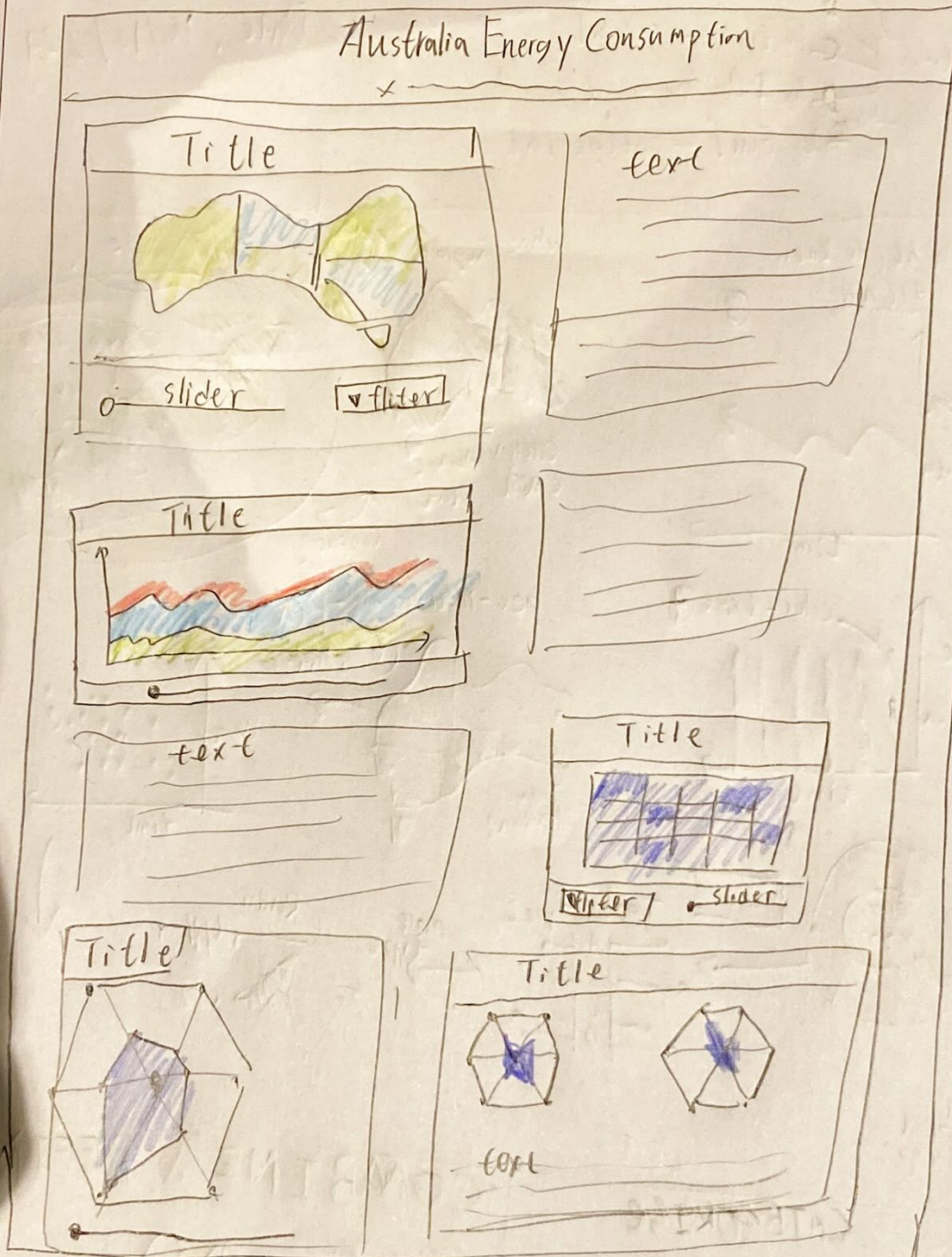of data, using the map

each will show
the geo-information
of usage using Bin

Question

- Is this too difficult to make?

- Maybe the data cannot filter like this

LAYOUT — From Sheet 3
with Modification

Australia Energy Consumption

Operation

- each chart are Indepent to interact to keep more operational freedom for user

- each of the Visualisation has a time slider and a fiter

Focus

- this is to give user to look at each pieace of data one by one, guide them to conclusion therefore no specific focus

- Map and line graph are the most general give high level view, then break down to more detaill perceptive