1. Ideas

Australia

Bushfire boundaries

Donut chart

states

- Arc length can be
  - number of fires
  - hectares burnt

Bar graph

Hectares burnt

states

Choropleth map

Australia

colour can represent
- number of fires
- land burnt

Total Number of fires

Years

2. Filter

Choropleth map

Hectares burned (colour hue)

Donut chart

Can be used to compare quantity of data

3. Categorize

categorical	Quantitative
- Year	- Hectares burnt
- Bushfire boundary	- no. of fires
- States	- Average hectares burnt (Australia wide)
	- % of land burnt

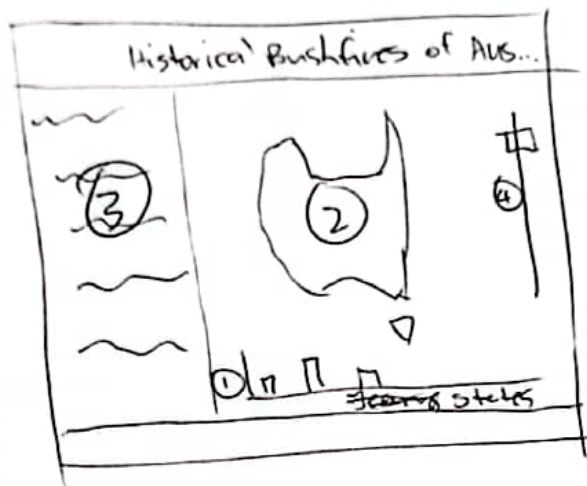## 4. Combine and Refine

Choropleth + boundaries

- shows two types of info qualitative boundaries & quantitative colour hue (for hectares burned)

5. Question

Should the area burned per state be normalised to the area of the state its in?

sheet ①

Layout

Historical Bushfires of Aus...

① No. of fires for each state
② chloropleth map of hectares burned
③ some fun facts or information
④ slider to select year

Operations

slider to pick year

tooltips to give more information

Focus

choropleth map
　　showing number of hectares
　　burned per state

~~Bar chart~~

Bar chart
　　showing count of fires per
　　state.

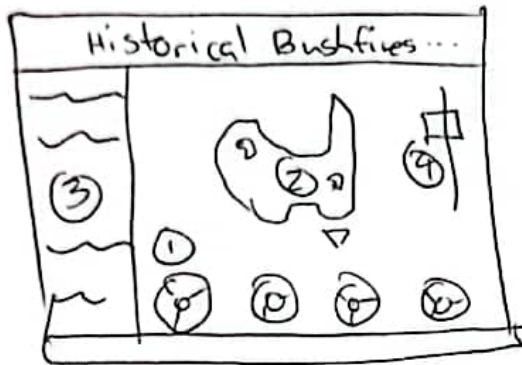slider
　　to filter year

~~Detail~~ Discussion

Pros
- easy to implement
- simple, clean layout

Cons
- Bar chart is a bit ugly
- Bar chart takes a lot of space but doesn't give much information
- doesn't show proportionality as well as donut charts

Layout

Historical Bushfires...

① Donut charts showing data for each state: eg - area burned - no. fires

② ~~their~~ Map showing bushfire boundaries

③ fun facts or information

④ slider to select year

Operations

- slider to pick year
- tooltips to give more information

Focus

Bushfire boundary map
  - showing boundaries of bushfires in that year

Donut chart
  - showing secondary metrics

slider
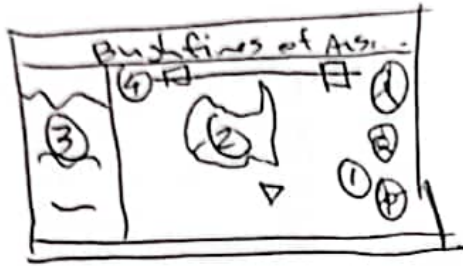 - to select a year for which the boundaries will be shown

Discussion

Pros
- Bushfire boundaries look awesome.
- Very detailed
- Donut charts show proportionality well

Cons
- large amount of data require. (slow to load)

Layout

① Donut charts showing data
　　for each state

② chloropleth map

③ ~ fun facts or info

④ slider to select year range

Operations

- slider picks a year range to look at

- Hover over elements for a more detailed tool tip.

Focus

chloropleth map
　　showing number of Hectres
　　burned per state

Donut chart
　　showing secondary metrics
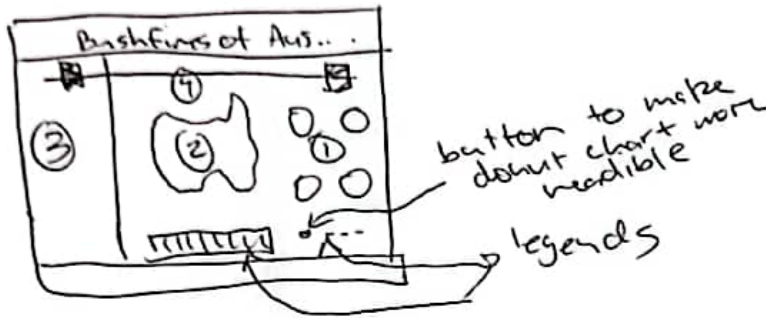
slider to filter year

Discussion

Pros
- easier to implement
- less data required
- shows a larger range of data

Cons
- Not as cool as mapping fire boundaries

Layout

button to make donut chart more readable

legends

① donut charts

② chloropleth map of Australia

③ Top 5 bushfires

④ slider to select period of years to filter data.

Operations

- slider filters data in both chloropleth map & donut charts.
- button allows user to put pie charts into equal angle mode. This shows all states, even when the data is really small.
- Tooltips when hovering over map or chart elements.

Focus

- chloropleth map is main focus, presenting the main data, which is number of hectares burned per state.

- Donut charts show secondary stats for more interstate comparison metrics.

- Top 5 bushfires, listed with their start year & end year, along with the amount of land burnt encourages users to ~~took~~ interact with ~~those~~ the slider to look at those years.

Discussion

Detail

Dependencies
- Ability to code in HTML, CSS, JS, JSON
- Vega-lite

ETA
- 5 days.