Cristina Perez, Evin StLaurent, Vishwa Bhatt
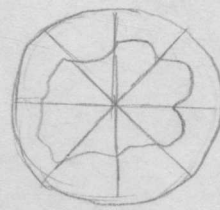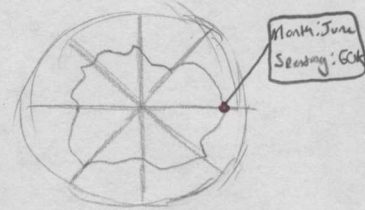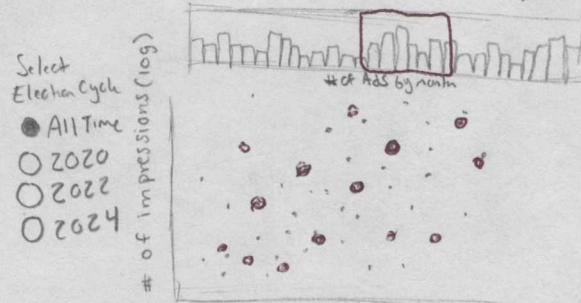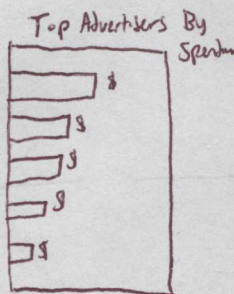## Sheet 5: Realization

Layout

line graph of spending by:
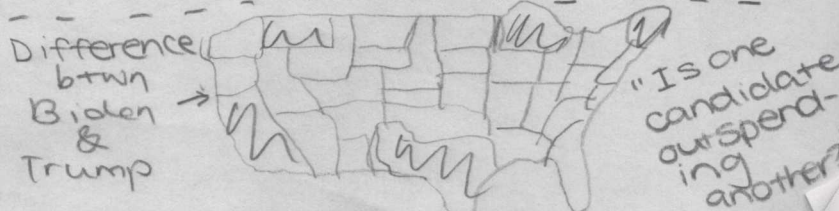- ○ week
- ● month

radial graph by # of ads by month

radial graph of ad spending by month

FOCUS/ZOOM

- We're using a line graph from 2018-2024 as a focused section of the overview (all the data) so that it can be broken down as the viewer desires.
- We're also using radial graphs is used to display the monthly trends across years, this allows viewers to receive a month by month picture of ads.
- We're using a scatterplot of all US ads with ad cost on the X axis and # of impressions on the y axis. Both will be on a logrithmic scale. the scatterplot will have a histogram of # of ads by month that can be brushed to select a custom timeframe for the scatterplot.
- Lastly we are using 4 clorepleths to display state by state ad spending data. The first is general ad spending by state and a bar chart next to it with top advertisers by spending. The next 2 side by side clorepleths are spending by the Biden and Trump campaigns by state. The last cloropleth is going to be a difference between Biden and Trump spending to see if one campaign is outspending another.

Select Election Cycle
- ● All Time
- ○ 2020
- ○ 2022
- ○ 2024

scatter plot of total number of impressions by ad spending

Operations

We will use brushing on the scatterplot and line graph. The scatter plot is also going to allow zoom and pan. The scatterplot and line graphs will also have radio buttons with the line graph being for week vs month and scatter for election cycle. Tooltips will also be included for the line graph and radial graphs spending peaks, and on the clorepleths for individual states and their spending.

The Brushing for the line graph will act as a focused look into a more general data view. The brushing on the histogram will highlight relevant points within that timespan on the scatter

Details

- We will use vega Lite, observable tutorials, & maybe other libraries like {unique valid}.

The browser should be able to load all of the data once filtered so we would upload directly like that

State: TX
Spending: 1M

choropleth map of ad spending by state

Top Advertisers By Spending

Timeline (vertical)
- 22nd Mar — Submit proposal / Data filtered the main import
- March 29th — Line, Graph, Scatter, & radial graph
- Apr. 3 — Choropleth, interaction / Data filtered the main import
- Apr. 5th — Rough Draft
- Apr. 14th — Video demo
- Apr. 23 — peer rev
- May 3rd — Final Pres

"Election Corner"

Biden

State: FL
Spending: 60K

Trump

Difference b/twn Biden & Trump →

"Is one candidate outspending another"