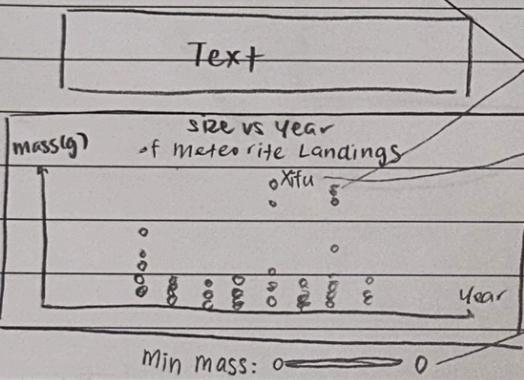
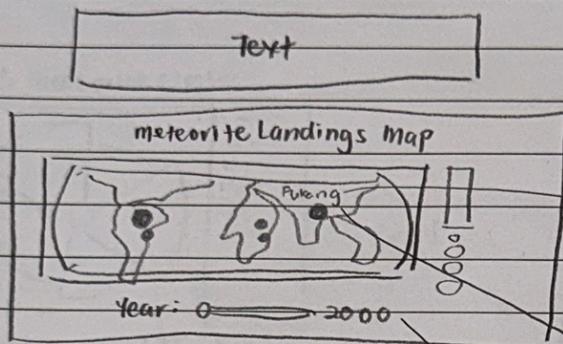


LAYOUT

METEORITE LANDINGS



FOCUS

Meteorite Landings Map

- Geospatial distribution
- Visualizing density, shows where is highly concentrated
- Size proportional symbol

Size vs Year of Meteorite Landings

- Temporal trend analysis
- Allowing user to select minimum mass

Title : Meteorite Landings

Author: EVE HOW 32839200

Date: 14/10/2024

Sheet : 2

Task: FIT3179 Assignment 2

OPERATIONS

→ When hovered, informations

about data will be displayed

→ Annotated names of meteorite landings with mass > 4500 000

→ Year & mass selector. User can select how they want to see their visualization

DISCUSSION

ADVANTAGES

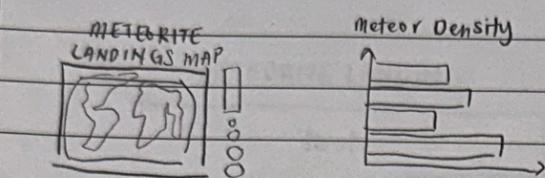
- Engaging for users as they can hover for more information
- Users can quickly & easily see areas with higher concentrations of landings.
- Allow tailored data exploration based on year or mass.

DISADVANTAGES

- Using size & shade may make it difficult for users to see data with smaller masses

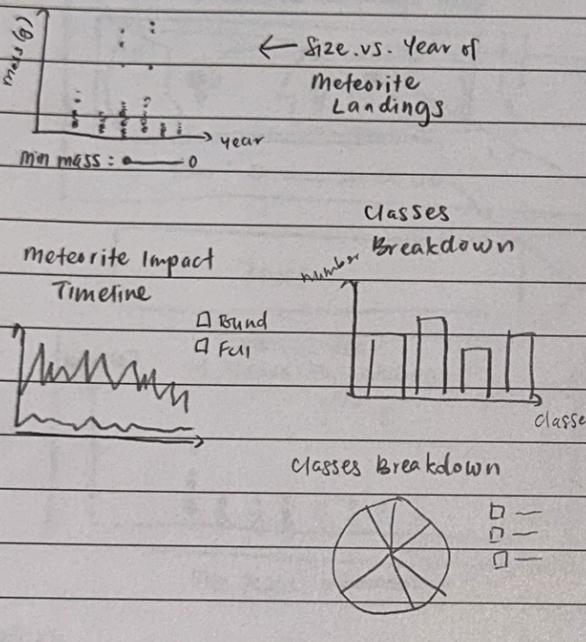
<u>LAYOUT</u>	<p>Title: Meteorite Landings Author: Eve How 32839200 Date: 14/10/2024 Sheet: 3 Task: HIT3179 Assignment 2</p>
<u>METEORITE CLASSES</u>	<u>OPERATIONS</u>
<p>Top 5 meteorite classes</p> <p>Text</p> <p>When hovered, shows number of meteorites in that class</p>	
<u>FOCUS</u>	<p><u>DISCUSSION</u></p> <p>→ Categorical comparison. Using size to represent different meteorite classes count</p> <p>→ Visual clarity. Use distinct colors to help user differentiate easily.</p> <p><u>ADVANTAGES</u></p> <p>→ Allow users to quickly compare data because of the size & color</p> <p>→ Circular design creates engaging visual</p> <p><u>DISADVANTAGES</u></p> <p>→ If data is similar in count, may make it difficult for user to interpret at a glance</p> <p>→ Complex if many classes</p>

1. IDEAS

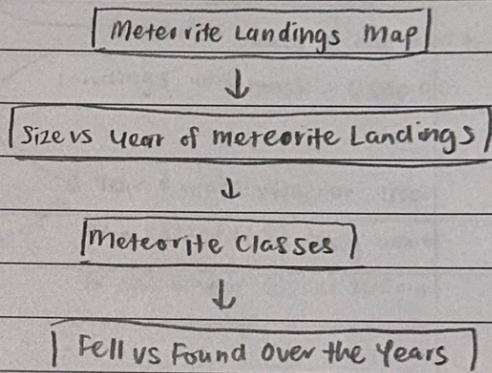


2. FILTER

- ① Meteorite Landings Map (Proportional Symbol Map)
- ② Size vs Year of Meteorite Landings (Scatterplot)
- ③ Top 5 Meteorite Classes (Radial plot)
- ④ Comparison of Meteorite Landings: Fell vs Found Over the Years (Line graph)



3. CATEGORIZE



4. COMBINE & REFINER

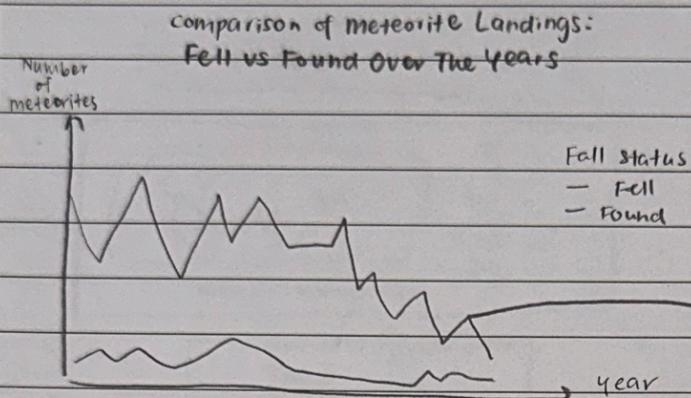
- ① Map & scatterplot both focuses on the mass of the meteorites.
Map: Distribution of meteorites, size indicate mass,
highlight where larger meteorites landed
Scatterplot: Mass in relation to year
User can filter by year for map & by min mass for scatterplot

5. QUESTION

Do these visualizations allow users to easily explore & interpret data in meaningful ways?

- ② Brushing interaction for line chart. Allow for closer examination of how found & fallen meteorites behave in that period.

Does the visualization make it easy for users to explore patterns in meteorite landings over time?

LAYOUT

Title: Meteorite Landings

Author: Eve How 32839200

Date: 14/10/2024

Sheet: 4

Task: FIT3179 Assignment 2

OPERATIONS

When hovered, shows more information on point

→ Brushing interaction for user to filter by year

Text

FOCUS

- Shows the contrast in the found and fell meteorites
- Temporal trend. Allow user to identify significant year activity.

DISCUSSIONADVANTAGE

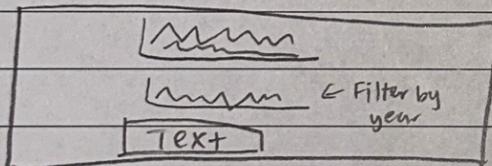
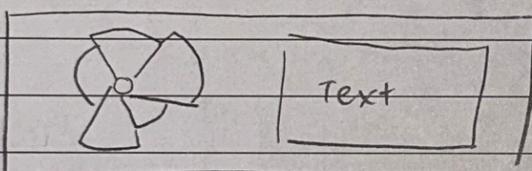
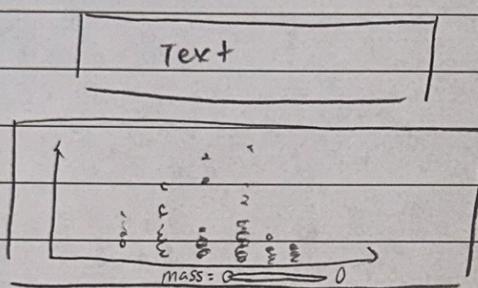
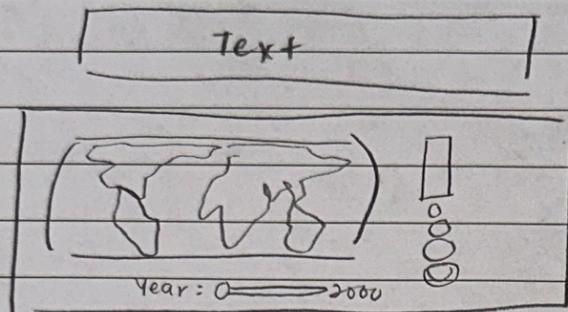
- Clear temporal trend. Allow user to easily see trend change over time.
- Interactivity. User can filter by year.

DISADVANTAGE

- Difficulty in reading exact values. May be harder for user to identify exact amount.

LAYOUT

METEORITE LANDINGS



FOCUS

- All graphs are equally important
- Tooltips so that user can see detailed amount
- Filters for user to view specific data

Title: Meteorite Landings

Author: Eve How 32839200

Date: 14/10/2024

Sheet: 5

Task: FIT 3179 Assignment 2

OPERATIONS

- Filter which year or minimum mass distribution to be displayed
- Hover over points in charts for more details
- Brushing interaction allows user to select which year they want to specifically view

BB

DETAIL

- Dependencies: Vega-Lite library, Excel data cleaning, VSCode compile code
- GitHub make it publicly accessible
- Data preparation: 1-2 days
- Visualization creation: 2-3 days
- Testing & refinement: 1-2 days