- **Basic Information:**

  A Look Into Board Games

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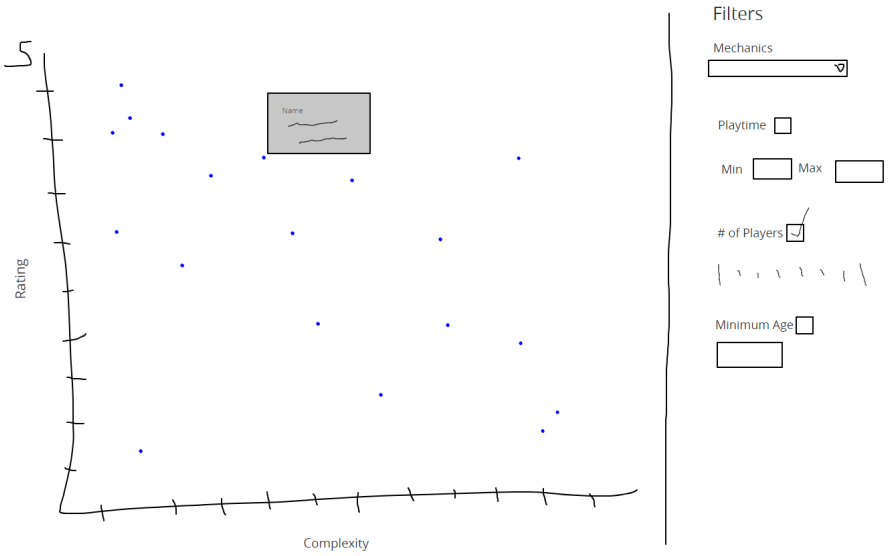
  https://github.com/syu36/data-vis-final

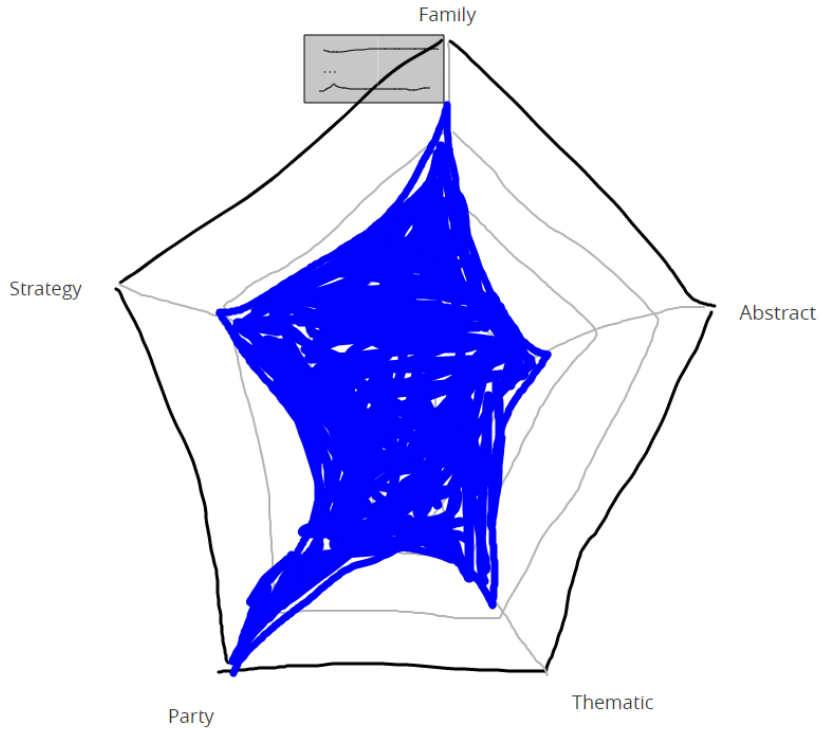
  Website: https://syu36.github.io/data-vis-final/
- **Background and Motivation**:

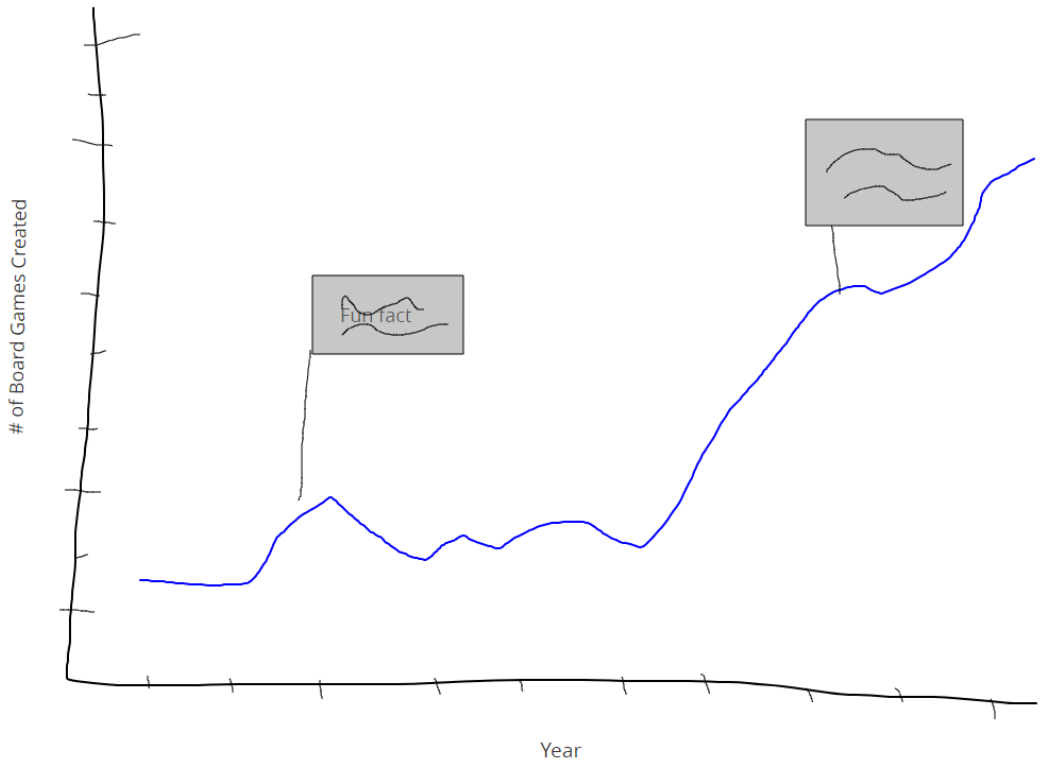
  I really enjoy playing board games and have a decent sized collection of various board games. I want to be able to look at board game data in a different way rather than just through reviews and ratings.
- **Project Objectives**:
  - Compare complexity and rating of board games.
    - Board games are "weighted" based on how difficult they are to pick up (not physically) and learn. Does this complexity affect rating? And if we only look at the board games filtered by certain options, does this affect the trend (if any?).
  - Display the creation/publishing of board games over time.
    - How have we seen board games throughout history? Was there a time where board games exploded in popularity?
  - Compare the types of board games that the board game community owns.
    - What kind of games do many people tend to own?
- **Data**:

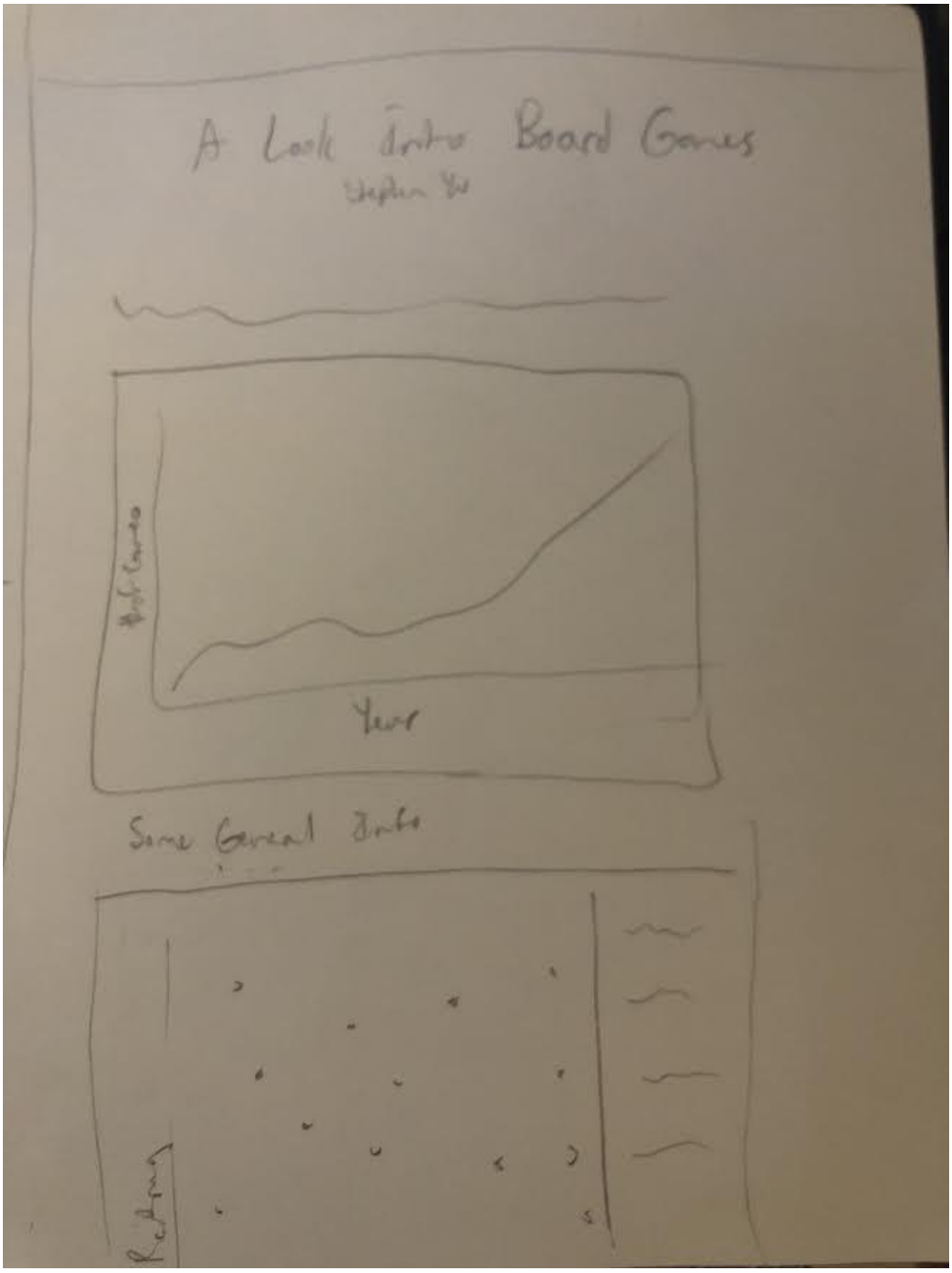
  https://ieee-dataport.org/open-access/boardgamegeek-dataset-board-games
- **Data Processing**: The only processing that needs to be done is parsing the lists of mechanics and domains as games can have multiple of either.

- **Visualization Design**:






# of Board Games Created
Fun fact
Year



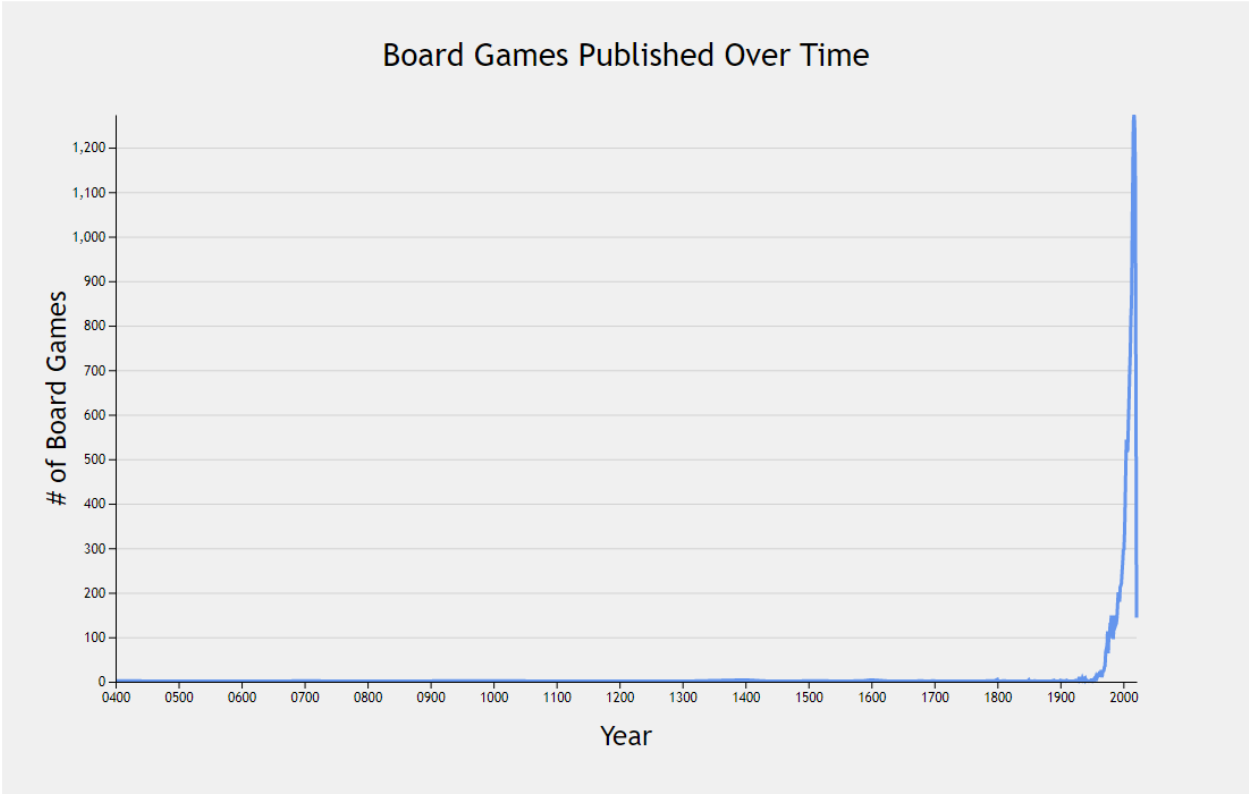
- **Must-Have Features**:
    - Scatterplot that compares rating with complexity (Obj 1).
        - selectors/filters for mechanics, play time, number of players, and age

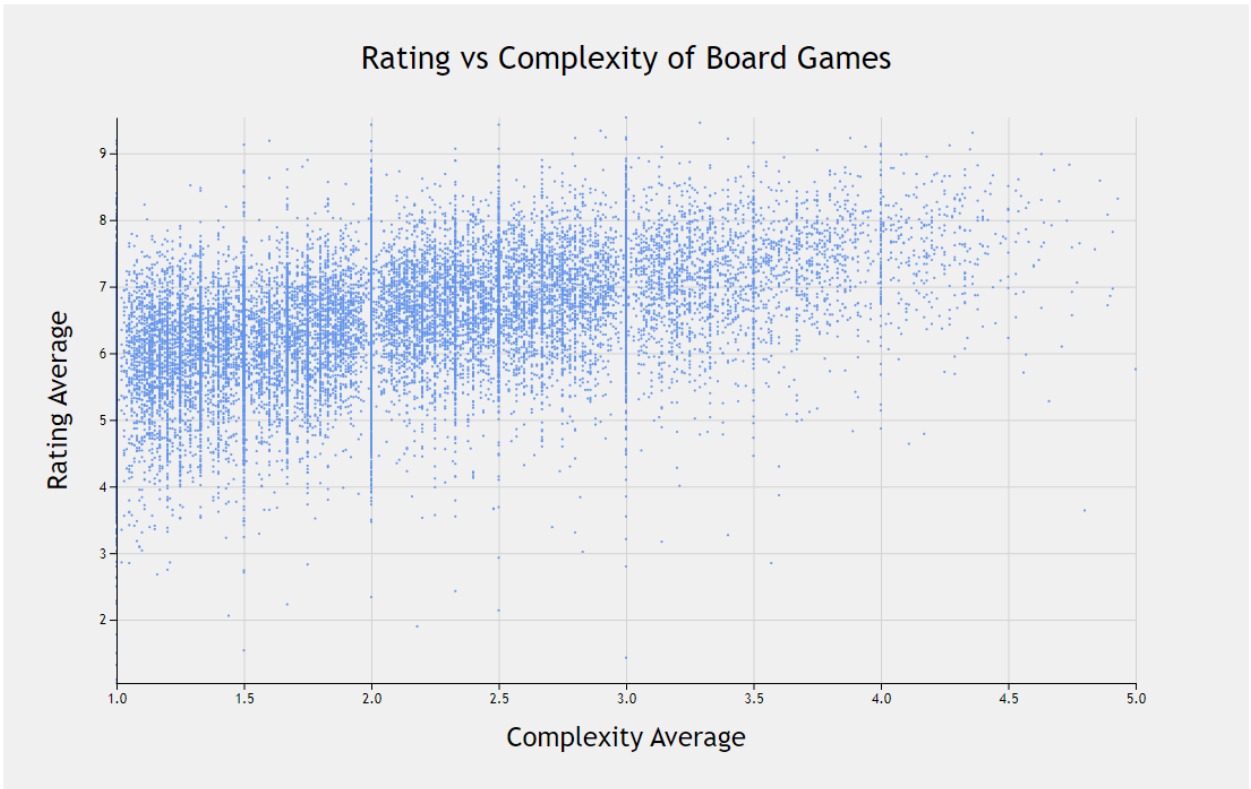
        - clicking on a point should display all of the other information about a game
    - A line chart that shows the number of games published over time, to visualize the creation of board games through time (Obj 2).
    - A radar chart to show how many people (at least on BGG) own a specific category of game (Obj 3).
        - Clicking on one corner of the chart will highlight and display the value
- **Optional Features**:
    - add fun facts about board game moments in history to the line chart (need to look up)
- **Project Schedule**:

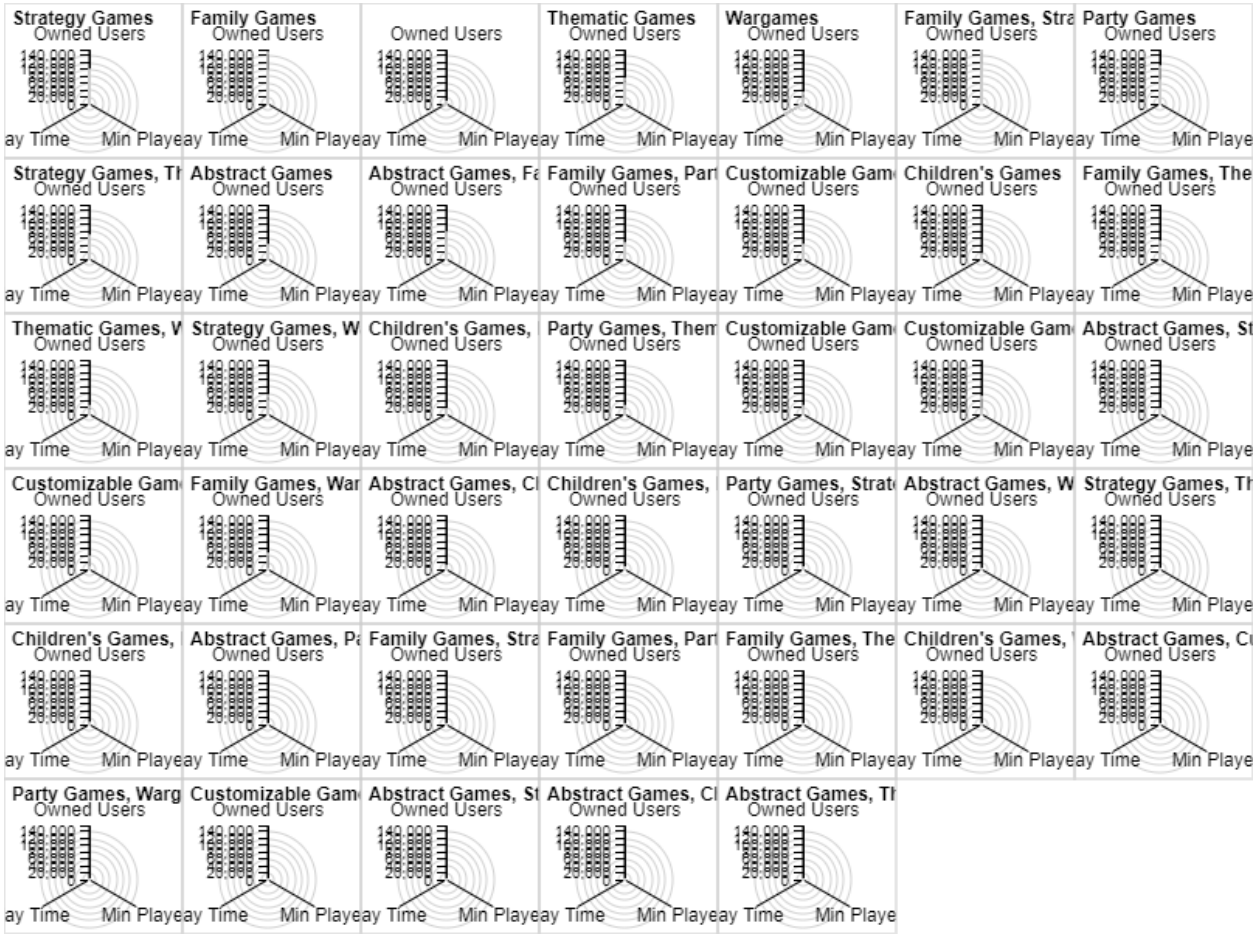
Deadline	**TODO**
March 20	**Data should be collected and ready for processing**
March 27	**Finalize rough sketches (this should be done by Wed.) and process the data in the above section about data processing**
April 3	**Create and complete the line chart of board game creation over time**
April 10	**Create and complete the radar chart, along with the interactivity to highlight categories**
April 17	**Start working on scatterplot- the foundational complexity vs rating display should be finished**
April 24	**Add selectors/filters to scatterplot**
May 1	**Design and create the website to host the visualizations**
May 8	**Prepare and practice for**

	presentation/report, and if time remains, add optional features

- **Completed:**
    - Initial static line chart
    - Initial static scatterplot


Board Games Published Over Time
# of Board Games
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
0400
0500
0600
0700
0800
0900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
Year


Rating vs Complexity of Board Games
Rating Average
9
8
7
6
5
4
3
2
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Complexity Average



Note: Rawgraphs would not display a sketch how I intend to look as the final product. The spokes should be the series shown in the charts above, merged, and using owned users as the value.

Related Work

Attia, Peter. "The Full History of Board Games." ***Medium*****, Medium, 5 Sept. 2018, https://medium.com/@peterattia/the-full-history-of-board-games-5e622811ce89.**

This does not have any visualizations, but has some interesting insights that could be used for my line chart optional feature.

Cong, Yang. "Board Game Data Visualization." ***Information Visualization*****, 7 Mar. 2019, https://studentwork.prattsi.org/infovis/labs/board-game-data-visualization/.**

This is an interesting student project from the Pratt Institute that has visualizations drawn from a similar dataset.

Doak, Maddy. "Looking at a Board Game Collection like a Data Scientist." ***Looking at a Board Game Collection Like a Data Scientist · Reed Data Science Spring 2020*****, 25 May 2020, https://www.reed.edu/math/241/2020/05/25/looking-at-a-board-game-collection-like-a-data-scientist/.**

Interesting little article about using BGG data (and the downsides).

"R/Boardgames - a Network Visualization of the Board Game Categories (and More)." ***Reddit*****, https://www.reddit.com/r/boardgames/comments/9aphuw/a_network_visualization_of_the_board_game/.**

Although it is a reddit post, it is a very well written post visualizing board games through networks and has lots of linked visualizations in that form. There are also other interesting charts besides networks within this post.

Wirges, Johannes. “What Board Games Teach Us about Data Visualization.” *Medium*, Nightingale, 9 Dec. 2019, https://medium.com/nightingale/what-board-games-teach-us-about-data-visualization-ded14080b4f4.

This does not directly relate to visualizing board games, but it is an interesting article about how elements of board games can be useful for people creating data visualizations.