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## **UIUC CS 416 Data Visualization Narrative Visualization**

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This is the webpage and repository of my narrative visualization project

Webpage: notsantana29.github.io

Repo: https://github.com/notsantana29/notsantana29.github.io

## **Data Source:**

This data was sourced from IMDB.com.

## **Review Criteria:**

• **Messaging.** What is the message you are trying to communicate with the narrative visualization?

This visualization asks questions about movies, how people perceive them, and how they're doing at the box office. The media we consume effects many aspects of our lives, and I think a lot of people have negative of new media or old media one way or the other. Some people think they don't make them like they used to, and some people think old movies are really boring. But have our ratings of movies changed over time? And are movies performing better or worse now? What I'm trying to communicate is that movies, at least the best ones, haven't really gotten better or worse on average one way or the other, but on these platforms that catalog movies there is definitely a recency bias. And even though movies are earning more, accounting for inflation that may not be so clear.

- Narrative Structure. Which structure was your narrative visualization designed to follow (martini glass, interactive slide show or drop-down story)? How does your narrative visualization follow that structure? (All of these structures can include the opportunity to "drill-down" and explore. The difference is where that opportunity happens in the structure.)
  - I've used the interactive slide show approach to guide the user through my
    message and show them through three slides analyzing the movie data the
    points I made above.

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• **Visual Structure.** What visual structure is used for each scene? How does it ensure the viewer can understand the data and navigate the scene? How does it highlight to urge the viewer to focus on the important parts of the data in each scene? How does it help the viewer transition to other scenes, to understand how the data connects to the data in other scenes?

In each scene two banners, one above and one below, make the focus the center of the screen where a visualization is laid out next to an analysis of what is going on in the visualization. The visualization is shown on the left and should draw the attention of most first because I wanted the user to look at the visualization and start to draw their own opinions before getting my explanation. But being side-by-side the user can go back and forth. Each of these visualization also have tooltips to allow the user to get more details and the first allows filtering to get a better idea of spread.

 Scenes. What are the scenes of your narrative visualization? How are the scenes ordered, and why

The first scene after the introduction is a scatterplot of movies comparing gross earnings to meta ratings. This scatterplot is also color coded by and allows filtering by decade. This is to allow user to understand the spread of the data, how most films are clustered together rating wise, how earnings and ratings are not correlated, how the gross earnings trends upward with time, and how there are a lot more data points from recent decades. Those last two points are what drive the next to scenes.

In the second scene, a bar chart showing total gross earnings is displayed that shows how decade by decade the gross earnings keeps climbing not only an aggregate basis but on an individual film basis, as shown in the annotations.

And the third scene, shows that there are indeed a lot more recent films in the data set by showing a line graph of the counts of films by decade, suggesting that there is a recency bias.

But the annotations in the second and third scene both also show that the average ratings aren't really changing much decade by decade. And all these points are summarized in the conclusion thereafter.

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Annotations. What template was followed for the annotations, and why that template?
 How are the annotations used to support the messaging? Do the annotations change within a single scene, and if so, how and why

My annotations all follow the same structure. Either on the points in the scatterplot, the bars in the bar chart, or the points on the line graph, a box is displayed that either displays individual statistics in the case of the first scene or aggregate statistic in the case of the second and third scene to further my message that earnings are rising but ratings seem to be staying constant.

• **Parameters.** What are the parameters of the narrative visualization? What are the states of the narrative visualization? How are the parameters used to define the state and each scene?

Internally, decades are color coded so that the same colors are kept throughout all scene to help users make that recognition.

On the first scene however, the user is allowed to filter the scatter plot on decade via a dropdown.

• **Triggers.** What are the triggers that connect user actions to changes of state in the narrative visualization? What affordances are provided to the user to communicate to them what options are available to them in the narrative visualization?

The user switches between scenes using the buttons at the bottom of the screen and can go back to the start using the home button at the top right of the screen, but that just switched between html files.

And as mentioned, on the first scene however, the user is allowed to filter the scatter plot on decade via a dropdown.