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CS 4460  
Lab 7 Description

### **Tasks**

My visualization is intended to help see what movie genres have the highest budgets, as well as the highest gross. Additionally it shows overall investment for a genre (the sum of all budgets for movies that fell under a genre label). And visualizes the overall trends for genres over time.

### **Design**

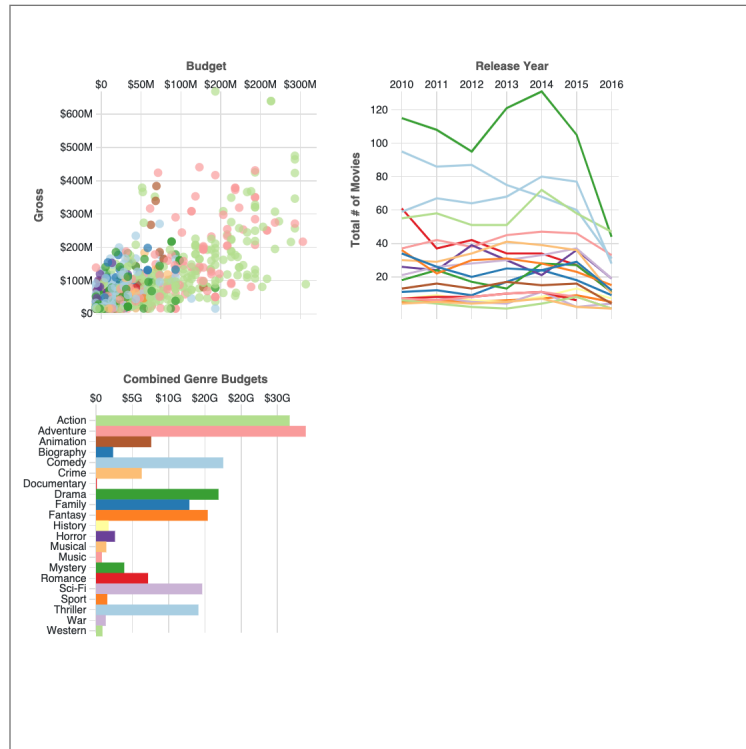
To show what movies have the highest return on investment I have a scatter plot with one axis being investment (budget) and the other being return (gross). This allows outliers to be easily visible as points that appear on the edges of the plot. Points are colored by the first genre label that is associated with the movie in the data, this makes it easier to tell what genres of movies have the most success and the most investment. To make data more visible, specific genres can be selected with the checkboxes. Any movies that are included under the selected genres are then included as data for all plots. Additionally movies can be included/excluded by release year through the slider.

To show overall investment, the bar chart shows the sum of investment for all movies included in the selected genres within the selected year span. This allows the user to explore what genres of movies receive the most investment and over what years.

Last the line chart shows the total number of movies for each genre for each year. Lines are included/excluded by genre checkboxes and data points on the lines are included/excluded by the year selection slider.

## Examples

Here all data is visible. The bar chart makes it clearly visible that action and adventure movies have received the most funding relative to other genres. The line chart shows that drama movies had the largest presence (in terms of total movies released) over the selected time period. The scatter plot also shows that action movies have the most dominant presence in the higher end of movie grossings.



## Range

2010-  
2016



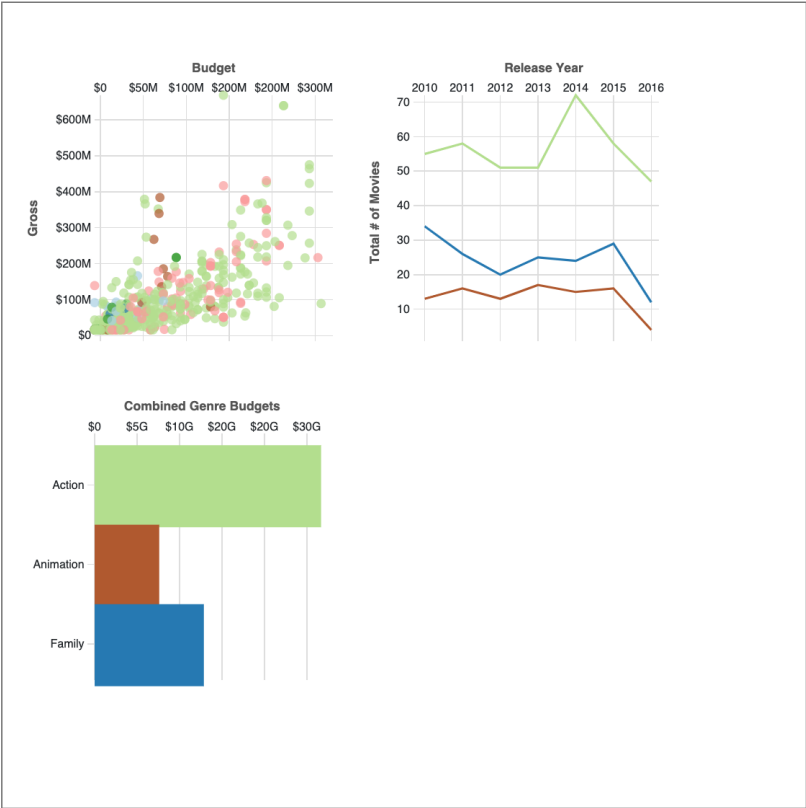
## Genres:

☒ Check All

☐ Uncheck All

- ☒ Action
- ☒ Adventure
- ☒ Animation
- ☒ Biography
- ☒ Comedy
- ☒ Crime
- ☒ Documentary
- ☒ Drama
- ☒ Family
- ☒ Fantasy
- ☒ History
- ☒ Horror
- ☒ Musical
- ☒ Music
- ☒ Mystery
- ☒ Romance
- ☒ Sci-Fi
- ☒ Sport
- ☒ Thriller
- ☒ War
- ☒ Western

Here only points for three genres are displayed (action, animation, and family). The bar chart reveals that action movies received more funding than animation and family movies combined. The line chart shows that in 2014 there was a surge in volume of action movies.



## Range

2010-  
2016



## Genres:

☒ Check All ☐ Uncheck All

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- ☒ Animation
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- ☐ Crime
- ☐ Documentary
- ☐ Drama
- ☒ Family
- ☐ Fantasy
- ☐ History
- ☐ Horror
- ☐ Musical
- ☐ Music
- ☐ Mystery
- ☐ Romance
- ☐ Sci-Fi
- ☐ Sport
- ☐ Thriller
- ☐ War
- ☐ Western

Here a more specific time range is selected. This allows a reduction in points in the scatter plot. Additionally the title to a movie near the edge of the scatter plot (Avengers: Age of Ultron) is visible by hovering over the point.

