Monash University: Assessment Cover Sheet

Student name	Yow	Jesse	
School/Campus	Clayton Campus	**Student's I.D. number**	32794649
Unit name	FIT3179 Data visualisation - S2 2023		
Lecturer's name	Prof Bernie Jenny	**Tutor's name**	Clair Pan
Assignment name	Data Visualisation I Report	**Group Assignment: No** **Note, each student must attach a coversheet**	
Lab/Tute Class: Studio 19	**Lab/Tute Time:** Wed 4-6pm	**Word Count:** 986 words	
Due date: 03-09-2023	**Submit Date:** 04-09-23	**Extension granted** ☐	

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Date: 04/09/23 Signature: ..... *

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Name: Jesse Yow

Student ID: 32794649

Assignment: Data Visualisation 1

a. **URL**: https://public.tableau.com/app/profile/jesse.yow/viz/Visualization1-DCEUBoxOfficeandRatings/FinalDesign?publish=yes
Word Count: 986 words

b. **Domain, Why and Who**

I. **Domain**

Movies - Detective Comics Extended Universe(DCEU) Box Office and Ratings Dataset

II. **Why**

I like watching movies and most of the time, I want to know if a movie should be watched or if it is a waste of my time. There are different types of movie ratings like Metascore, IMDB (Internet Movie Database), rotten tomatoes and audience score. Being a DC fan too, I want to know which DCEU movie succeeded or failed. DC fans or moviegoers that are interested in DCEU movies would want to know if a particular movie did well in the audience eyes or critics eyes or both. Some ratings are bias or skewed due to fan base overrating movies or critics being hard on this genre of movies. Therefore, I am going deeper into analysing the data may show that a movie may have been good or bad overall.

III. **Who**

My target audience are superhero fans, comic book enthusiast, moviegoers and most importantly DC fans. Movie analyst are also welcome to view my visualization.

c. **What**

The dataset used is from Kaggle by the author, Ahmet Kağan Koral who graduated at Koç University has create multiple datasets and has participated in 3 competitions in Kaggle. He has updated the dataset that includes the latest DCEU movie which is 'The Flash' that was released in 15th June 2023. My dataset had to union with itself as it was required to build the radial bar chart. There was not much data cleaning as the data was already cleaned by the author.

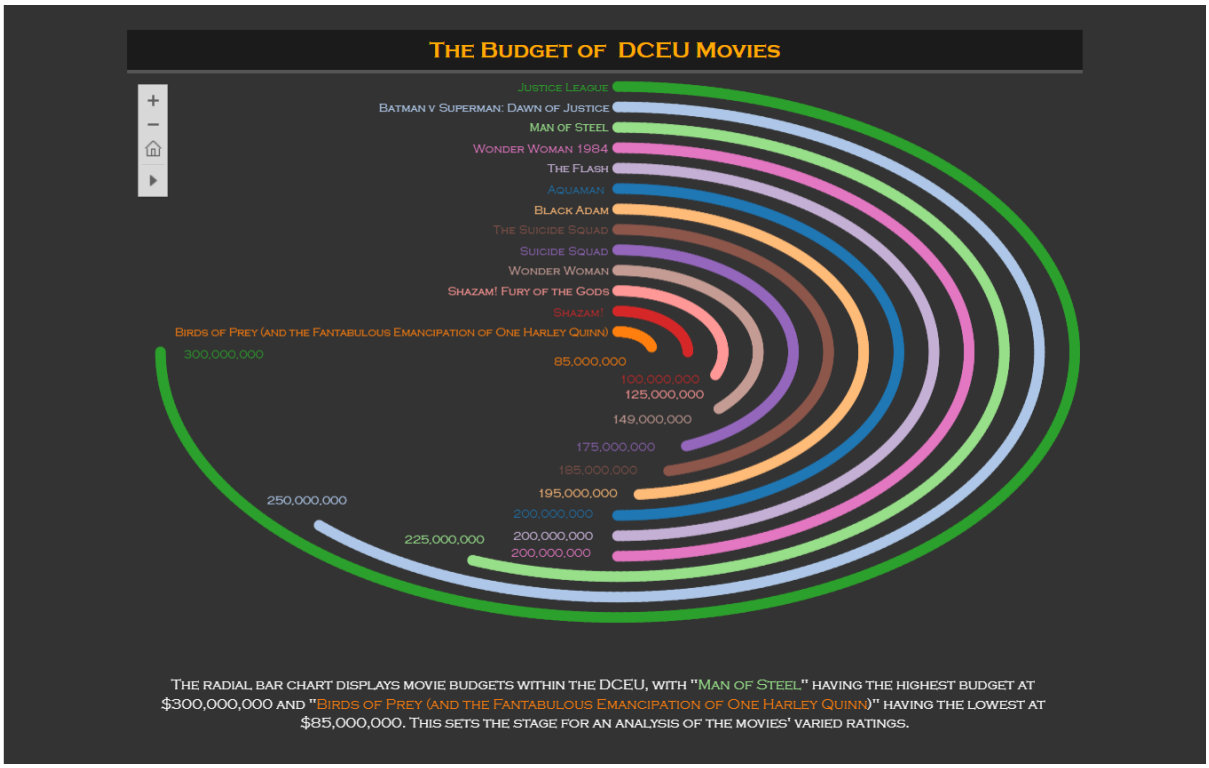
d. **Why and How**

All charts are used as filters so that viewers can easily see a particular DCEU movie's performance. Each image has a URL link to its respective Wikipedia page.

Figure 1: Introduction

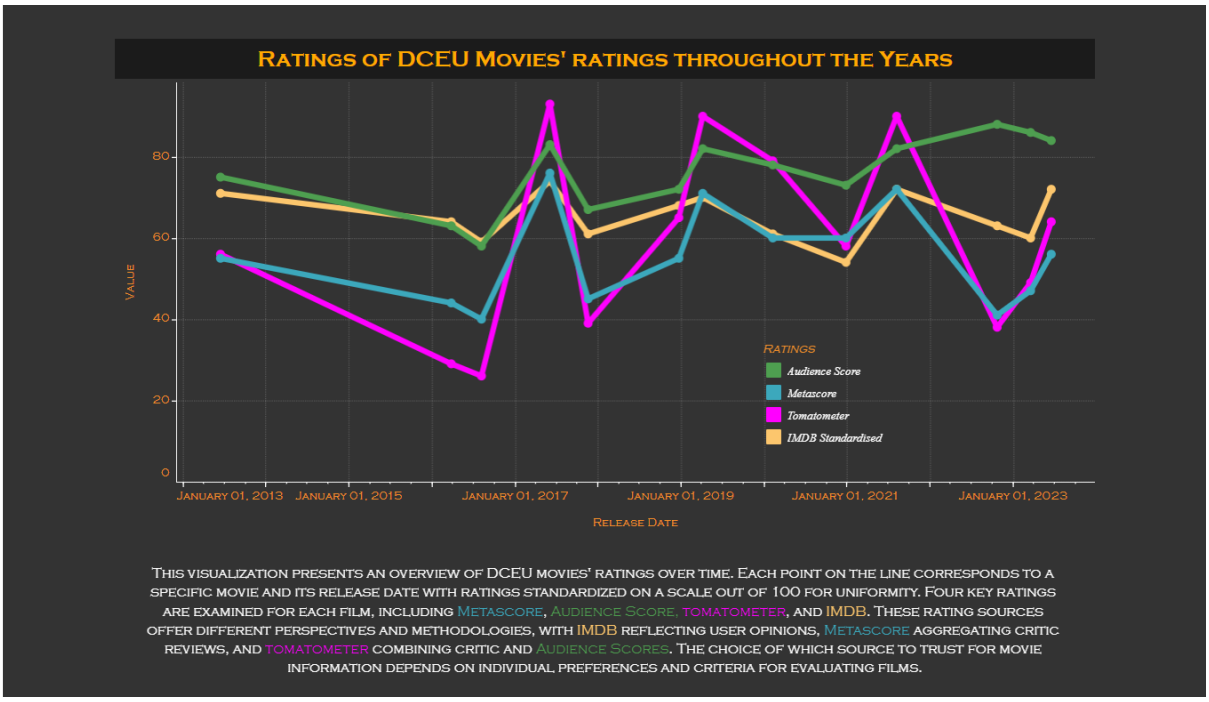
A brief introduction to the DCEU, head title and image is to display the main title of the visualization.

Figure 2: Radial Bar Chart



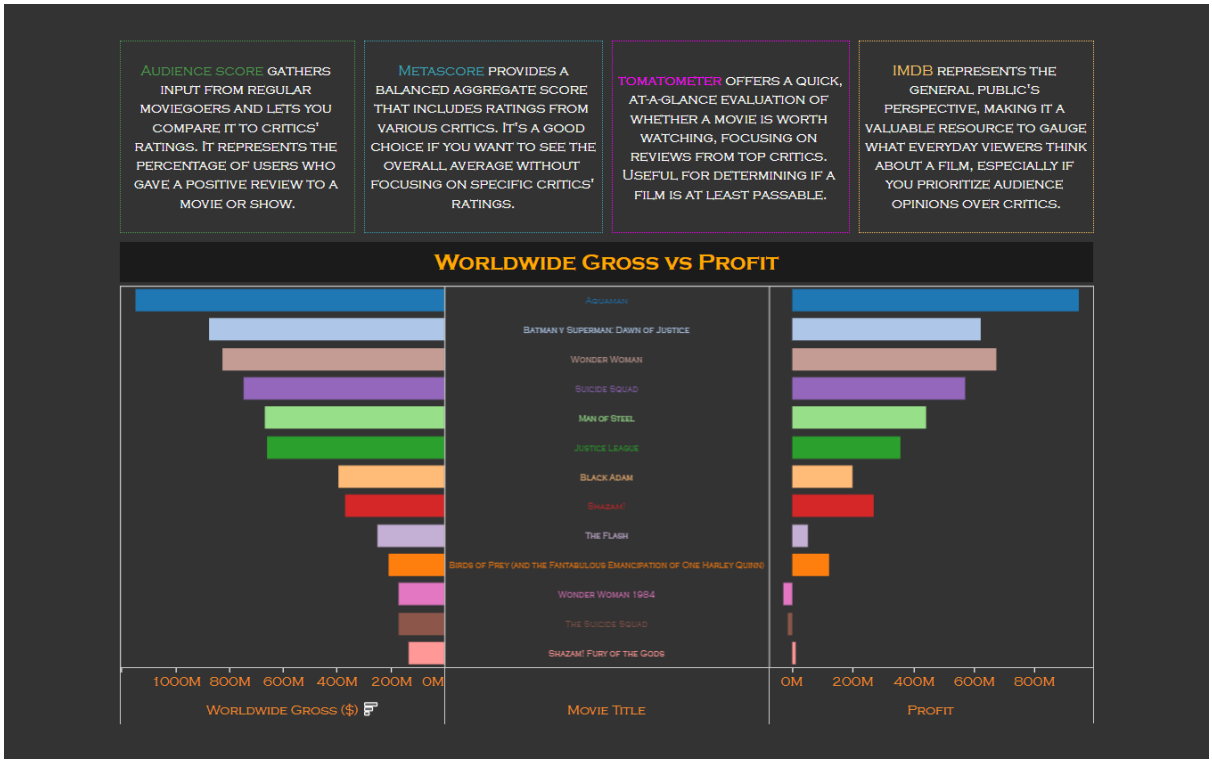
I used a radial bar chart to view the budget of DCEU movies because it enables quick visual comparisons since the bars radiate from a central point, making it simple to compare categories or data points at a glance. For example, viewers can tell that 'Justice League' has the biggest budget. Besides that, it provides a distinctive approach to convey material that can aid in grabbing the audience's attention and promoting understanding. This means that viewers can easily view and understand my radial bar chart.

Figure 3: Line chart



I used a line chart because it can show trends over time. This makes it simple to notice how successive data points change. Here I am able to display 4 types of ratings distinguished by the colour. This allows viewers to analyse how does DCEU movies perform well or badly over time, there are points on the line chart indicating a movie that was released in its respective dates while able to see each DCEU movie perform in each rating category. This can be seen using tooltips when your cursor hovers over each point.

Figure 4: Tornado Chart



I used a tornado chart because worldwide gross and profit can be compared easily to show the effects of various variables or causes. It enables viewers to rapidly determine which factors have the most impact. In this case, viewers are able to tell the difference between worldwide gross and profit of a DCEU movie. At the same time, it is pleasing to see as a viewer due to its tornado like shape. Viewers can use tooltips to view each DCEU movie's worldwide gross and profit. On top of that, viewers can sort ascending or descending order based on worldwide gross or profit.

Figure 5: Bubble Charts - Metascore

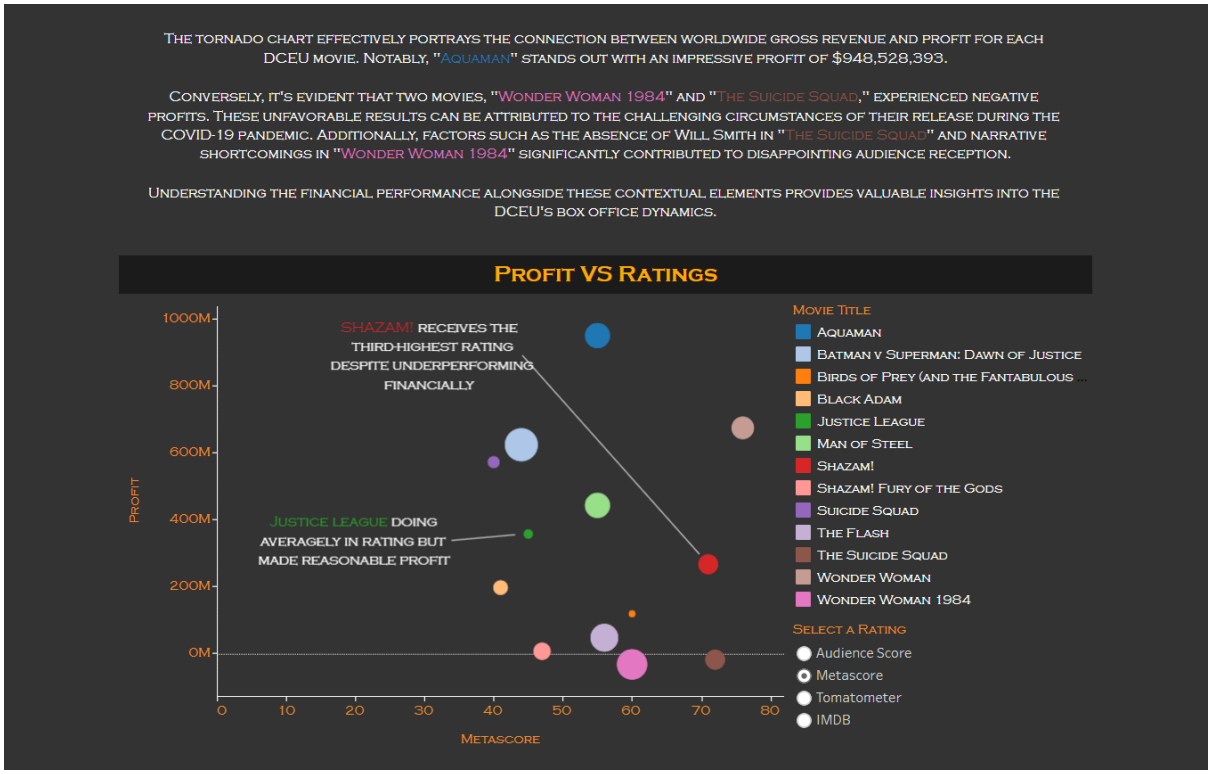


Figure 6: Bubble Charts – Audience Score

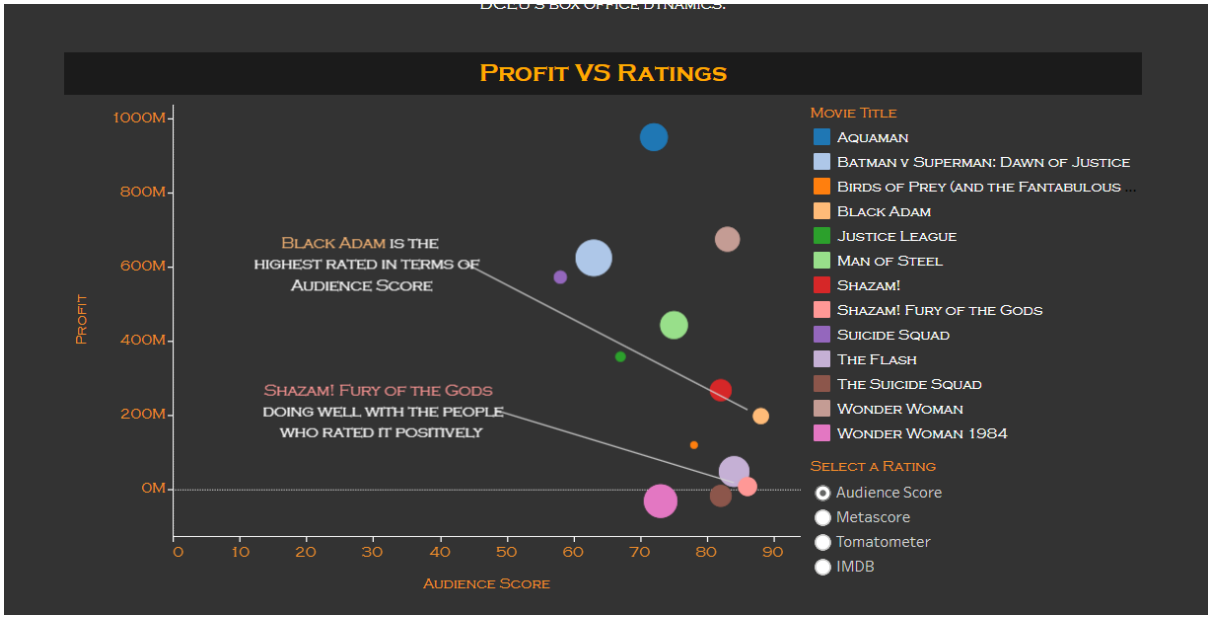


Figure 7: Bubble Charts - Tomatometer

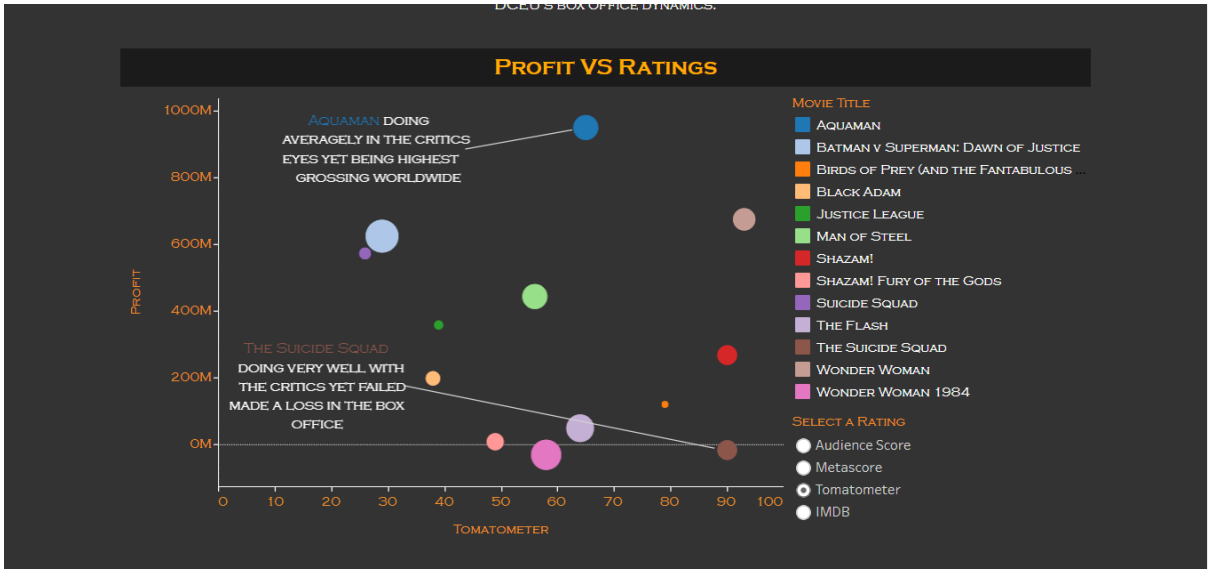
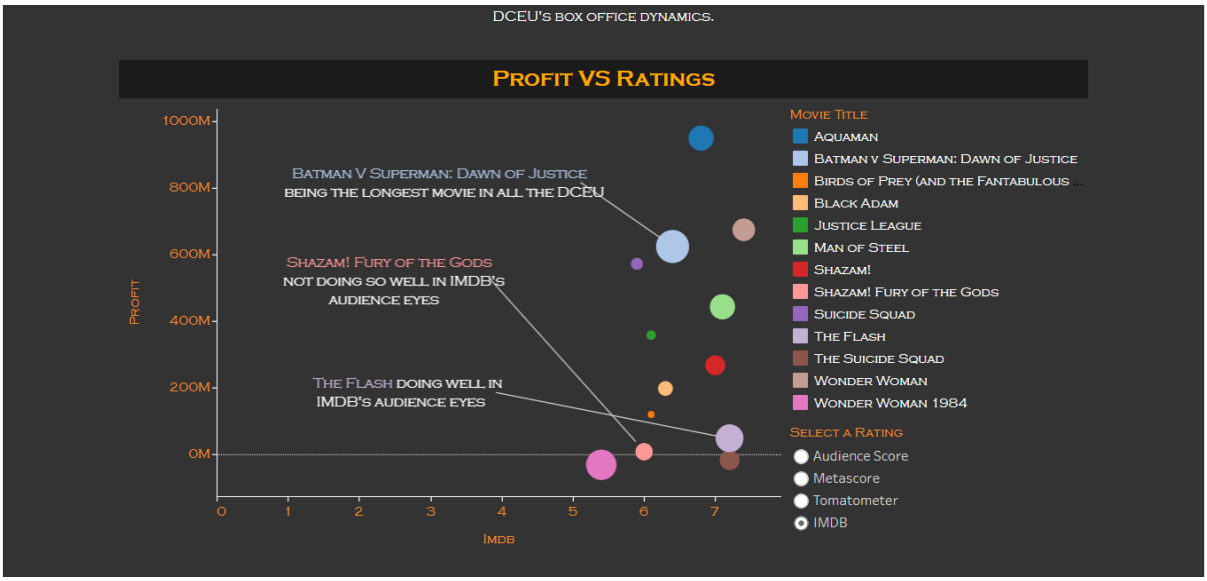
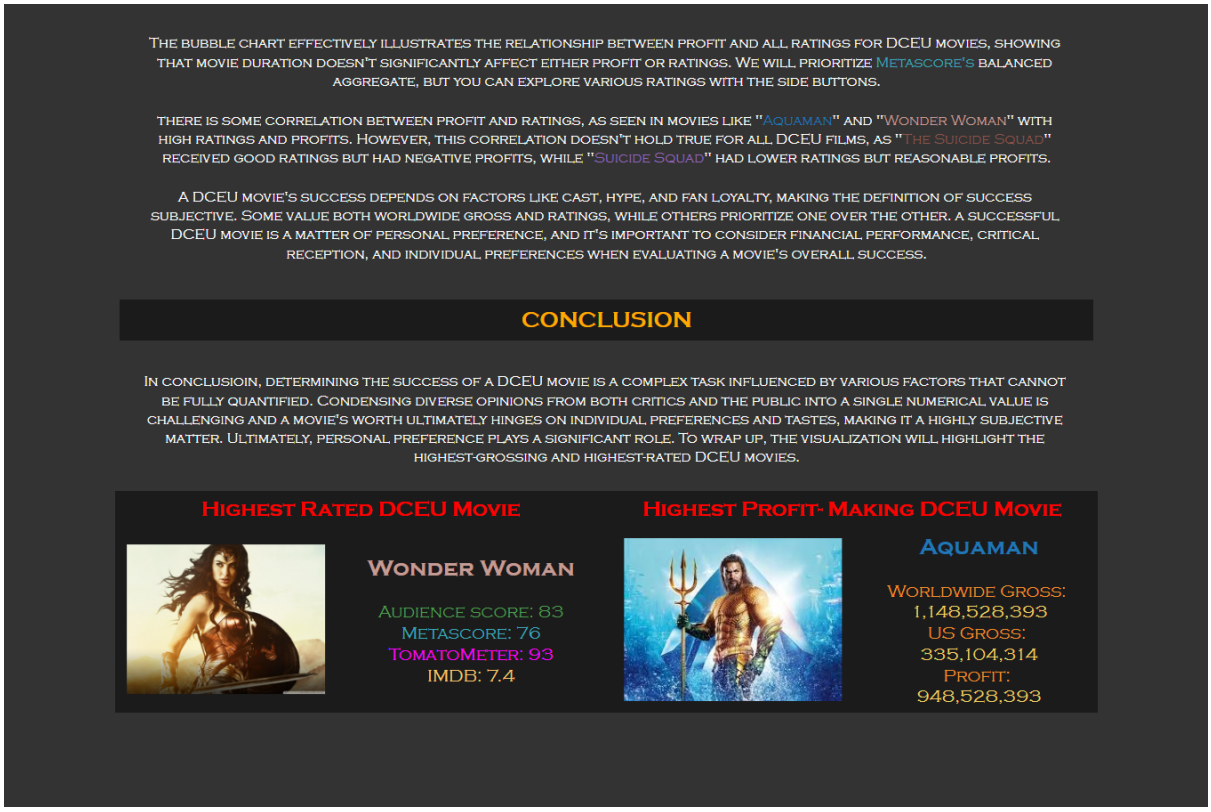


Figure 8: Bubble Charts - IMDB



I used bubble chart because it can display three variables at once two on the x and y axes and a third through the size of the bubbles. Furthermore, it is useful for comparing the values of various data points or groups. As a result, they can be used to visualize complicated, multivariate data. In this case, I am examining profits, rating and the duration of DCEU movie. Viewers can view DCEU movies' profit and their interested rating by selecting on the single value list at the bottom right. In total there are 4 bubble charts here. The legend is also present for viewers easier viewing. Tooltips are shown when hovered on and semi-important information are annotated on different bubble graphs.

Figure 9: Conclusion



I included a small conclusion that wraps up my analysis of this topic. It shows the highest rated DCEU movie and the Highest Profit-Making DCEU Movie.

e. Design

I. Layout

I placed white space at the right and left with a width of 101. The bottom white space has a height of 85. Each text box, image and visualization have consistent inner and outer padding. These provide separation between different elements that reduces visual clutter and makes my visualization organized overall.

II. Colour

My background colour is greyish-black as it is the theme of superheroes. I used colour HUE for the movie titles and the different types of ratings. I also used the same colours for the fonts that will match the visualization colours. The main titles and sub titles also have consistent colours throughout the visualization.

III. Figure-ground

My title, subtitles and texts follow a hierarchy from biggest to smallest font size. Titles and subtitles are bolded showing the importance of it. The consistent font colouring of movie titles also helps viewers to match the text with the visualization. This allows viewers to separate the main subject from the background aiding in the organization of visual information at the same time directing viewers to important elements.

IV. Typography

I used Copperplate Gothic Bold for the main titles and subtitles while using Copperplate Gothic Light for the text. I chose this because it is easy to read and gives the superhero themed vibes.

V. **Storytelling**

My storytelling starts from top to bottom structure as a viewing path. Every section has texts that explains the information from the introduction to the conclusion.

f. Bibliography/list of references

I. McClure, B. (2023, July 4). *Every DCEU Movie, Ranked By Box Office*. CBR. https://www.cbr.com/every-dceu-movie-ranked-by-box-office/#shazam-fury-of-the-gods-2023---133-783-006

II. Stegner, B. (2018, February 21). *IMDb vs. Rotten Tomatoes vs. Metacritic: Which Movie Ratings Site Is Best?* MUO. https://www.makeuseof.com/tag/best-movie-ratings-sites/

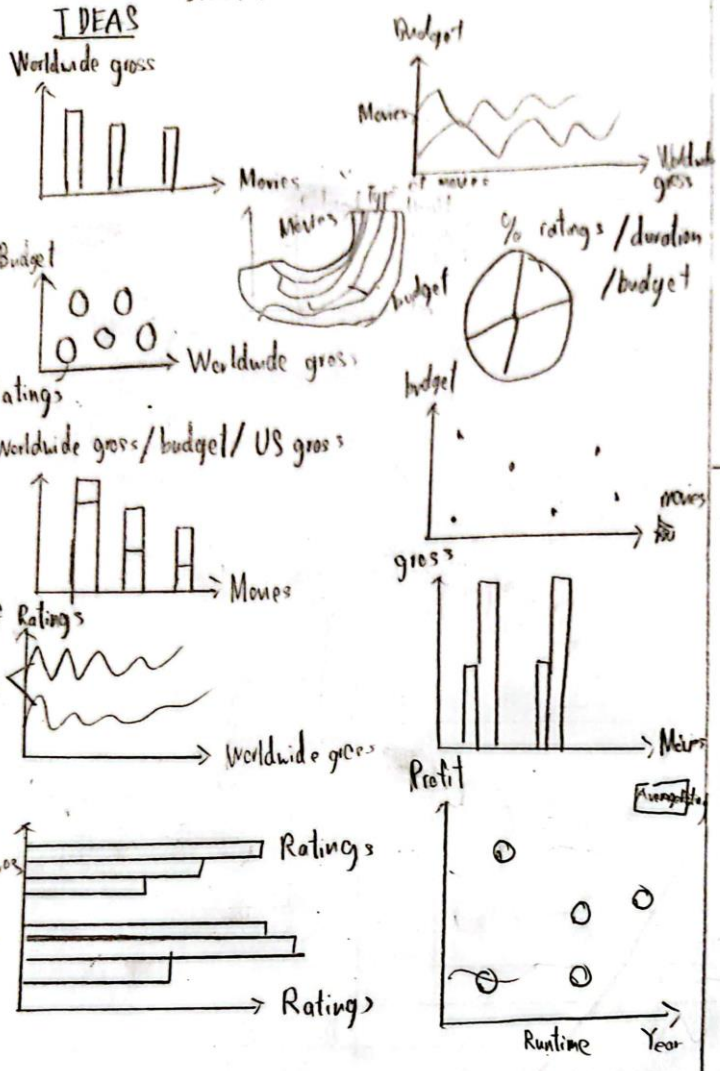
III. *About - Rotten Tomatoes*. (n.d.). Www.rottentomatoes.com. https://www.rottentomatoes.com/about#:~:text=What%20is%20the%20Audience%20Score

IV. *The Data Visualisation Catalogue*. (n.d.). Datavizcatalogue.com. https://datavizcatalogue.com/index.html

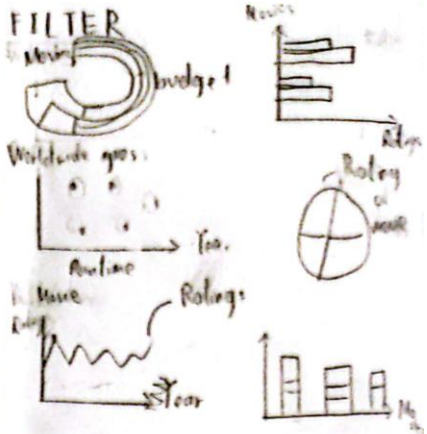
Design 5 Sheets

Sheet 1

IDEAS



FILTER



CATEGORIZE

Budget and release date through time

↓

Different ratings for their respective movie

↓

Chosen rating of respective movies throughout time

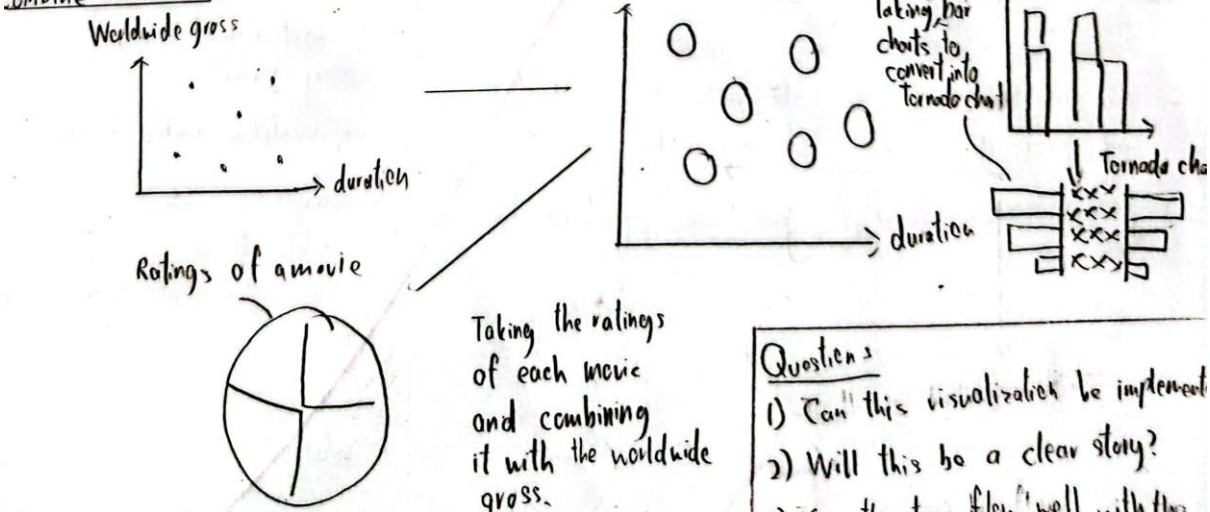
↓

Worldwide gross vs duration with ratings

↓

Budget vs Worldwide gross vs US gross

Combine & Refine

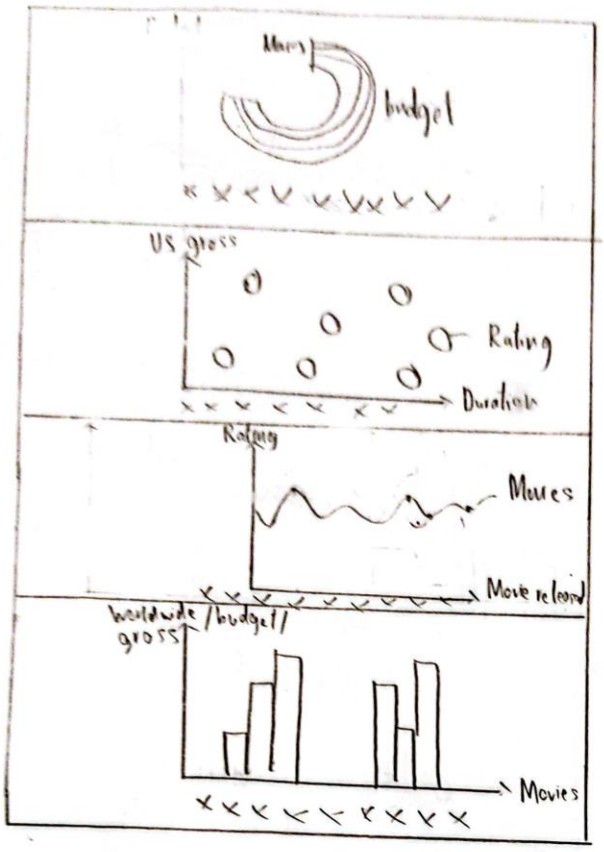


Taking the ratings of each movie and combining it with the worldwide gross.

Questions

1) Can this visualization be implement
2) Will this be a clear story?
3) Can the story flow well with the chosen idioms?

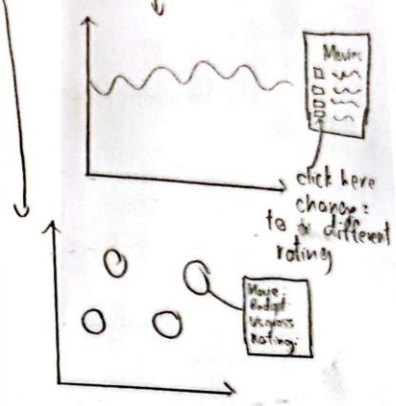
Layout



Title: Narrative Visualization
Author: Jesse Yew
Date: 19-8-23
Sheet: 3
Task: Initial design

Operations

- Bubble chart shows tooltips of each movie's data
- Line chart is able to switch to different ratings



ious

- Simple information that shows the overall information of each movie
- Find out the best rating to view movies and understand the biasness of each rating

Different sections has it own standing information

Discussions

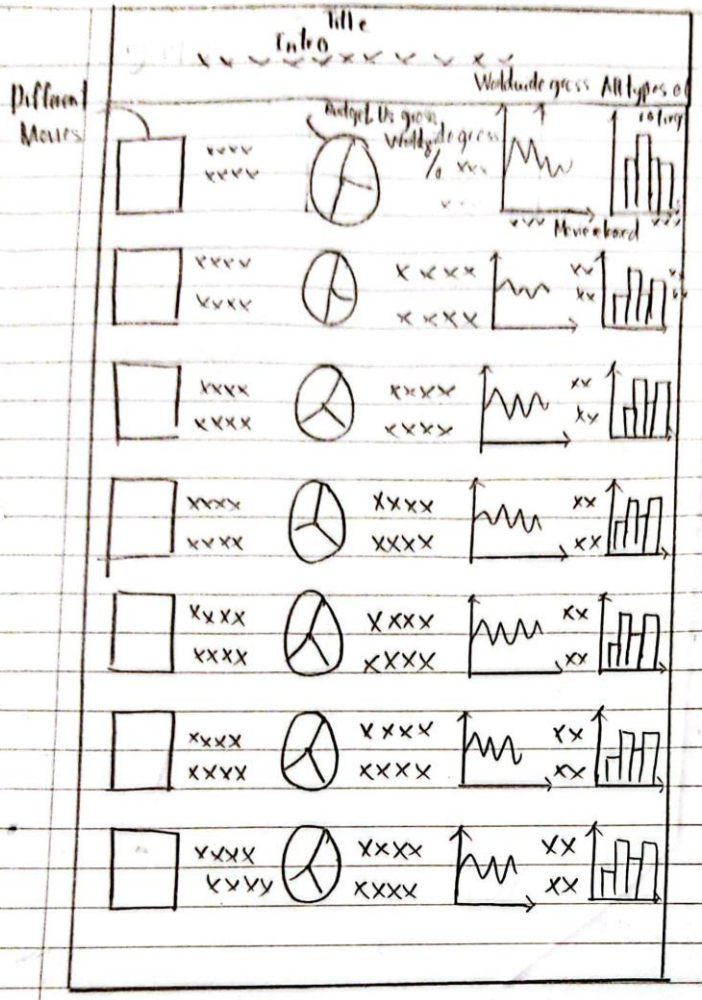
- Different colours to represent each movie
- Informative but may have too many elements
- Implementation looks doable

Advantages:
- Readable story
- Balance of multiple graphs

Disadvantages:
- Might not convey enough information
- Takes up too much space

No.: Layout

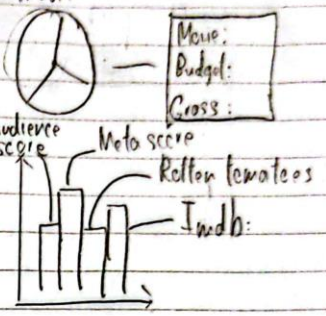
Date:



Title: Dashboard View
Author: Jesse You
Date: 19-8-22
Sheet: 3
Task: Initial design

Operations

- Each chart will have tooltips of its data of its respective movie.



- Each picture of movies has a link to wikipedia of the movie.

Focus

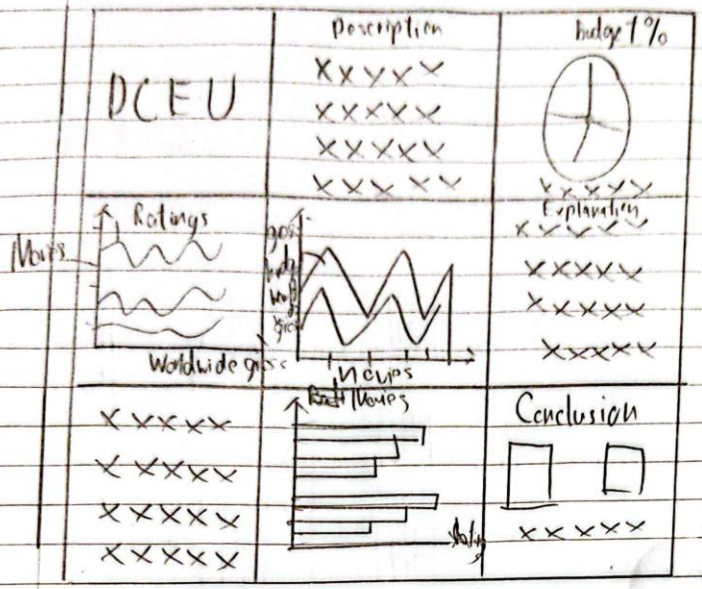
- Focuses on each movie's aspects
- Gives a more visual story
- Analyzes briefly on each data of the movie

Discussions

- Contains a lot of charts
- Overwhelming number of movies?
- Not enough description to understand what we are looking for
- Implementating will be time consuming

No.: Date:

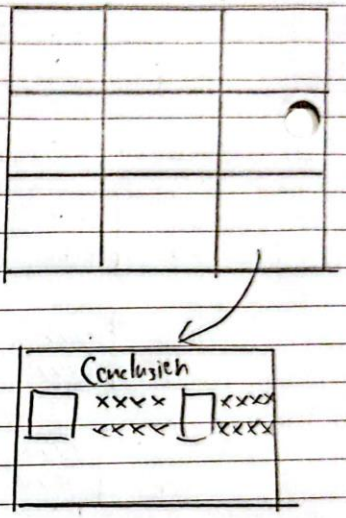
Layout



Title: Full narrative view
Author: Jesse Yew
Date: 20-8-23
Sheet: 4
Task: Illustrical design

Operations

- Each section can be enlarged for better viewing



- Each section has toolstip for its chart

Focus:

- Each section shows different information
- Able to focus on the story of the visualization
- Colours will be varied for a nice visual

Discussions:

- Ordered which gives a nice looking visualization
- May not be informative
- Can be overwhelming at first glance

No.:

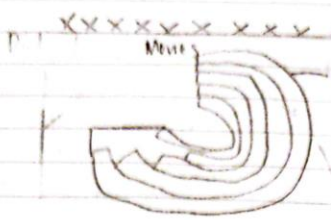
Date:

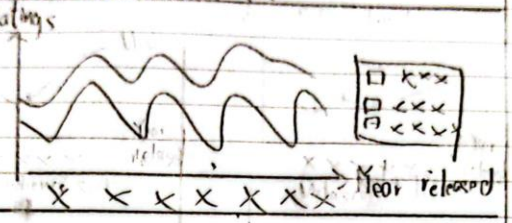
Layout

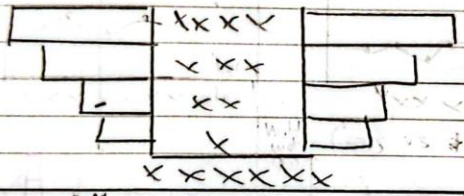
Introduction —

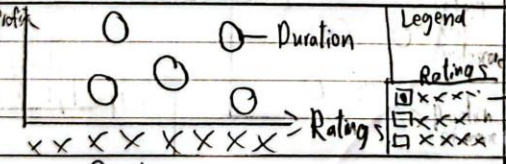
DCEU Movies

Budget —



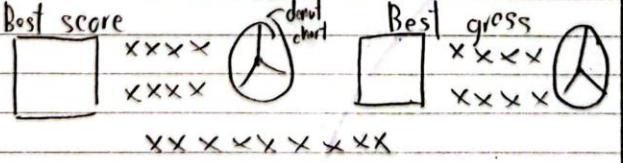






Conclusion —

Conclusion



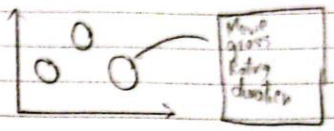
Focus

- From start to end, there will be a flow of story telling
- Each section has its own focus on another aspect
- Able to deeply analyze the different datas of each movie.

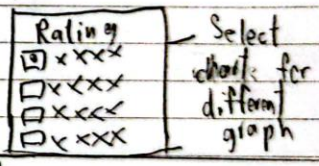
Title: Final Design Sheet
Author: Jesse Tew
Date: 22-8-23
Sheet: 5
Task: Final Implementation Design

Operations

- Tooltips for all charts



- Each small section can be enlarged for better viewing
- Pictures in conclusion have links to Imdb site



Details:

- Database implemented using CSV files
- Estimated time to build at least one week
- Certain visualization will be larger for more clarity
- Combined sheet 2, 3 and 4 together