

ISSS608

*Visual Analytics and Applications*

*Jan 2023 – Group 13*

*Visual Analytics Project*



*Movie Analysis And Prediction*



*User Guide*

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## 1. Overview

This app serves the trends and analysis to explore movie data and get insights.

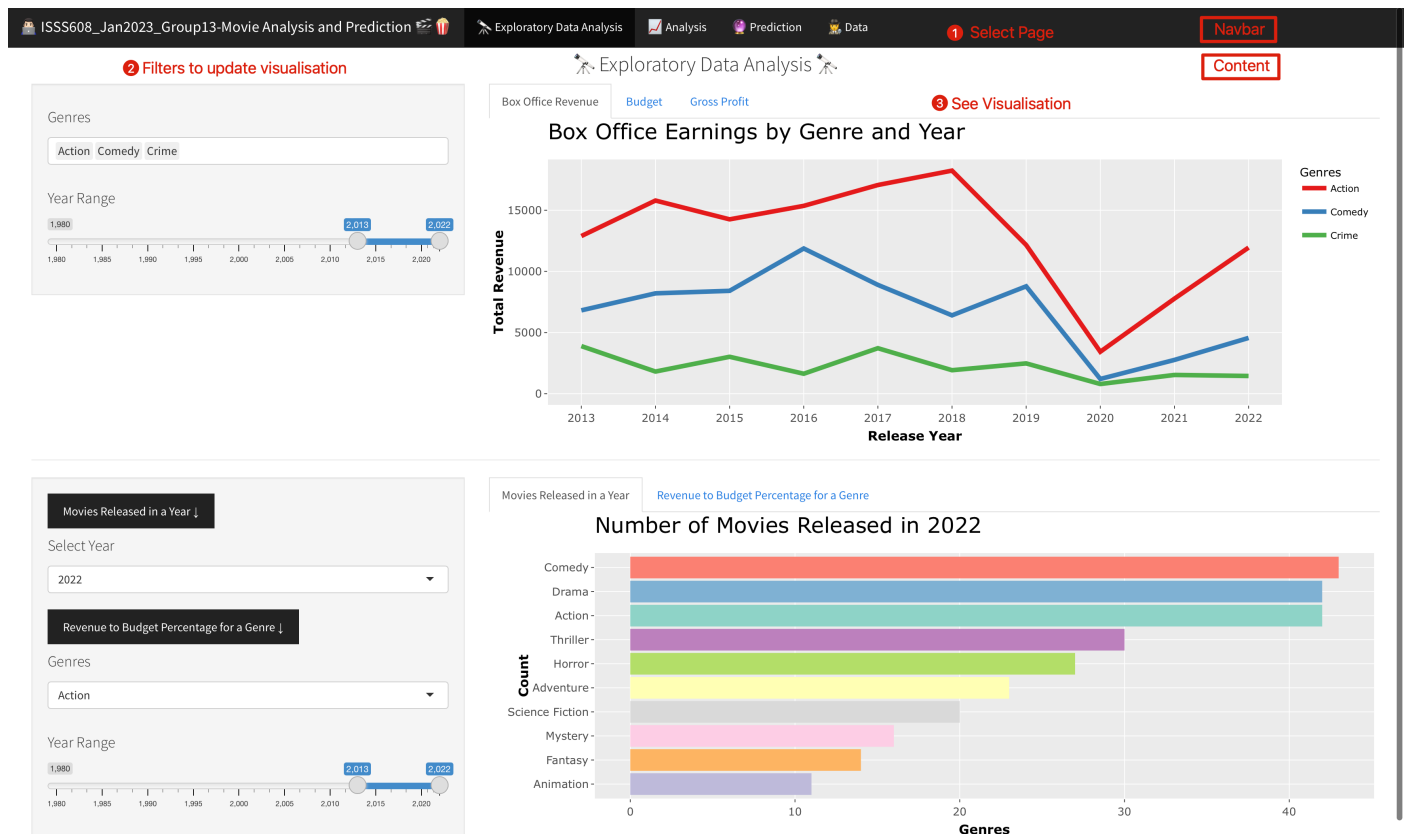
The app has 4 pages:

1. Exploratory Data Analysis (EDA)
2. Analysis
3. Predictions
4. Data

Use the navbar to navigate to the desired visual plot.

Each page may have different filters to choose from. These filters can help to restrict the data and get pots based on selection.

These filters can be found on the left side of the page and right side plots get affected based on the selection automatically.



All visualisation have many different features like hover to view values, zoom-in, zoom-out, download etc.

Genre selection can be selected from list or typed out to filter list of available selections.

## 2. Exploratory Data Analysis (EDA)

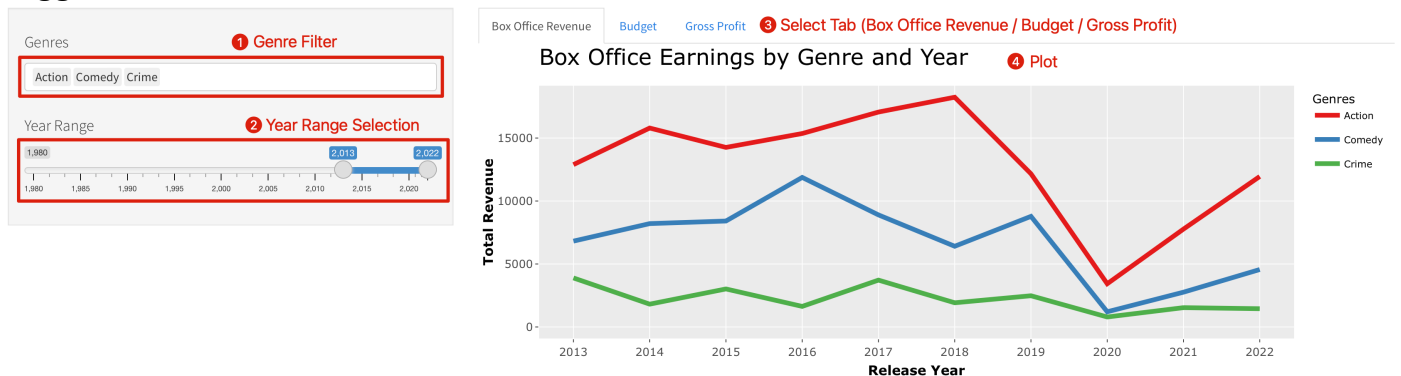
EDA contains following plots:

In the first half, there is Box Office Revenue, Budget and Gross Profit tab where data can be filtered based on Genre and Date Range selection.

Genre Filter can have maximum of 5 selection.

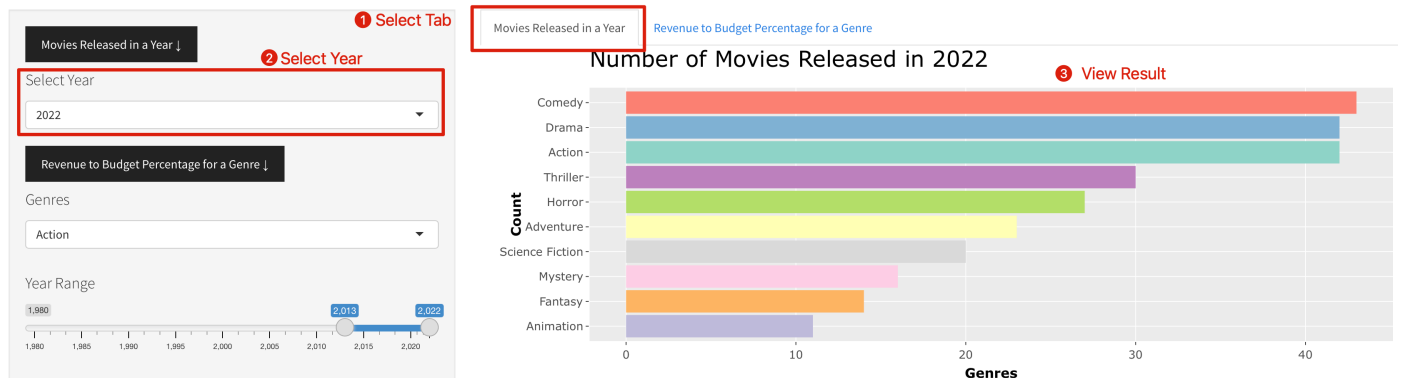
Date Range can be selected from 1980 to 2022.

Toggle different tabs to see data based on the tab selected.

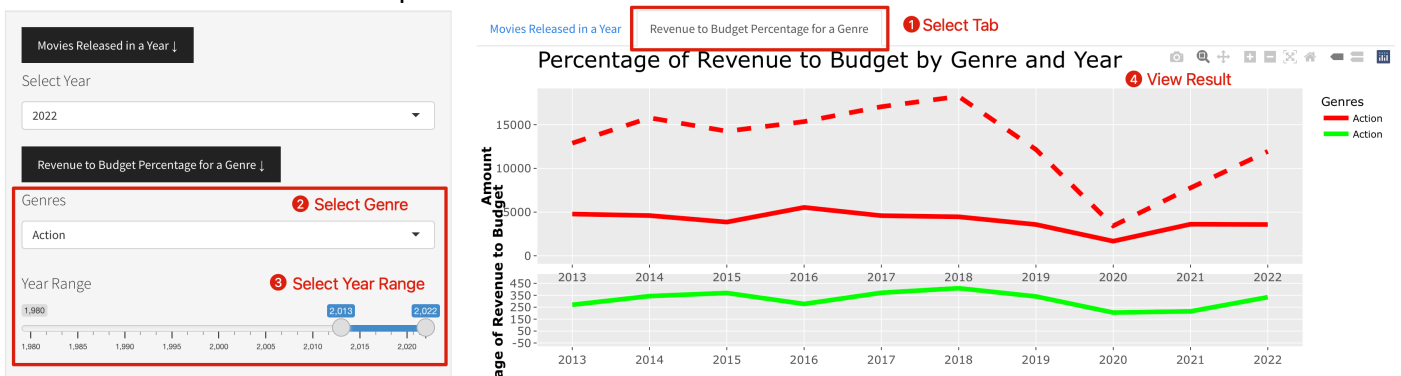


In the second half, there are 2 tabs:

**Movie Released in a Year**, Select the Year from left side menu. Result will be updated based on selection.



**Revenue to Budget Percentage for a Genre**, Select tab, select the filter criteria Genre and Year Range from left side menu. Result will be updated based on selection.



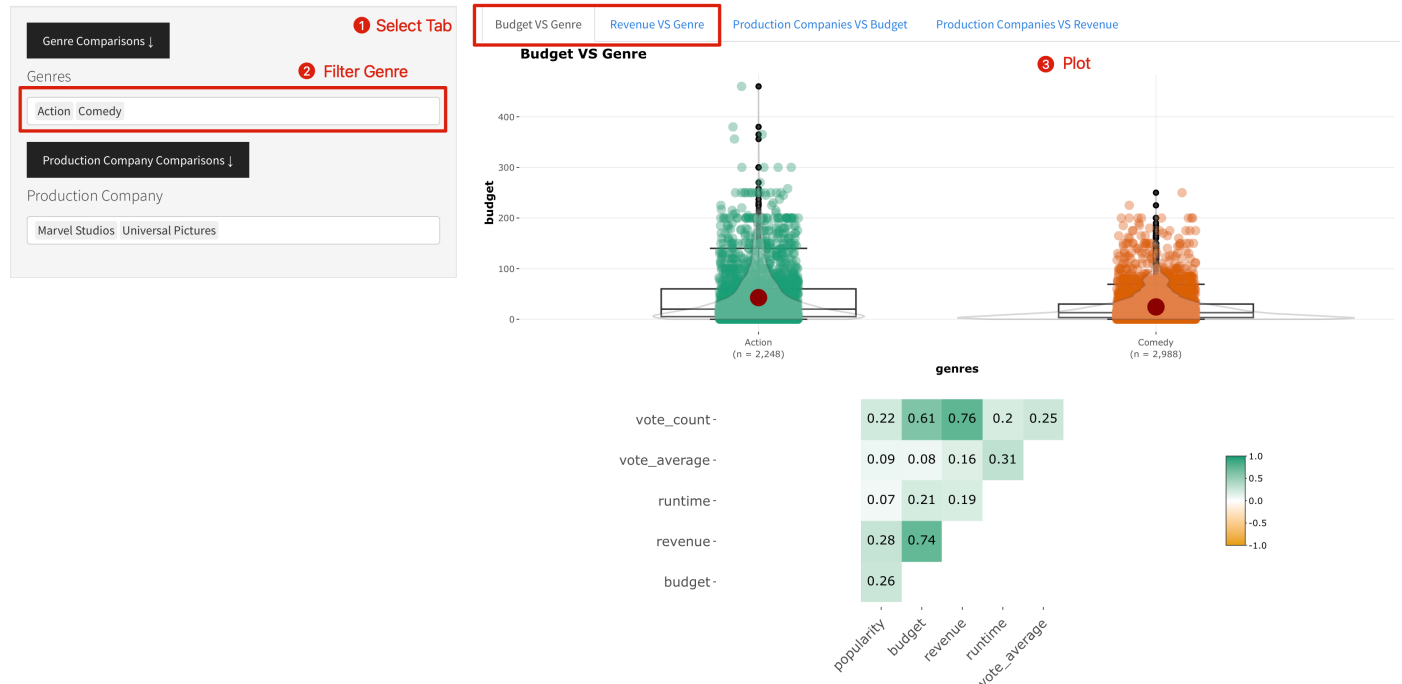
### 3. Analysis

Analysis have 2 types of Tabs:

#### Budget VS Genre and Revenue VS Genre

Select the tab for plot. Select Genres to filter and the plots will be updated with filtered data.

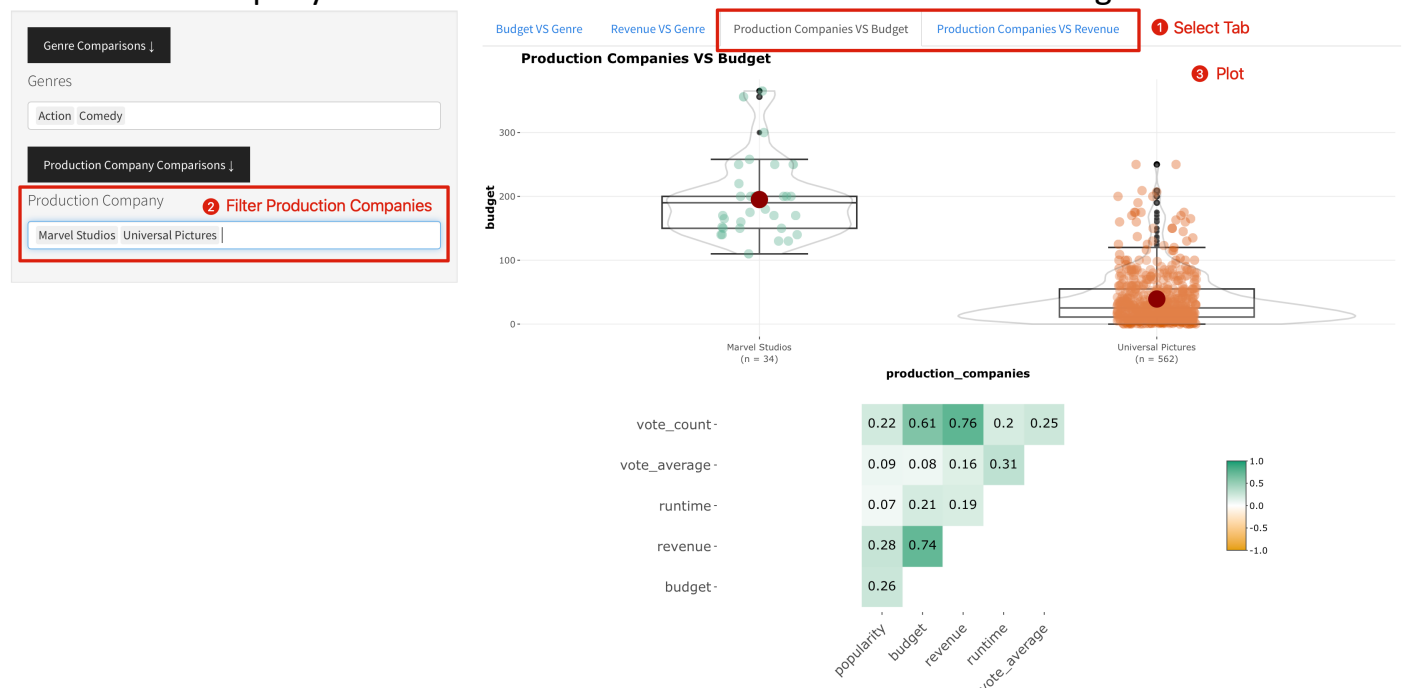
Genre selection has two as the maximum limit for filtering.



#### Production Companies VS Budget and Production Companies VS Genre

Select the tab for plot. Select Production Companies to filter and the plots will be updated with filtered data.

Production Company selection has two as the maximum limit for filtering.



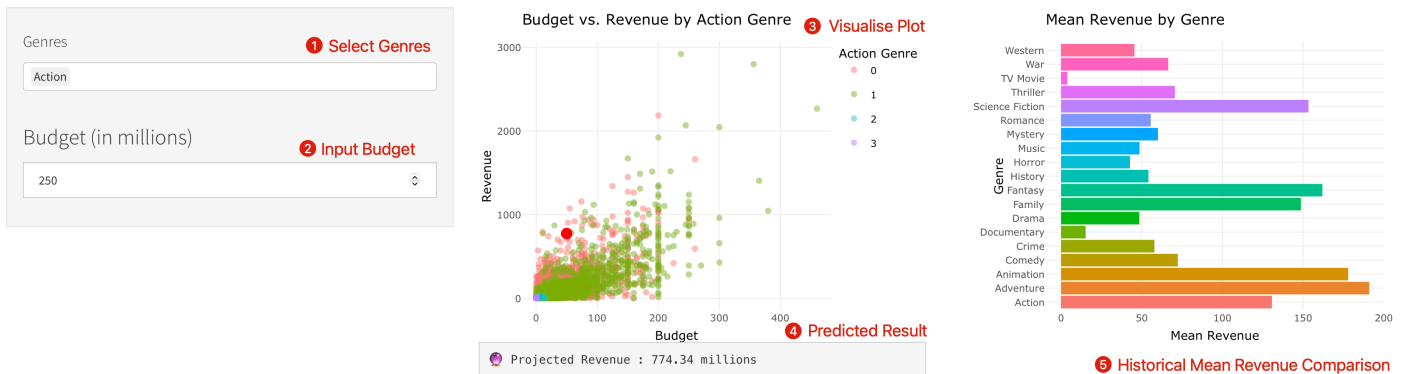
## 4. Prediction

Prediction Page has a Revenue Prediction based on Budget and Genre selection.

Select Genres (max up to 5) and input the budget (in millions). The plot will update the prediction with a red dot highlighting the prediction of revenue for the specified filters.

Projected Revenue is also printed as text.

Historical mean revenue by Genre can be used for comparing it with the predicted revenue.



## 5. Data

Data page allows to view the raw data used in the app.

On the left side, there is option to select no of entries per page.

On the right side, there is search box to filter rows if the keyword is found.

The Data table can be viewed and can be sorted (Ascending / Descending) by any available column by clicking on the column name.

Show 10 entries

Select entries per page

Data

1 Input search keyword

Search: Robert downey jr

3 View Data

4 Sort by column

	title	genres	original_language	release_date	budget	revenue	runtime	status	credits	keywords
33	Avengers: Infinity War	Adventure,Action,Science Fiction	en	2018-04-25	300	2046.239637	149	Released	Robert Downey Jr.,Chris Hemsworth,Mark Ruffalo,Chris Evans,Scarlett Johansson,Benedict Cumberbatch,Tom Holland,Chadwick Boseman,Don Cheadle,Zoe Saldana,Karen Gillan,Elizabeth Olsen,Paul Bettany,Anthony Mackie,Sebastian Stan,Tom Hiddleston,Idris Elba,Danai Gurira,Peter Dinklage,Benedict Wong,Pom Klementieff,Dave Bautista,Vin Diesel,Bradley Cooper,Gwyneth Paltrow,Benicio del Toro,Josh Brolin,Chris Pratt,Sean Gunn,William Hurt,Letitia Wright,Terry Notary,Tom Vaughan,Lawlor,Carrie Coon,Michael James Shaw,Stan Lee,Winston Duke,Florence Kasumba,Kerry Condon,Monique Ganderton,Jacob Batalon,Tiffany Espensen,Isabella Amara,Ethan Dizon,Ariana Greenblatt,Ameenah Kaplan,Ross Marquand,Michael Anthony Rogers,Stephen McFeely,Aaron Lazar,Robert Pralgo,Olaniyun Thurmon,Blair Jasin,Matthew Zuk,Laura Miller,Kenneth Branagh,Samuel L. Jackson,Cobie Smulders,Harrison Osterfield,Gary Peebles,Marija Abney,Zola Williams,Marie Mouroum,James Siderits,Precious Jenkins	magic,sacrifice,superhero,based on comic,space,battlefield,genocide,magical object,super power,aftercreditsstinger,mavel cinematic universe (mcu),cosmic

Robert Downey Jr.,Chris Evans,Mark Ruffalo,Chris Hemsworth,Scarlett Johansson,Jeremy Renner,Tom Hiddleston,Samuel L. Jackson,Cobie Smulders,Clark Gregg,Stellan Skarsgård,Gwyneth Paltrow,Paul Bettany,Alexis Denisof,Tina Benko,Jerzy Skolimowski,Kirill Nikiforov,Jeff