## **Movie Success Prediction and Sentiment Study**

#### **Student Name & Date**

Saisruthi - 16.05.25

### **Project Objective**

The goal of this project is to predict how successful a movie will be at the box office using available metadata such as budget, genre, and viewer ratings. In future stages, sentiment analysis using viewer reviews will be added to enhance prediction accuracy and insights.

### **Tools and Technologies Used**

Python, Google Colab, pandas, matplotlib, seaborn, numpy, IMDB Dataset (Kaggle). Future enhancements will use VADER for sentiment analysis and regression models from scikit-learn.

#### **Steps Completed**

- 1. Project created and setup in Google Colab.
- 2. IMDB Top 1000 Movies dataset loaded and inspected.
- 3. Null values, data types, and column-wise insights reviewed.
- 4. Initial data visualization for genres, ratings, and budget.
- 5. Implement VADER-based sentiment analysis on movie reviews.
- 6. Build a regression model to predict movie box office success.
- 7. Add genre-wise sentiment trends and visualizations.
- 8. Finalize and document all results.

### Conclusion

The project has made solid progress in EDA and setup. With additional work on sentiment analysis and prediction modeling, it will provide a comprehensive insight into movie success factors.

# **THANK YOU NOTE:**

I sincerely thank Elevate Labs for this valuable internship opportunity. This project has helped me strengthen my data analysis and machine learning skills, and I am grateful for the learning experience.