MIS 515 First Deliverable

Group 1: Ben Schram, Michael Boyd, Prajakta Wankhede, Venkata Narayana Mallineni

Executive Summary:

Highlights of project, objectives, and keys to success

Our company, the Info Avengers, is embarking on a transformative project to develop a movie analytics platform designed to revolutionize how both movie enthusiasts and industry professionals interact with film data. By leveraging extensive datasets from The Movie Database (TMDB) and the Internet Movie Database (IMDb), the platform will deliver personalized movie recommendations and comprehensive analytics insights.

Our objectives are threefold: (1) to use TMDB and IMDB data to offer tailored movie suggestions; (2) to gauge public and critic reactions and predictive modeling to forecast the success of future film projects through sentiment analysis; and (3) to use user engagement with this platform to collect input choices for actors, directors, producers, et cetera to predict potential successful collaborations based on historical data.

To achieve this, we will utilize a detailed dataset incorporating over 1 million entries across 42 features originating from both TMDB and IMDb, including information such as budget and revenue, genre and release year, public and critic ratings, and more to facilitate the development of informed decision-making and deeper engagement through our platform.

Description of Business:

What is our company doing in this project – Movie Analytics Platform

We plan to develop a Movie Analytics Platform that will change how movie-lovers and industry professionals engage with film data. Our technology uses large datasets from TMDB (The Movie Database) and IMDB (Internet Movie Database) to provide personalized movie recommendations and in-depth analytical insights.

In addition, we want to incorporate advanced analytical abilities such as sentiment analysis to evaluate public and critics reactions more accurately, as well as predictive modeling that predicts the success of future film projects based on existing data. Users will also be able to choose their choice of actors, directors, and production firms, allowing the system to predict the possibility of successful movie collaborations based on previous success.

Project Detail:

Throughout this project, our goal is to act as Movie Analytics Company. We will be using a large IMBD movie dataset containing over 1 million rows with 42 columns describing in-depth movie data such as box office numbers, viewer ratings, actor and directory information, among other things. We will be able to provide many useful insights while utilizing this dataset as seen below:

- Most Profitable Movies
- Movie Viewer Rankings by Genre
- Actor & Director rankings based on Average Rating and/or Box Office Revenue
- Movie Rankings by Release Year
- Hidden Gems (High Voter Rating & Low Viewership)
- Profitability (Comparing Budget against Revenue)
- Potential Sentiment Analysis

These are just a few of the analytical questions that we will be able to visualize using our IMBD dataset. In doing so, we can hopefully create some sort of dashboard to visualize many of these insights. Python, SQL, and possibly Tableau could all be very helpful tools in getting started with this project. However, we also have hopes of utilizing the tools that we learn about throughout this course to assist in enhancing our project.