**Data Illuminators Project 3**

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**Title: Analysing the IMDB Top Movies**

**Introduction:**

The IMDB Top Movies dataset contains a collection of the highest-rated movies of all time, as voted by users of the renowned movie database website. In this data analytics project, we will leverage various tools and technologies to perform an in-depth analysis of the IMDB Top Movies dataset. Our project will demonstrate proficiency in different tools learned in the past weeks in the data analytics course, such as Python Flask–powered API, HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.).

**Objectives:**

1. The objectives of this project are to:
2. Create a Flask-powered API to access the IMDB Top Movies dataset.
3. Use HTML/CSS and JavaScript to create a dashboard page with multiple charts that update from the same data.
4. Explore the dataset to answer the following research questions:

a. ~~What are the top 10 movies in each genre?~~

b. Is budget correlated to movie rating?

c. Is budget correlated to box office performance?

d. What genres require the most budget?

e. Which genres have been the most profitable in the past decade?

f. Which actors have the most appearances in the data?

Who is the Project for? Film Investors

Visualizations for the dataset

* Movie Budget vs Box Office Gross – Scatter Plot
* Which genre requests the most budget – Bar Graph
* Is budget correlated to box office performance?

Bar graph showing an average profit for various levels of budget.

The objective of this project is to demonstrate the proficiency in different tools learned in the past weeks in the data analytics course such as Python Flask–powered API, HTML/CSS, JavaScript, and at least one

database (SQL, MongoDB, SQLite, etc.).

The project includes a dashboard page with multiple charts that update from the same data.

The project is powered by a dataset consisting of the top movies from IMDB by rating.

The following are the questions explored in the project:

1. What are the top 10 movies in each genre?
2. Is budget correlated to movie rating?
3. Is budget correlated to box office performance?
4. What genres require the most budget?
5. Which are the most popular movies by decade?
6. Which actors have the most appearances in the data?