

Database Systems Assignment: Pixar Films Analysis

Overview

Pixar Animation Studios has provided a structured dataset (`pixler dataSet.xlsx`) containing information about their films, including financial data, critical reception, genres, crew members, and awards. The dataset consists of 7 normalized tables, as described in the provided data dictionary.

Your task is to import the dataset into your preferred SQL application and write SQL queries to answer the following analytical questions.

Instructions

1. Import the Excel file into your SQL environment (e.g., MySQL, PostgreSQL, SQLite).
2. Create the database and tables according to the structure in the Excel file and data dictionary.
3. Use SQL to answer each question below.
4. Format all monetary values in **millions of USD** (e.g., 394000000 \rightarrow 394.0).
5. Format percentages with **one decimal point** (e.g., 75.83 \rightarrow 75.8%).

Grading (Total: 10 Marks)

Task 1: Financial Performance (1.5 Marks)

Write a query to list all films with the following information:

- Title
- Release year
- Budget (in millions)
- Worldwide gross (in millions)
- ROI percentage

Conditions:

- Exclude films with missing or zero budgets
- Sort results by ROI in descending order

Task 2: Award Analysis (1.5 Marks)

For films that won at least one Academy Award, list:

- Title
- Number of awards won
- Total nominations (including wins)
- Win percentage Sort the results by win percentage in descending order.

Task 3: Genre Profitability (2.0 Marks)

Identify the five most profitable subgenres. For each subgenre, report:

- Subgenre name
- Average worldwide gross (in millions)
- Number of films in that subgenre

Conditions:

- Only include subgenres that appear in at least 3 films
- Sort by average worldwide gross in descending order

Task 4: Director Impact Study (1.5 Marks)

For directors who have worked on two or more films, provide:

- Director name
- Average Rotten Tomatoes score
- Average worldwide gross (in millions)
- Average IMDb score Sort the results by average worldwide gross in descending order.

Task 5: Franchise Comparison (2.0 Marks)

Compare the performance of the following film series: Toy Story, Cars, and Finding Nemo/Dory. For each franchise, provide:

- Franchise name (base title without numbers)
- Total number of films
- Total worldwide gross (in millions)
- Average runtime (in minutes) Sort by total gross in descending order.

Task 6: Budget Category Analysis (1.5 Marks)

Group all films into the following budget categories:

- Low (budget < \$100M)
- Medium (\$100M–\$150M)
- High (budget > \$150M) For each category, calculate and report:
- Budget range label
- Average Metacritic score
- Average worldwide gross (in millions)
- Number of films in the category

Submission Instructions

- Submit screen shots of your SQL queries .
- Clearly label each query using comments (e.g., -- Task 1)