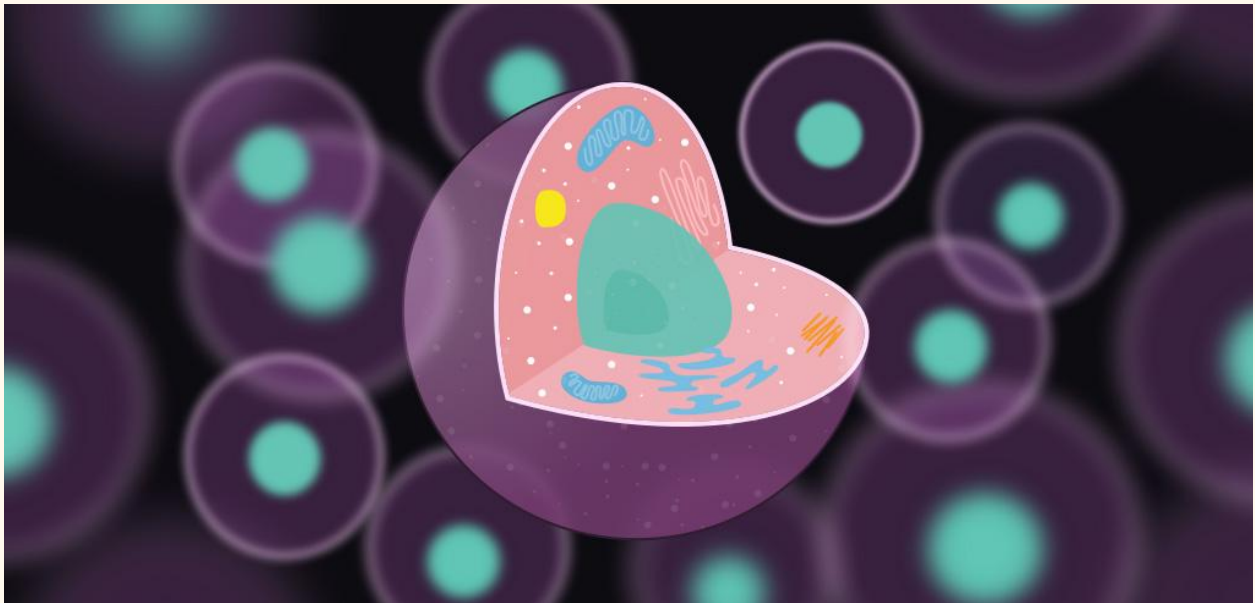


DATA & APPLICATIONS PROJECT REPORT

TEAM: DEOXYRIBONUCLEIC_ACID_2 (TEAM 27)



INTRODUCTION

The project is designed to facilitate the management of comprehensive information about the Academy Awards, commonly known as the Oscars. The project defines strong entities such as Movies, Songs, and Artists, each with their attributes and relationships. It also accounts for weak entities like Characters and Family Members, enabling the storage of further details. With a focus on functionality, it supports data insertion, updates, deletions, and various retrieval and analysis operations, making it a robust framework for users to explore and analyze the world of the Academy Awards

COMMANDS

The following commands are available to the user:

1. Modify the Database
2. Retrieve the Database
3. Exit

Modify Commands

A. Insertion

- a. Insert Ceremony
- b. Insert Movie
- c. Insert Song

B. Updation

- a. Gross Income of a Movie
- b. Win Status of a Movie

C. Deletion

- a. Movie
- b. Song

Retrieve Commands

1. Selection

- a. List of categories a particular movie has been nominated to
- b. List of all movies grossing more than a particular amount (in US\$)
- c. List of movies that have won an award in a particular category
- d. List of years ceremony was hosted at a particular venue

2. Projection

- a. List of movies that have won more than 0 awards
- b. List of actors / singers in a particular movie
- c. List of songs in a particular language

3. Aggregate

- a. Average budget of all the movies
- b. Highest gross income of a movie

- c. Total number of movies in each year
- d. Maximum number of awards won by a movie
- e. Maximum number of awards won by an actor

4. Search

- a. Artist
- b. Award Category

5. Analysis

- a. Relationship between the gender of the director and the gross income of the movies
- b. Closeness of the age of the actor to the age of the character and its dependency on gender
- c. Relationship between number of movies directed and the gender of the director

SIGNIFICANCE OF THE COMMANDS

Modify Commands

1. Insertion

- 1. Insert Ceremony: Adds information about a new Oscar ceremony, useful when a new ceremony is scheduled or completed.
- 2. Insert Movie: Adds data about a new movie nominated or awarded at the Oscars, necessary when a new movie is released or recognized.
- 3. Insert Song: Inserts information about a song nominated or awarded at the Oscars, required when new songs gain recognition.

2. Updation

- 1. Gross Income of a Movie: Updates the gross income of a specific movie in the database, important for reflecting real-time box office figures.
- 2. Win Status of a Movie: Updates the win status of a movie, crucial when awards results are announced or corrected.

3. Deletion

1. **Movie:** Deletes information about a specific movie from the database, necessary when a movie is no longer relevant or needs correction.
2. **Song:** Deletes information about a specific song from the database, useful when song data becomes obsolete.

Retrieve Commands

1. Selection

1. **List of categories a particular movie has been nominated to:** Retrieves award categories for a specific movie, aiding in understanding its diverse nominations.
2. **List of all movies grossing more than a particular amount:** Retrieves successful movies, assisting in financial analysis and decision-making.
3. **List of movies that have won an award in a particular category:** Retrieves specialized information about award-winning movies in specific categories.
4. **List of years the ceremony was hosted at a particular venue:** Retrieves historical data on the Oscars ceremony venue, helpful for event planning.

2. Projection

1. **List of movies that have won more than 0 awards:** Retrieves successful movies, important for recognizing high-achieving films.
2. **List of actors/singers in a particular movie:** Retrieves cast and crew information, assisting in recognizing contributors to a movie.
3. **List of songs in a particular language:** Retrieves song data based on language, aiding in language-specific analyses.

3. Aggregate

1. **Average budget of all the movies:** Calculates and retrieves the average budget of all movies, providing an overview of industry trends.
2. **Highest gross income of a movie:** Retrieves the top-performing movie, helping to identify blockbuster films.

3. Total number of movies in each year: Counts movies released each year, aiding in understanding industry growth.
4. Maximum number of awards won by a movie: Retrieves the maximum number of awards won by a movie so far.
5. Maximum number of awards won by an actor: Retrieves the maximum number of awards won by an actor so far.

4. Search

1. Artist: Searches for information related to a specific artist, facilitating quick access to an artist's contributions.
2. Award Category: Searches for information related to a specific award category, aiding in category-specific analysis.

5. Analysis

1. Relationship between the gender of the director and the gross income of the movies: Analyzes the impact of the director's gender on movie success, promoting diversity awareness.
2. Closeness of the age of the actor to the age of the character and its dependency on gender: Explores the correlation between actor age and character age, aiding in character casting decisions.
3. Relationship between the number of movies directed and the gender of the director: Analyzes the connection between the director's gender and their prolificacy, contributing to gender-based industry studies.

USERS

In an ideal implementation, every user should be able to execute the Retrieve commands, but only the privileged users - the admins should be allowed to execute the Modify commands which make changes to the database.