

## DBMS Task 2

### MOVIES INFORMATION MANAGEMENT

#### DESCRIPTION

The "movies\_db" database is a comprehensive relational database designed to manage and organize information related to a diverse set of entities within the context of movies and entertainment. It encompasses tables for storing details about movies, directors, actors, genres, roles, users, customers, logins, and various associations among them. Users are assigned roles, and customers are linked to users, allowing for a role-based access control system. The database captures login sessions, tracks movie details, casts, ratings, and customer reviews. With a structured and normalized schema, the "movies\_db" facilitates the efficient storage and retrieval of information, providing a robust foundation for managing a broad range of data related to the movie industry and user interactions.

#### TABLES

##### Movies:

- MovieID (Primary Key)
- Title
- ReleaseYear
- Duration
- Description

##### Directors:

- DirectorID (Primary Key)
- FirstName
- LastName

##### Actors:

- ActorID (Primary Key)
- FirstName
- LastName
- BirthDate
- Gender
- Country

#### **Genres:**

- GenreID (Primary Key)
- GenreName

#### **Roles:**

- RoleID (Primary Key)
- RoleName

#### **UserRoles:**

- UserRoleID (Primary Key)
- UserRoleName

#### **Users:**

- UserID (Primary Key)
- Email
- Username
- Password

#### **UserRoleMapping:**

- UserRoleMapID (Primary Key)
- UserID (Foreign Key Referencing Users (UserID))
- UserRoleID (Foreign Key Referencing UserRoles (UserRoleID))

#### **Customers:**

- CustomerID (Primary Key)
- Firstname
- Lastname
- Age
- Country

#### **UserCustomer:**

- UserCustomerID (Primary Key)
- UserID (Foreign Key Referencing Users (UserID))
- CustomerID (Foreign Key Referencing Customers (CustomerID))

#### **Login:**

- LoginID (Primary Key)
- LoginDate
- LoginTime
- LogoutTime

#### **UserLogin:**

- UserLoginID (Primary Key)
- UserID (Foreign Key Referencing Users (UserID))
- LoginID (Foreign Key Referencing Login (LoginID))

#### **MovieDetails:**

- MovieDetailsID (Primary Key)
- MovieID (Foreign Key Referencing Movie (MovieID))
- DirectorID (Foreign Key Referencing Directors (DirectorID))
- GenreID (Foreign Key Referencing Genres (GenreID))

#### **MovieCast:**

- MovieCastID (Primary Key)

- MovieDetailsID (Foreign Key Referencing MovieDetails: MovieDetailsID)
- ActorID (Foreign Key Referencing Actors: ActorID)
- RoleID (Foreign Key Referencing Roles: RoleID)

### **Ratings:**

- RatingID (Primary Key)
- RatingDescription

### **MovieRatings:**

- MovieRatingID (Primary Key)
- MovieDetailsID (Foreign Key referencing MovieDetails: MovieDetailsID)
- CustomerID (Foreign Key referencing Customers: CustomerID)
- RatingID (Foreign Key referencing Ratings: RatingID)
- ReviewTest

## **DETAILED INFORMATION**

### **1. Movies:**

- Stores information about movies.
- Attributes: MovieID (Primary Key), Title, ReleaseYear, Duration, Description.

### **2. Directors:**

- Contains details about movie directors.
- Attributes: DirectorID (Primary Key), FirstName, LastName, BirthDate, Gender, Country.

### **3. Actors:**

- Holds information about actors.
- Attributes: ActorID (Primary Key), FirstName, LastName, BirthDate, Gender, Country.

### **4. Genres:**

- Represents different genres that movies can belong to.
- Attributes: GenreID (Primary Key), GenreName.

## **5. Roles:**

- Defines roles that actors play in movies.
- Attributes: RoleID (Primary Key), RoleName.

## **6. UserRoles:**

- Lists various user roles in the system.
- Attributes: UserRoleID (Primary Key), UserRoleName.

## **7. Users:**

- Stores user details for accessing the system.
- Attributes: UserID (Primary Key), Email, Username, Password.

## **8. UserRoleMapping:**

- Maps users to their respective roles.
- Attributes: UserRoleMapID (Primary Key), UserID (Foreign Key), UserRoleID (Foreign Key).

## **9. Customers:**

- Contains information about customers.
- Attributes: CustomerID (Primary Key), FirstName, LastName, Age, Country.

## **10. UserCustomer:**

- Maps users to their respective customers.
- Attributes: UserCustomerID (Primary Key), UserID (Foreign Key), CustomerID (Foreign Key).

## **11. Login:**

- Records login and logout times for users.
- Attributes: LoginID (Primary Key), LoginDate, LoginTime, LogoutTime.

## **12. UserLogin:**

- Maps users to their respective login sessions.
- Attributes: UserLoginID (Primary Key), UserID (Foreign Key), LoginID (Foreign Key).

## **13. MovieDetails:**

- Contains details about movies, directors, and genres.

- Attributes: MovieDetailsID (Primary Key), MovieID (Foreign Key), DirectorID (Foreign Key), GenreID (Foreign Key).

#### **14. MovieCast:**

- Maps actors and roles to specific movie details.
- Attributes: MovieCastID (Primary Key), MovieDetailsID (Foreign Key), ActorID (Foreign Key), RoleID (Foreign Key).

#### **15. Ratings:**

- Defines different ratings that can be assigned to movies.
- Attributes: RatingID (Primary Key), RatingDescription.

#### **16. MovieRatings:**

- Associate ratings and reviews with specific movies and customers.
- Attributes: MovieRatingID (Primary Key), MovieDetailsID (Foreign Key), CustomerID (Foreign Key), RatingID (Foreign Key), ReviewText.

## ENTITY RELATIONSHIP DIAGRAM

