Database Design Project 4 Mini Report

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You should submit a mini report with your conceptual design of the information system you are building. In this report, you should use an ER diagram to explain your design, and put all entity sets, relationship sets, as well as their attributes, relevant and reasonable constraints into the diagram.

Github Repo: https://github.com/Siwon-Kim/cop4710-project4

Database Entities Description:

- Users: This entity represents the users who can access our system.
- Movies: This entity represents the movies that are available in the system.
- Watched: This entity represents the records of movies that have been watched by users.

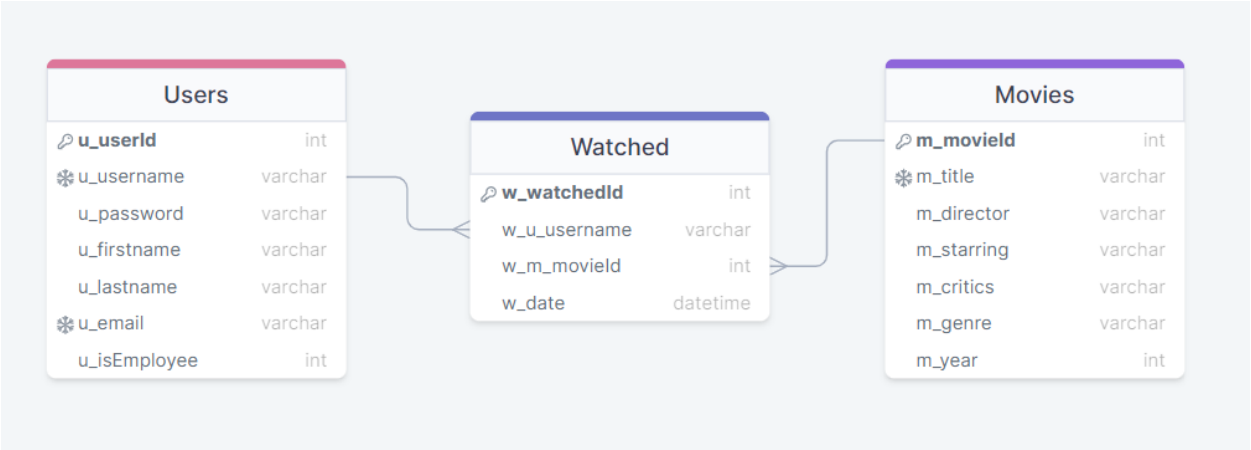
Database Schema:

- Users
    - u_userId: A unique identifier for each user in the system.
    - u_username: A unique username for each user that they use to log in to the system.
    - u_password: The password associated with the user's username.
    - u_firstname: The first name of the user.
    - u_lastname: The last name of the user.
    - u_email: The email address of the user.
    - u_isEmployee: A flag indicating whether the user is an employee or not. If the flag is set to true, the user has access to additional functionality in the system, such as the ability to add, edit, and delete movie lists.
- Watched
    - w_watchedId: A unique identifier for each record of watched movies in the system.
    - w_u_username: The username of the user who watched the movie.
    - w_m_movieId: The ID of the movie that was watched.
    - w_date: The date on which the user watched the movie.
- Movies
    - m_movieId: A unique identifier for each movie in the system.
    - m_title: The title of the movie
    - m_director: The name of the director of the movie
    - m_starring: The name of the actors who star in the movie.
    - m_critics: The review of the movie given by critics
    - m_genre: The genre of the movie.
    - m_year: The year the movie was released.

Foreign Keys:

- Users u_username -> Watched w_u_username
- Movies m_movieId -> Watched w_m_movieId

ER Diagram:



There are 2 kinds of database users:

1. Employee: These users will have the ability to add new movies into the database, edit and delete the movie list.
2. Customer: These users will be able to search the movie by title, director, genre, and year and store the watched movie list.

The constraints need to be enforced by Python program:

1. The Employee information including username and password provided in the program. Customers can only sign up for their account on our homepage.
2. For the employee, isEmployee in the “Users” table already set to 1. The new signup user(customer) gets the value 0 for it.
3. We provided some data for employee information and a movie list in the program.