Database Design logic and its relationships

1. User

Attributes:

* userId: Unique identifier for the user.
* username: Username for login.
* email: User's email.
* password: User's password.
* role: User’s role (either regular user or admin).

Relationships:

* Reviews: A user can write multiple reviews for movies.
* Favorites: A user can mark multiple movies as favorites.
* Ratings: A user can rate multiple movies.
* Watchlist: A user can have multiple movies in their watchlist.

2. Movie

Attributes:

* movieId: Unique identifier for the movie.
* title: Movie title.
* genre: Movie genre (e.g., action, drama).
* releaseDate: Release date of the movie.
* thumbnailUrl: URL for the movie’s thumbnail.
* description: Movie summary or description.

Relationships:

* Reviews: A movie can have multiple reviews written by different users.
* Ratings: A movie can have multiple ratings from users.
* Favorites: A movie can be marked as favorite by multiple users.
* Watchlist: A movie can be part of multiple users' watchlists.

3. Review

Attributes:

* reviewId: Unique identifier for the review.
* content: Text content of the review.
* rating: Numeric rating (e.g., 1–5 stars).
* date: Date the review was posted.

Relationships:

* User: Each review is written by a user.
* Movie: Each review is associated with a movie.

4. Rating

Attributes:

* ratingId: Unique identifier for the rating.
* ratingValue: Numeric value of the rating (e.g., 1 to 5).

Relationships:

* User: Each rating is given by a user.
* Movie: Each rating is associated with a movie.

5. Favorite

Attributes:

* favoriteId: Unique identifier for the favorite relationship.

Relationships:

* User: Each favorite relationship is linked to a user.
* Movie: Each favorite relationship is linked to a movie.

6. Watchlist

Attributes:

* watchlistId: Unique identifier for the watchlist relationship.

Relationships:

* User: Each watchlist entry belongs to a user.
* Movie: Each watchlist entry is for a particular movie.

7. Admin

Attributes:

* adminId: Unique identifier for the admin.
* username: Admin's username.
* email: Admin's email.

Relationships:

* Movies: Admin can add, edit, or delete multiple movies.
* Users: Admin manages users, can remove or modify user data.

Entity Relationships:

User and Movie:

A User can interact with a Movie by writing a review, giving a rating, adding it to their watchlist, or marking it as a favorite.

User and Review:

A User can write multiple Reviews, and a Review belongs to one User.

Movie and Review:

A Movie can have multiple Reviews, and each Review is associated with one Movie.

User and Rating:

A User can give multiple Ratings, and each Rating belongs to one User.

Movie and Rating:

A Movie can have multiple Ratings, and each Rating is associated with one Movie.

User and Favourite:

A User can mark multiple Movies as favorites, and each favorite relationship links a User to a Movie.

User and Watchlist:

A User can have multiple Movies in their watchlist, and each watchlist relationship links a User to a Movie.

Admin and Movie:

An Admin manages the Movies, meaning they can add, update, or remove movies from the platform.