

Brief Description

The online streaming service platform is designed to manage a comprehensive catalog of movies, user subscriptions, and user interactions with the content. The system architecture supports various functionalities, including managing movie metadata, tracking awards, and handling user subscriptions and viewing history.

Movie Management

At the core of the platform is the **MOVIE** entity, which stores essential information about each movie in the catalog. This includes the movie's title, release year, rating, and length in minutes. Each movie is associated with a **DIRECTOR** and a **COUNTRY**. The **DIRECTOR** entity stores the first name, last name, nationality, and birth date of each director, ensuring that the platform can accurately reflect the contributions of filmmakers across various regions.

Movies are further categorized by their **GENRE**, such as Action, Drama, Comedy, etc. The **MOVIE_GENRE** entity is a linking table that allows a movie to be associated with one or more genres, reflecting the diverse nature of cinematic productions.

Additionally, the **LANGUAGE** entity ensures that movies are categorized by the language in which they are produced or dubbed. This is crucial for platforms that serve a global audience, allowing users to filter and select movies based on their language preferences.

Actor and Award Management

Actors play a critical role in the film industry, and the **ACTOR** entity captures the first name, last name, nationality, and birth date of each actor. The **MOVIE_ACTOR** entity links actors to movies, enabling the system to track the cast of each film comprehensively.

Awards are an important aspect of the film industry, recognizing the achievements of movies and actors alike. The **AWARD** entity stores the name of each award, and the **ACTOR_AWARD** entity captures the specific awards won by actors for their performances in movies, including the year of the award and the associated movie. This allows the platform to highlight award-winning performances and critically acclaimed films, enhancing the user experience.

User and Subscription Management

Users are the primary consumers of the platform's content, and their information is stored in the **USERS** entity. This includes personal details such as first name, last name, nationality, birth date, email address, and the date of registration. Each user is also assigned a secure password for account access.

The platform offers various **SUBSCRIPTION PLANS**, which define the pricing, duration, and features available to users. The **SUBSCRIPTIONS** entity links users to their respective subscription plans, capturing details such as the start and end dates of the subscription and whether the subscription is

currently active. This is essential for managing user access to the platform's content and ensuring that subscriptions are handled efficiently.

Content Consumption Tracking

To understand user behavior and preferences, the platform tracks which movies are watched by users through the **WATCHED_MOVIES** entity. This entity records the user ID, movie ID, subscription plan ID, and the date the movie was watched. By analyzing this data, the platform can provide personalized recommendations, understand viewing trends, and optimize content offerings.

Integration and Scalability

The platform's schema is designed with scalability in mind, ensuring that it can handle a growing user base and an expanding movie catalog. The relationships between entities such as movies, actors, genres, and languages allow for complex queries and reporting, which can drive content recommendations, marketing strategies, and user engagement initiatives.

By integrating award information and tracking user interactions, the platform not only serves as a streaming service but also as a comprehensive database of cinematic history and user preferences. This enhances the platform's ability to deliver a personalized, engaging, and content-rich experience to users worldwide.