Entity-Relationship Diagram - Netflix database

The revised database schema for managing movies and TV shows incorporates a normalized design that allows for the representation of individuals involved in various roles, such as actors and directors. By separating tables we eliminate redundancy while enabling the link to multiple productions through the Show_Cast and Show_Directors tables. This structure supports complex relationships, ensuring that each movie or show can have a diverse cast and multiple directors, while still maintaining clear associations with the Genres and Countries tables.

1. Identify Entities

- Movies/TV Shows
- People (Directors and Actors)
- Countries
- Genres

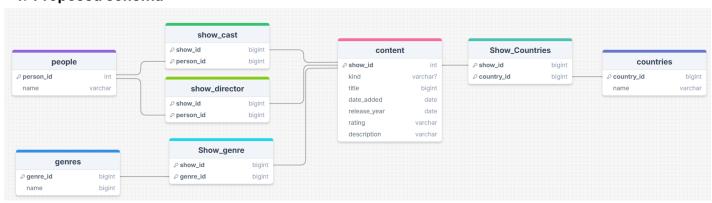
2. Relationships

- Each movie or TV show can have multiple directors and actors.
- Each movie or TV show can belong to multiple genres.
- Each movie or TV show can be associated with multiple countries.

3. Tables

- Movies/TV Shows Table
- People Table
- Countries Table
- Genres Table
- Show_Cast Table (to link shows/movies to actors)
- Show Directors Table (to link shows/movies to directors)
- Show_Genres Table (to link shows/movies to genres)
- Show_Countries Table (to link shows/movies to countries)

4. Proposed schema



5. Components of the ERD

1. Primary Keys (PK)

Uniquely identifies each record in a table.

- Movies/TV Shows: show_id
- People: person_id
- Countries: country id
- Genres: genre_id
- Show_Cast: (show_id, person_id) Composite PK
- Show_Directors: (show_id, person_id) Composite PK
- Show_Genres: (show_id, genre_id) Composite PK
- Show_Countries: (show_id, country_id) Composite PK

2. Foreign Keys (FK)

References a primary key in another table, establishing a relationship between the two. Show_Cast:

- show_id references Movies/TV Shows (show_id)
- person_id references People (person_id)

Show_Directors:

- show_id references Movies/TV Shows (show_id)
- person_id references People (person_id)

Show_Genres:

- show id references Movies/TV Shows (show id)
- genre_id references Genres (genre_id)

Show_Countries:

- show_id references Movies/TV Shows (show_id)
- country_id references Countries (country_id)

