DMQL PROJECT

Title: Cinematic Insight Odyssey

Topic: Movie Database

Problem Statement:
- Developing a movie DB that allows users to browse and retrieve movie information efficiently. The system would provide detailed info about all-things-movies - from cast, crew, genre to ratings and unheard cinematic gems.
- By analyzing this DB, users can gain insights into popular genres, directorial success, actor influence, and other trends in the movie industry.
- The goal is to create a comprehensive platform that enhances the movie-watching experience by providing access to a vast repository of movie-related data.

IMDB Dataset: https://developer.imdb.com/non-commercial-datasets/

SCHEMA:

Table Name	Column Names	Primary Key(s)	Foreign Key(s)
Movies	movie_id, title, original_title, start_year, end_year, runtime_minutes, is_adult, average_rating, num_votes	movie_id	
Genre	genre_id, genre_name	genre_id	
MovieGenres	movie_id, genre_id	(movie_id, genre_id)	movie_id (FK) references Movies(movie_id), genre_id (FK) references Genres(genre_id)
People	person_id, name, birth_year, death_year	person_id	
Occupations	occupation_id, occupation_title	occupation_id	
CastAndCrew	movie_id, person_id, occupation_id, start_date, end_date	(movie_id, person_id, occupation_id)	movie_id (FK) references Movies(movie_id), person_id (FK) references People(person_id), occupation_id (FK) references Occupations(occupation_id)
AlternateTitles	alternate_title_id, movie_id, ordering, region, language, types, attributes, is_original_title	(movie_id, ordering)	movie_id (FK) references Movies(movie_id)
Title_Crew	title_crew_id, movie_id, director_id, writer_id	(movie_id, director_id, writer_id)	movie_id (FK) references Movies(movie_id), director_id (FK) references People(person_id), writer_id (FK) references People(person_id)
Episodes	episode_id, movie_id, parent_movie_id, season_number, episode_number	(movie_id, season_number, episode_number)	movie_id (FK) references Movies(movie_id), parent_movie_id (FK) references Movies(movie_id)
FilmRoles	film_role_id, movie_id, person_id, ordering, character_name	(movie_id, person_id, ordering)	movie_id (FK) references Movies(movie_id), person_id (FK) references People(person_id)
Rating	rating_id, movie_id, rating_timestamp	(movie_id, rating_timestamp)	movie_id (FK) references Movies(movie_id)

Entities:
- **Movies:** Represents individual movies or TV series.
- **Genre:** Represents different genres available.
- **People:** Represents info of actors, directors, writers, and other personnel involved in movies.
- **Occupations:** Represents different job titles in the movie industry.
- **MovieGenres:** Relates movies to genres (many-to-many relationship).
- **CastAndCrew:** Relates movies to people with their specific occupations (many-to-many relationship).
- **AlternateTitles:** Stores alternative titles associated with movies.
- **Title_Crew:** Links movies to specific directors and writers.
- **Episodes:** Represents individual episodes within TV series.
- **FilmRoles:** Relates movies to people associated with specific roles or characters.
- **Rating:** Captures ratings given to movies.

ER DIAGRAM:

public — genre
- genre_id serial
- genre_name text

public — occupations
- occupation_id serial
- occupation_title text

public — movies
- movie_id serial
- title text
- original_title text
- start_year integer
- end_year integer
- runtime_minutes integer
- is_adult boolean
- average_rating numeric
- num_votes integer

public — people
- person_id serial
- name text
- birth_year integer
- death_year integer

public — moviegenres
- movie_id integer
- genre_id integer

public — alternatetitles
- alternate_title_id serial
- movie_id integer
- ordering integer
- region text
- language text
- types text[]
- attributes text[]
- is_original_title boolean

public — castandcrew
- movie_id integer
- person_id integer
- occupation_id integer
- start_date date
- end_date date

public — episodes
- episode_id serial
- movie_id integer
- parent_movie_id integer
- season_number integer
- episode_number integer

public — filmroles
- film_role_id serial
- movie_id integer
- person_id integer
- ordering integer
- character_name text

public — rating
- rating_id serial
- movie_id integer
- rating_timestamp timestamp without time zone
- rating_source text
- rating_value numeric

public — titlecrew
- title_crew_id serial
- movie_id integer
- director_id integer
- writer_id integer