

# Movie Database

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## Background

This project will model how an internet movie streaming service, similar to Netflix, may organize its data. The database will contain data about a collection of movies offered, in addition to all the actors, directors and writers who are associated with each movie. With this data, a user will be able to query the database for movies by title or the name of a creator (actor, director or writer).

The database will also contain information about the registered users. Users will have the ability to track the movies they've watched by creating a "watched list". Users will be allowed to review their list of watched movies and add/remove movies from the list freely. This tracking can provide the basis for the future potential expansion of providing a recommendation system.

## Application Requirements

R1) A browsable list of all the movies provided by the service.

R2) Ability to select a movie in a list to view additional information.

R3) A search bar which can find movies based on substrings of titles, actors, directors or writers.

R4) Ability for users to "watch" the movie - adding it to the list of the movies they have seen.

R5) Users may switch which registered account they are currently using, or optionally register a new account (passwordless).

R6) Provide a history of all the movies seen by the current account only.

## Due Diligence

Data in this database which is about movies and their creators will be built up from already public information. This portion of the database can be completely public facing.

In a real world application, the data regarding registered users and their watch history is sensitive without a consent agreement. No other registered account should be able to access the data of another account. User data is generated on the fly by the application.

The sample data was gathered using the OMDb API (<https://www.omdbapi.com/>), where all the content is licensed under the creative commons [CC BY-NC 4.0](#). API keys are freely available. This project interfaces with the API using a Python script, which transformed a select amount of sample data into a SQL script to insert the set into the database.

The wrapper program is built in Qt C++ and is only using modules (mainly Qt SQL) of the library that are distributed under free licenses (LGPL, public domain).

## ER Diagram

