MovieHub DB

Project Goal:

Given a dataset of movies, users, ratings, we want to ……..

create a simple database of user's reviews on movies

Sample Movie

About our Database

- Allow users to
    - view over 100 movies
    - leave reviews / critiques
    - look at previous reviews
    - update reviews

- look at historical trends using visualizations
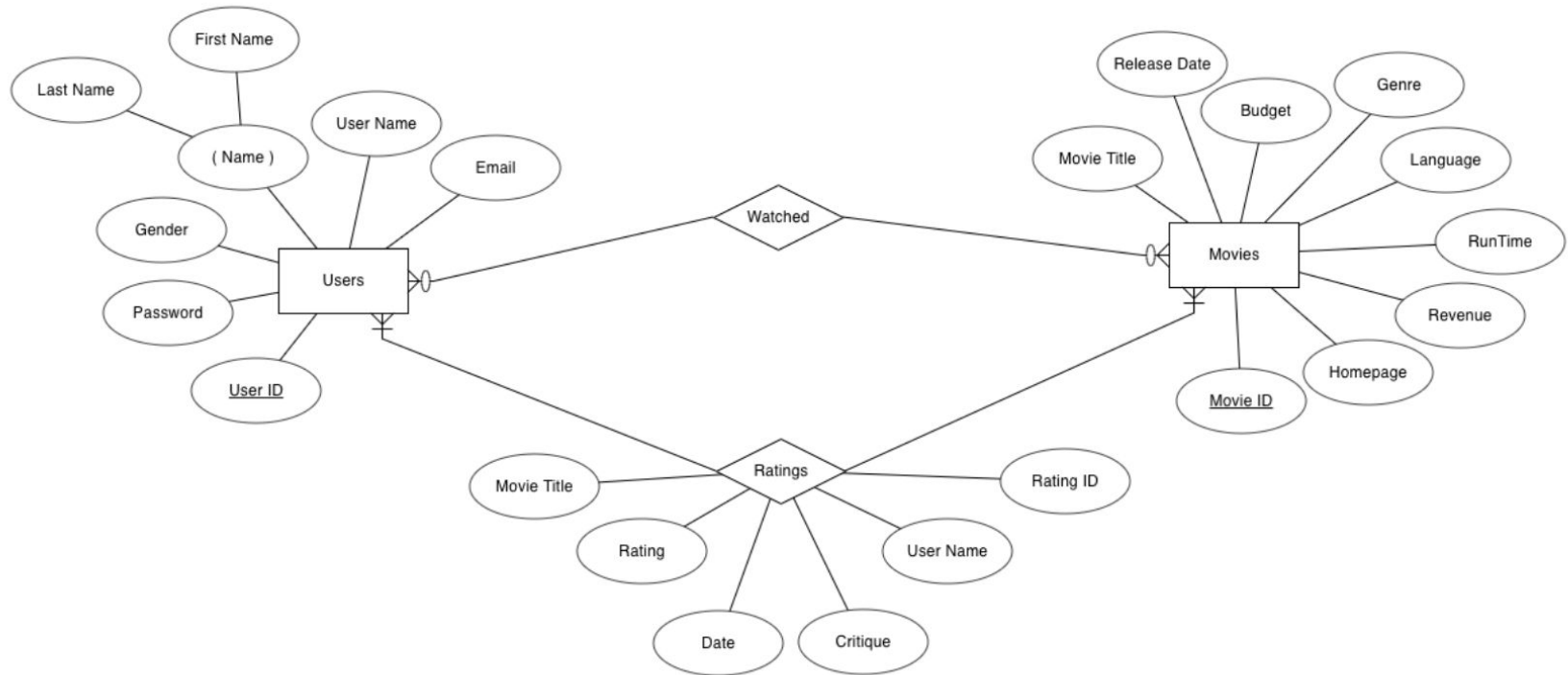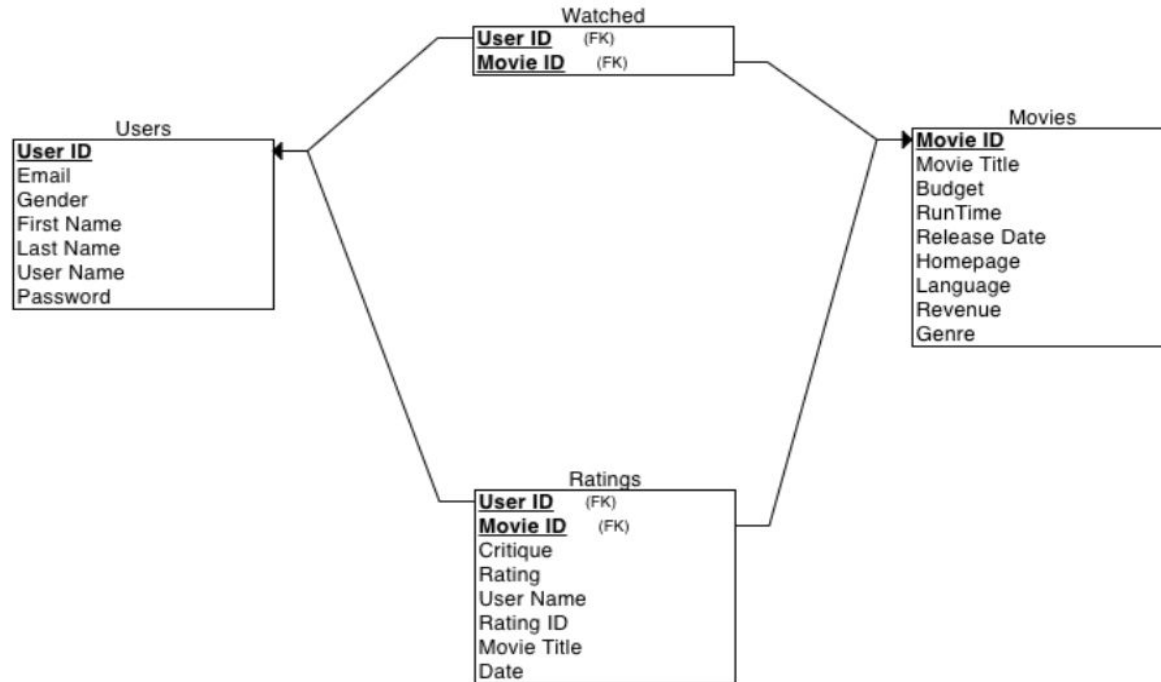- provide recommendations of movies for future users

ETL Process

- Data:
  - Kaggle
  - Mockaroo
  - Excel

- Coding:
  - SQL Workbench
  - QT Designer
  - Python

ER Diagram

Relational Schema

Watched

User ID	(FK)
Movie ID	(FK)

Users

User ID
Email
Gender
First Name
Last Name
User Name
Password

Movies

Movie ID
Movie Title
Budget
RunTime
Release Date
Homepage
Language
Revenue
Genre

Ratings

User ID	(FK)
Movie ID	(FK)

Critique
Rating
User Name
Rating ID
Movie Title
Date

Star Schema

Movies
- **Movie ID**
- Movie Title
- Budget
- RunTime
- Homepage
- Language
- Release Date
- Genre

Movie fact table
- Movie ID (FK)
- FullDate (FK)
- Country Code (FK)
- Revenue

Production Location
- **Country Code**
- Continent
- Country
- City

Date
- **FullDate**
- Year
- Month
- Day

Rating fact table
- User ID (FK)
- Movie ID (FK)
- FullDate (FK)
- Rating
- Critique

Users
- **User ID**
- User Name
- First Name
- Last Name
- Email
- Password
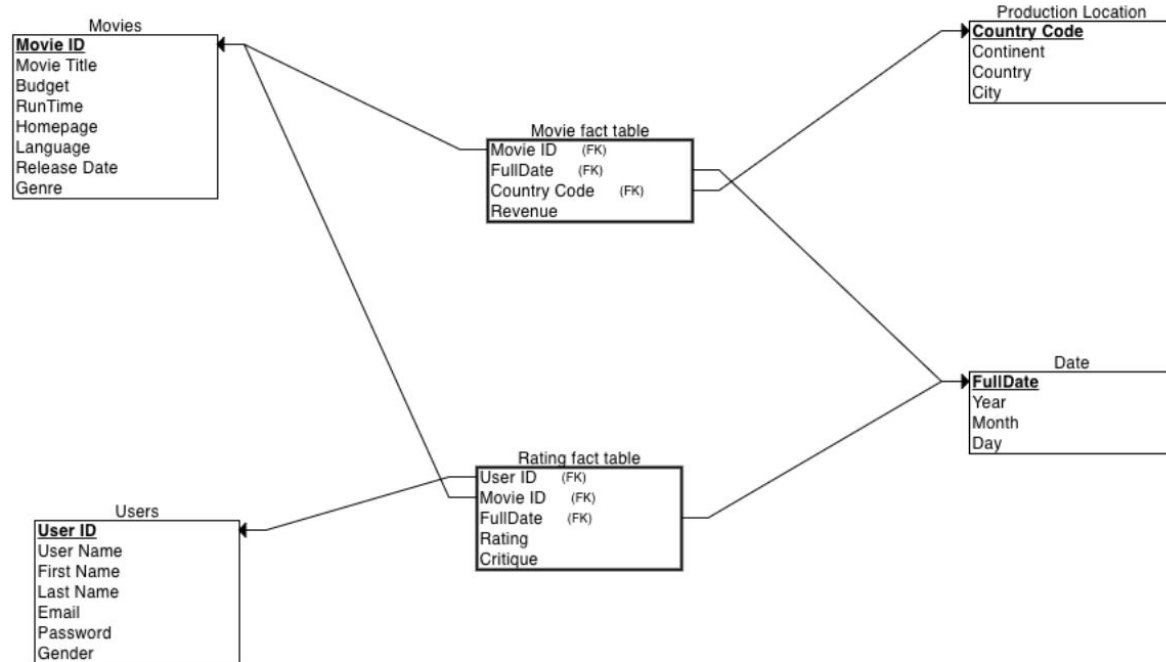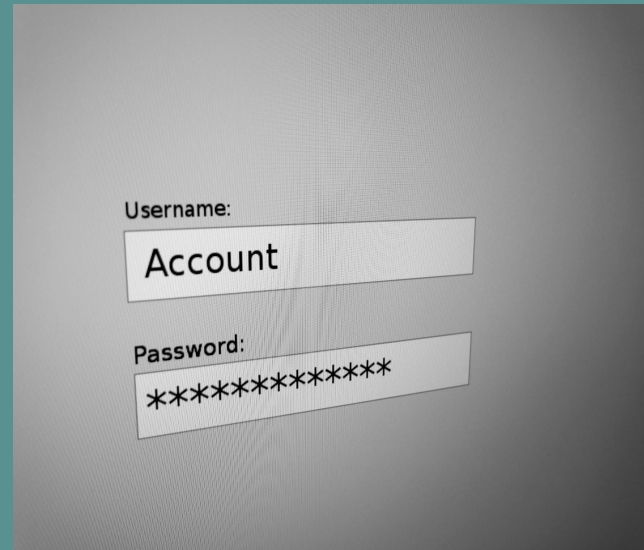- Gender

DEMO

Summary

- Operational:
    - users register, login with username and password
    - find a movie, title, genre, rating, review

- Analytical:
    - create visualizations from operational
    - bar charts, pie charts on different genres over time, average rating of genres
    - comparisons between two movies, ratings, revenue, runtime

Future Direction

- Incomplete data: add more data

- Operational:
    - Movie Recommendation System
    - Allow users to view other users' profiles and ratings
    - Forum/Discussion Page

- Analytical:
    - Adjust data to allow drill down/up for time series
    - Add labels, pictures on the GUI

Thank you!