Designing the Database

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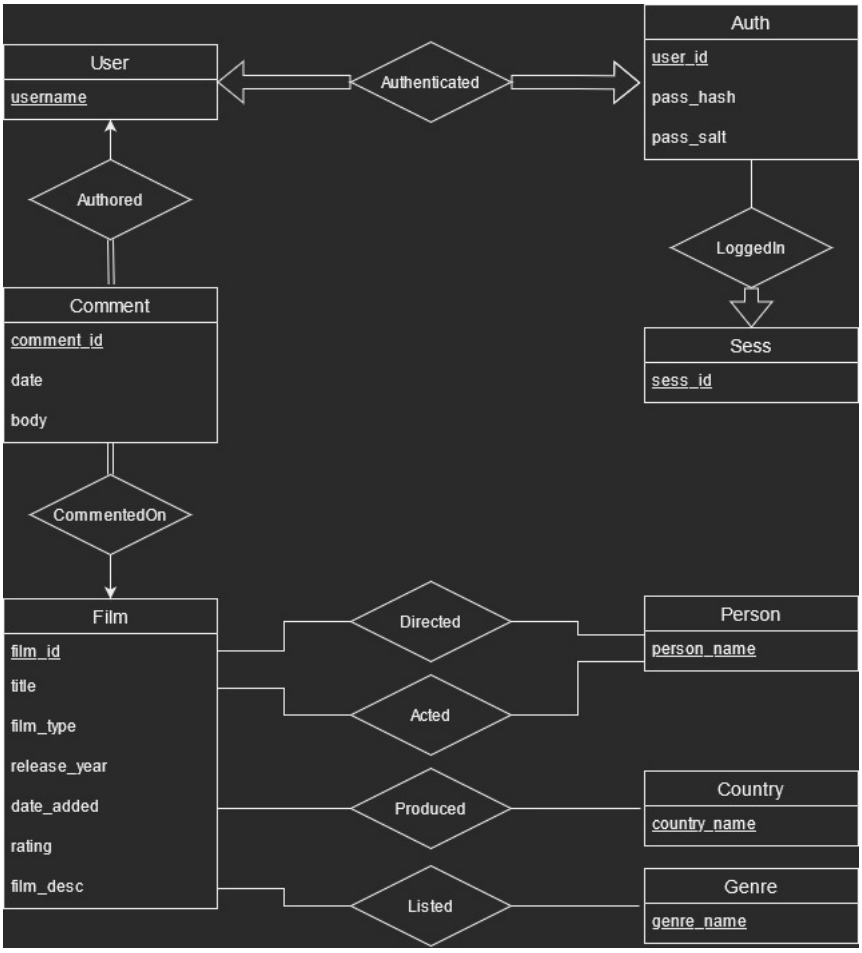

Figure 1: Entity-Relation Diagram

The database has two major parts: users and films. The `Film` table is the largest by far. This contains most of the information about a film. Other attributes, such as director(s), actor(s), production country, and listed genre(s) are stored as relations to the film. This is because multiple values are associated with each film. For users, there are four main tables: User, Sess, Auth, and Comment. User stores the username while Auth stores the information

needed for authentication. Sess stores session IDs and is related to Auth in a one-to-many relationship.

Many relationships and tables were merged when converting the ER-diagram to the schema. For example, Authored was merged into Comment, as was CommentedOn. LoggedIn was also merged into Sess. Additionally, the Person, Country, and Genre tables were all removed since the only attribute they contained was their name. Perhaps the largest difference between the ER-diagram and the schema is User and Auth. Since User only continas a single attribute, username, I merged it with Auth and removed the Authenticated relationship. This works because the relationship is one-to-one with total participation.