**CAC 1 - Django Full-Stack Web Development Project - Phase 1**

**Streamify Database Schema**

**Introduction:**

Streamify is an OTT platform offering a vast collection of latest and classic movies and series in one place. It provides real-time viewing analysis, enabling users to gain insights into their watching behaviour and preferences, enhancing their overall entertainment experience with personalized recommendations and detailed analytics.

**1. Database Design:**

Streamify consist of 8 tables. Below are the name of the tables:

**Table Name:** User\_auth

**Table Description:** This table is for user authentication at the time of login and signup.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| User\_id | Int | PRIMARY KEY |  |
| username | Varchar | UNIQUE |  |
| password | Varchar | UNIQUE |  |

**Table Name:** User\_profile

**Table Description:** This table holds the information about the user. This is for user management.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| user\_id | Int | FOREIGN KEY |  |
| first\_name | Varchar |  |  |
| last\_name | Varchar |  |  |
| dob | Date |  |  |
| age | int |  | Calculated field from Dob |
| mobile | double | UNIQUE |  |
| email | Varchar | UNIQUE |  |
| door\_no | int |  |  |
| street | Varchar |  |  |
| city | Varchar |  |  |
| state | Varchar |  |  |
| pincode | int |  |  |
| genre preference | Varchar |  |  |
| subscribed | boolean | ENUM(“Yes”,”NO”) |  |
| gender | boolean | ENUM(“M”,”F”) |  |

**Table Name:** Movies

**Table Description:** This table holds the information about the movies along with other details this is for movie / series management.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| movie\_id | Int | PRIMARY KEY |  |
| movie\_name | Varchar |  |  |
| duration | time |  |  |
| ratings | int |  |  |
| releasedate | date |  |  |
| type(movie/series) | boolean | ENUM (“Movie”,”Series”) |  |

**Table Name:** Genre

**Table Description:** This table holds the information about different types of Genre available. This table is for Genre Management.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| genre\_id | Int | PRIMARY KEY |  |
| genre\_name | Varchar |  |  |

**Table Name:** Actor

**Table Description:** This table is used to manage the details of Actor / Actress who has worked in the movie / series.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| actor\_id | Int | PRIMARY KEY |  |
| actor\_name | Varchar |  |  |
| dob | date |  |  |
| age | int |  |  |
| gender | boolean | ENUM(“M”,”F”) |  |
| awards | int |  |  |

**Table Name:** Movie\_Genre

**Table Description:** This table is used to record the details of movie and genre. This act as a junction table between movie and genre table

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| movie\_id | Int | FOREIGN KEY |  |
| genre\_id | Int | FOREIGN KEY |  |

**Table Name:** Movie\_Actor

**Table Description:** **:** This table is used to record the details of movie and actor. This act as a junction table between movie and actor table

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| movie\_id | Int | FOREIGN KEY |  |
| actor\_id | Int | FOREIGN KEY |  |

**Table Name:** Watchlist

**Table Description:** This table is used to record the details of the movies watched by the users along with the genre and actor for analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** | **Description (if any)** |
| user\_id | Int | FOREIGN KEY |  |
| movie\_id | Int | FOREIGN KEY |  |
| genre\_id | Int | FOREIGN KEY |  |
| actor\_id | Int | FOREIGN KEY |  |
| start\_time | time |  |  |
| end\_time | time |  |  |

**2. Relationship Schema Diagram:**

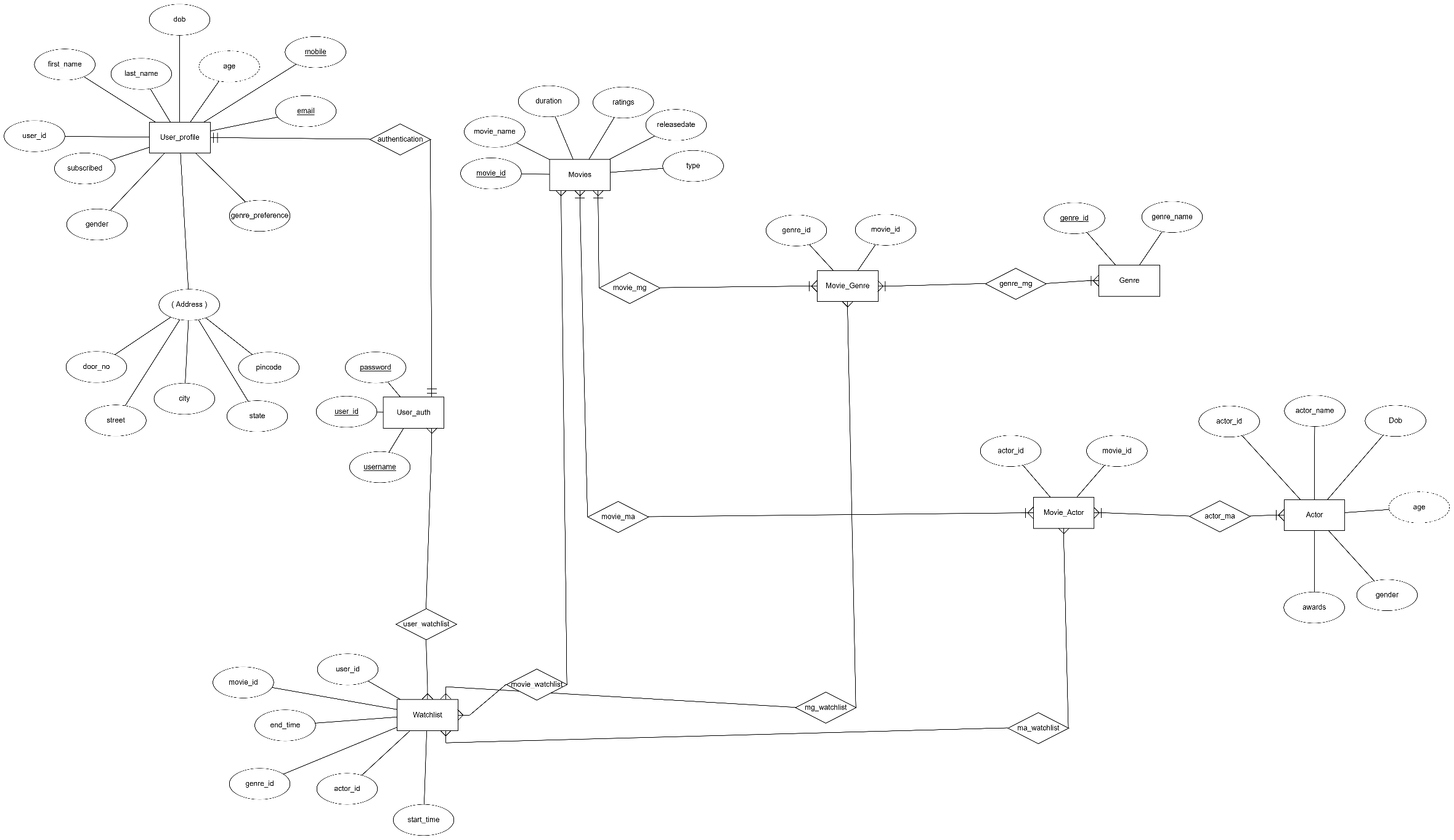
Below are the list of the tables we have in Streamify along with column name and constraint

1. User\_auth (**user\_id PRIMARY KEY**, **username UNIQUE**, **password UNIQUE**)
2. User\_profile (**user\_id FOREIGN KEY,** first\_name, last\_name, dob, age, **mobile UNIQUE,** **email UNIQUE,** door\_no, street, city, state, pincode, genre\_preference, **subscribed ENUM (“Yes”,”NO”),** **gender ENUM (“M”,”F”)**)
3. Movies (**movie\_id PRIMARY KEY,** movie\_name, duration, ratings, releasedate, **type ENUM (“Movie”, “Series”)**)
4. Genre (**genre\_id PRIMARY KEY,** genre\_name)
5. Actor (**actor\_id PRIMARY KEY,** actor\_name, dob, age, **gender ENUM (“M”,”F”),** awards)
6. Movie\_Genre (**movie\_id FOREIGN KEY, genre\_id FOREIGN KEY**)
7. Movie\_Actor (**movie\_id FOREIGN KEY, actor\_id, FOREIGN KEY**)
8. Watchlist (**user\_id FOREIGN KEY, movie\_id FOREIGN KEY, genre\_id FOREIGN KEY, actor\_id FOREIGN KEY,** start\_time, end\_time)

**Relationships:**

* **User\_auth → User\_profile:** user\_id in User\_profile references user\_id in User\_auth (One – to One Relationship)
* **User\_auth → Watchlist:** user\_id in Watchlist references user\_id in User\_auth (One – to – Many Relationship)
* **Movie → Watchlist:** movie\_id in watchlist references movie\_id in Movie (One – to – Many Relationship)
* **Movies → Movie\_Genre:** movie\_id in Movie\_Genre references movie\_id in Movies (One – to – Many Relationship)
* **Genre → Movie\_Genre:** genre\_id in Movie\_Genre references genre\_id in Genre (One – to – Many Relationship)
* **Movies → Movie\_Actor:** movie\_id in Movie\_Actor references movie\_id in Movies (One – to – Many Relationship)
* **Actor → Movie\_Actor:** actor\_id in Movie\_Actor references actor\_id in Actor (One – to – Many Relationship)
* **Movie\_Genre → Watchlist:** movie\_id in Watchlist references movie\_id in Movie\_Genre, genre\_id in Watchlist references genre\_id in Movie\_Genre (Many – to – Many Relationship)
* **Movie\_Actor → Watchlist:** movie\_id in Watchlist references movie\_id in Movie\_Actor, actor\_id in Watchlist references actor\_id in Movie\_Actor (Many – to – Many Relationship)

**3. E-R Diagram:**

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