

CPSC 304 Project Cover Page

Milestone #: 3

Date: July 25, 2024

Group Number: 22

| Name | Student Number | CS Alias (Userid) | Preferred E-mail Address |
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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

CPSC 304 Streaming Service Database

Project Members: Kean Vidyarthi, Suhayl Patel, Weena Wibowo

Project Summary

Our project's database represents the structure of a streaming service, from the perspective of a streaming service provider (ex. Netflix). We've decided to model entities like Users, Subscriptions, Media, and additional aspects that would be beneficial for a streaming service provider to manage.

The domain of our application is within the streaming service industry, targeting providers who offer a variety of digital content to their users. This application is designed for streaming service providers to efficiently manage and monitor various aspects of their service, including users, subscriptions, media producers, and more. Our goal is to create a comprehensive and user-friendly database solution that simplifies the processes related to managing a streaming service.

Our application will keep track of users, the subscriptions they hold, the media content they consume, and the media producers who create this content. This will include user account information, subscription plans, and entities associated with pieces of media (directors, actors, producers). By doing so, a streaming service provider could easily analyze user behavior, optimize content delivery, and manage relationships with media producers.

Our service can be integrated with the streaming provider's existing system or function as a standalone service. The application will be constantly updated with new data from user interactions, content uploads, and subscription changes, making a robust database management system essential for maintaining service efficiency and reliability. Ultimately, our database solution is designed to provide streaming service providers with the tools they need to manage their operations effectively and understand their user base.

Functionalities

- INSERT
 - ex. Inserting a new media producer into the media producers database
- DELETE
 - ex. Deleting a genre from the genres
- UPDATE
 - ex. Updating a user's subscription in the subscription database
- SELECT
 - ex. Selecting a user (or multiple) to edit in the user database

Pages

Navbar:

| | | | | | | |
|-----------------|--------------|------|-------|----------------------------|--------|----------------|
| Stream Insights | subscription | home | users | media movie TV shows | genres | media Producer |
|-----------------|--------------|------|-------|----------------------------|--------|----------------|

- /
 - Home Page (design pending)
- /Media
 - Contains media subclasses, which are currently "Movies" and "TV shows"
 - /Media/Movies
 - Contains only Media entities belonging to the "Movie" subclass
 - Filter by Genre
 - Display Director, Actor, Genre, Media Producer, Review information

movies

| media id | media title | duration | producer id | Genre name |
|-------------|----------------|----------|----------------|---------------|
| | | | | |

Actors

directors

review

- /Media/TVshows
 - Contains only Media entities belonging to the "TVshows" subclass
 - Filter by Genre
 - Display Director, Actor, Genre, Media Producer, Review information

TV shows

| media ID | media title | # of eps | producer ID | Genre name | Actors | directors | review | episode |
|----------|-------------|----------|-------------|------------|--------|-----------|--------|---------|
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• /Users

- List of users with associated subscriptions
 - TODO: Add credit card as attribute for user?
- TODO: Rephrase - Should be able to add delete edit etc.

users

| trash icon | Full name | email | phone # | DOB | Subscription Info | Liked Genres | Reviews |
|--------------------------|-----------|-------|---------|-----|-------------------|--------------|---------|
| <input type="checkbox"/> | keean | | | | | | |
| <input type="checkbox"/> | | | | | | | |
| <input type="checkbox"/> | | | | | | | |
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| <input type="checkbox"/> | | | | | | | |

• /MediaProducers

- List of media producers
- TODO: Rephrase - Should be able to add delete edit etc.

media producer

| producer ID | producer name |
|-------------|---------------|
| | |
| | |
| | |
| | |
| | |

media produce

- /Genres
 - List of genres
 - TODO: Rephrase - Should be able to add delete edit etc

liked Genres

| Genre name | # of media | is popular Genre ? |
|------------|------------|--------------------|
| | | |
| | | |
| | | |
| | | |
| | | |

- /Subscriptions

Subscription

| user email | subs. ID | start date | end date | duration | price |
|------------|----------|------------|----------|----------|-------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

- /Reviews

Reviews

| email | media ID | Review ID | star # | comment |
|-------|----------|-----------|--------|---------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

user profile / view media

- /Episodes

Episodes

| media ID | EPS # | EPS name | season |
|----------|-------|----------|--------|
| | | | |
| | | | |
| | | | |

TV shows

- /Actors

Actor

| Actor id | Actor name |
|-------------|---------------|
| | |

- /Directors

Director

| Director id | Director name |
|----------------|------------------|
| | |

Todo/Timeline

| DATE (week of) | Task | Assigned To |
|-----------------|---|-------------|
| July 21st, 2024 | Upload old milestones to GitHub | Weena |
| July 21st, 2024 | Brainstorm database functionalities | Whole group |
| July 21st, 2024 | Write project description/summary | Keean |
| July 21st, 2024 | Create hand-drawn mockups of each page | Whole group |
| July 21st, 2024 | Commit mockups to GitHub | Suhayl |
| July 28th, 2024 | Figma mockup | Whole group |
| July 28th, 2024 | Spearhead frontend (React) | Weena |
| July 28th, 2024 | Spearhead backend (mainly Node.js) | Keean |
| July 28th, 2024 | Spearhead database integration with project | Suhayl |

Queries will be done end-to-end so each group member has an opportunity to learn the front-end, back-end, and database integration of our project. The tasks assigned with "SPEARHEAD" simply refer to the group member that is responsible for ensuring that aspect of the project is fully implemented and functional.