

# **CS 312 - Group Project Proposal**

# **Group Details:**

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## **Project Details:**

Title	Online Streaming Platform	
Problem Statement	With the rise of streaming services, users are often overwhelmed with content choices and find it difficult to discover high-quality films and TV shows based on their interests. A personalized streaming platform that offers a seamless browsing experience, detailed content information, and user reviews would enhance accessibility and user interaction with visual entertainment.	
Project Idea	Develop a streaming service application using the PERN stack (PostgreSQL, Express.js, React, Node.js) where users can browse, search, and stream various movies, TV shows, and documentaries. The platform will focus on user feedback through ratings and reviews, and efficient content discovery based on user preferences.	
Project Components	<ul> <li>Book Listing and Details:         <ul> <li>Display a comprehensive list of movies, TV shows, and documentaries with essential information like titles, genres, cast, and synopses.</li> <li>Clicking on a title reveals detailed information, including reviews, ratings, director profiles, and release dates to aid user decision-making.</li> </ul> </li> <li>Search Functionality:</li> </ul>	

- Implement a robust search feature allowing users to quickly find content by title, genre, or actor.
- Enhance user experience with auto-suggestions and filters, offering advanced options like searching by release year or content type (movie, series, documentary).
- User Reviews and Ratings:
  - Enable users to submit reviews and rate the content they've watched.
  - Display aggregated ratings and popular reviews to foster community engagement and enhance content discovery.
- Sorting and Filtering:
  - Provide sorting options such as genre, release year, ratings, or content type (e.g., documentaries, TV shows).
  - Implement advanced filtering to cater to user preferences (e.g., sort by popularity, trending content, or recommended content).

# **Task Planning:**

#### 1. Phase-1:

Phase-1 Deliverables	Homepage layout	
	User Authentication	
	Content listing	
	Basic content search	
	External API Integration	
	Basic sorting/filtering options	
Student 1 T	Tasks Student 2 Tasks	



Task 1:	Task 1:
Design and develop the homepage layout.  Create a clean and responsive UI using React making sure users can browse top-rated or popular content.	Design and implement the basic search function. Build search input with auto-complete and options like genre, year, actor(s), and director(s) based on API data.
Task 2:	Task 2:
Implement user authentication. This includes setting up the backend with Node and Express to handle user registration, authentication, and session management.	Develop the detailed content view for each listing. When a user clicks on a title, shows detailed information like cast, review/rating, and year based on API data.
Task 3:	Task 3:
Set up the Database. Design the schema for our PostgreSQL database for users, content, and review tables. Make sure passwords are securely stored.	Allow users to submit reviews and ratings for content. This data should be stored in the database and displayed alongside the content details.
Task 4:	Task 4:
Create a content listing. Fetch and display list of content (movies, TV shows, and documentaries) from an external API with	Build the sorting/filtering feature. Add options or buttons on the front end for users to sort content based on

popularity, year, and genre.

basic details: title, genre, synopsis.



## 2. Phase-2:

Recom     Advance	ofile management mendation engine ed filtering features t playback support
Student 1 Tasks	Student 2 Tasks
Task 1:	Task 1:
Recommendation Engine. Use filterin algorithms to generate personalized recommendations based on user's pa views and ratings.	filtering to support multiple levels of
Task 2:	Task 2:
Implement User profile management Allow users to update their profile information, see their view history, an manage ratings/reviews.	video playback functionality directly on
Task 3:	Task 3:
Expand the Database. Add tables to sto user preferences, interactions, and view history.	<u> </u>

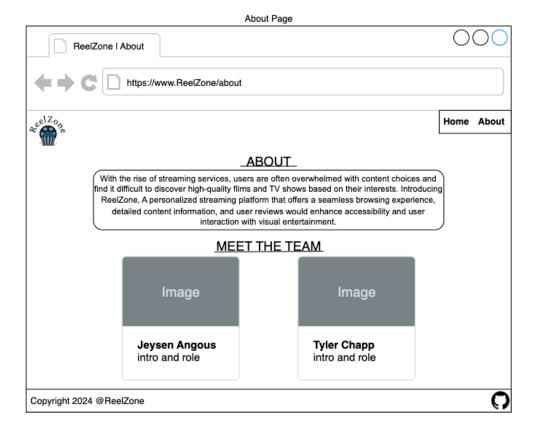


### **Project Mock-Up Screens:**

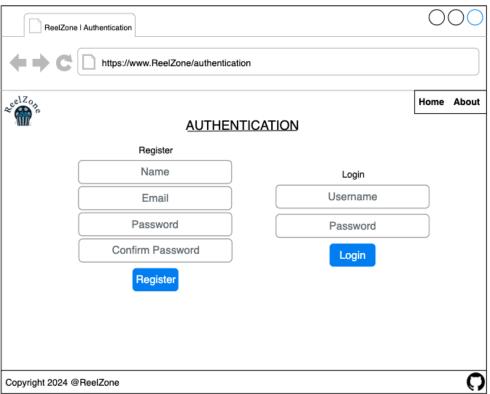
- Sketch your mock-up screens using pen or pencil on paper. Alternatively, if you prefer digital tools like Figma or draw.io, you may use them.
- Incorporate mock-up screens corresponding to the project components or task list.
- Capture screenshots or pictures of your mock-ups and attach them in this section.







#### Authentication





#### Dashboard

