## **CLOUD APPLICATION DEVELOPMENT(CAD)**

# Project: Media Streaming with IBM Cloud video Streaming Phase 2: Innovation

#### **Define Requirements:**

- Clearly outline the features, such as user profiles, playlists, real-time chat, and notifications.
- Determine the technology stack you'll be using, such as front-end frameworks (React, Angular), back-end frameworks (Node.js, Django), and database systems (MongoDB, PostgreSQL).

#### **Design the Database:**

- Create a database schema to store user information, playlists, movies/shows data, chat messages, and other relevant details.
- Establish relationships between different entities, such as users and playlists, movies/shows and playlists, etc.

#### **Develop User Authentication and Profiles:**

- Implement user registration and login functionality with secure password storage and authentication methods.
- Create user profiles where users can add avatars, bios, favorite genres, and other personal details.

#### **Implement User-Generated Playlists:**

- Allow users to create, edit, and delete playlists.
- Provide options to add movies/shows to playlists, and ensure these associations are stored in the database.

#### **Integrate Real-Time Chat:**

- Choose a real-time communication technology like WebSockets to enable instant messaging between
  users
- Implement public chat rooms for discussions related to movies/shows and private messaging for oneon-one conversations.
- Implement message history, emoji reactions, and basic moderation tools.

#### **Develop Movie/Show Pages:**

- Design individual pages for movies/shows displaying details, play options, discussion sections, and related content suggestions.
- Implement features like adding to playlist, real-time chat, user ratings, and reviews.

#### **Set Up Notifications:**

- Implement a notification system to alert users about new messages, playlist updates, and friend activities.
- Use push notifications or WebSocket notifications to ensure real-time updates.

#### **Implement User Interactions:**

- Enable users to follow/unfollow others and manage their friend list.
- Implement actions like liking playlists, movies/shows, and comments.

#### **Implement Security Measures:**

- Ensure data security by using encryption and secure communication protocol.
- Implement user authorization to control access to various features and data.

#### **Test Thoroughly:**

- Perform extensive testing to identify and fix bugs.
- Test the platform's usability and responsiveness on different devices and browsers.

#### Launch and Gather Feedback:

- Deploy the platform to a web server or a cloud service.
- Gather user feedback and make necessary improvements based on the feedback received.

## **Homepage:**

#### **Featured Movies/Shows:**

Display a selection of popular movies and shows.

#### **User-Generated Playlists:**

Showcase curated playlists created by users based on genres, moods, or themes.

#### **Trending Discussion:**

Highlight ongoing discussions about trending movies or shows.

#### Personalized Recommendations:

• Provide movie/show suggestions based on users' watch history and preferences.

## **User Profiles:**

#### **Create Profile:**

Users can create profiles with avatars, bio, and favorite genres.

#### My Playlists:

 Users can create, edit, and share their playlists. They can add movies/shows from the platform to their playlists.

#### **Watch History:**

Show a list of movies/shows recently watched by the user.

## **Movie/Show Pages:**

#### **Play Button:**

Starts the movie/show.

#### Add to Playlist:

Users can add the movie/show to their playlists.

#### **User Ratings and Reviews:**

Allow users to rate and review movies/shows.

#### **Related Content:**

Suggest similar movies/shows based on the current selection.

## **Real-Time Chat:**

#### **Public and Private Chats:**

 Users can engage in public discussions related to specific movies/shows or initiate private chats with friends.

## **Emoji Reactions:**

Users can react to messages with emojis to express their emotions quickly.

#### **Moderation Tools:**

Implement tools to moderate chats, ensuring a positive and respectful environment.

#### **Notification System:**

Notify users when they receive new messages or when someone replies to their comments.

## **Notifications:**

#### **New Playlist Updates:**

• Notify users when someone adds their movie/show to a playlist.

#### **Discussion Alerts:**

Notify users about ongoing discussions related to movies/shows they've watched or are interested in.

### Friend Activity:

Notify users about their friends' activities, such as creating playlists or starting discussions.

## **Settings:**

## **Privacy Controls:**

• Allow users to control who can message them and who can see their activities.

#### **Notification Preferences:**

• Enable users to customize their notification settings based on their preferences.

#### **Account Security:**

- Implement two-factor authentication and account recovery options.
- By incorporating these features, MovieHub can create an engaging, social, and personalized moviewatching experience, enhancing user interaction and satisfaction on the platform.

THANK YOU...