

Media Streaming with IBM Cloud Video Streaming

Phase 2: Innovation

Problem Statement:

The project involves creating a virtual cinema platform using IBM Cloud Video Streaming. The objective is to build a platform where users can upload and stream movies and videos on-demand. This project encompasses defining the virtual cinema platform, designing the user interface, integrating IBM Cloud Video Streaming services, enabling on-demand video playback, and ensuring a seamless and immersive cinematic experience.

Our Goal:

To provide users with an immersive movie watching experience through on demand streaming with the key features including User friendly interface, On demand playback, Integration with IBM Cloud Video Streaming, User Authentication and Payment Integration. Also considering the features like, User generated playlists or real-time chat for a more engaging movie watching experience.



Innovative Features:

1. User Generated Playlists:

Allowing the users to create their own playlists to watch their favourites as well as the same kind of videos they watch to get an immersive experience of watching movies.

It helps in enhanced user engagement, personalized movie recommendations, social sharing of playlists, which in turn helps in using this platform which provides user friendly interface.

2.Real-Time Chat:

It also provides the real time chatting feature for the user, watching the movie simultaneously along with real time chatting.

It helps in experiencing the virtual cinema with friends and family by discussing in real time about the movie, which encourages the user interaction and community building.

3.User Friendly Interface:

Creating a user-friendly interface for immersive experience of the virtual cinema platform, providing the features including, search & filter options for the contents, thumbnail and movie posters for easy identification, user profile with avatars, user generated playlists and chat integration.

4.Managing Contents:

Designing a management system handling various types of videos and movies in different formats. It provides the features supporting videos in different formats and quality, easy content uploading for content creators etc.

5.IBM cloud Video Streaming Integration:

Integrating IBM Cloud Video Streaming services into the platform for Video Streaming. It includes, setting up channels for different categories of the contents, providing reliable playback and configuring encoding settings for optimal streaming quality.

6.Security:

Ensuring the platform's security by user authentication and authorization.

Compliance with copyright issues and data protection laws and **DRM** for content protection.

7.Payment Integration:

Implementing revenue generating strategies including subscription models, rental or purchase of movies and advertising partnerships.

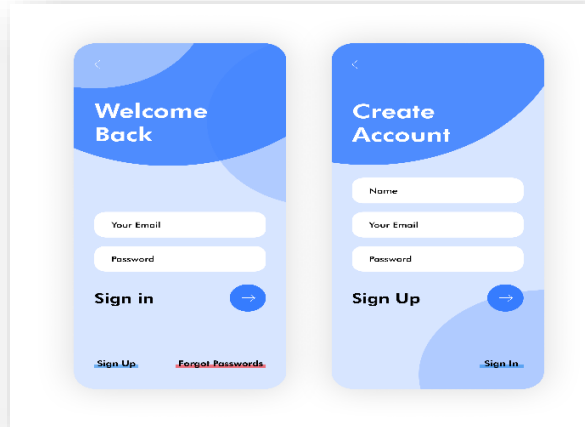
Launching marketing campaign to attract users by pre-launch promotions, social media marketing and partnerships with content creators.

8.Continuous updating:

Gathering user's feedback based on their experience, getting suggestion, regularly updating the platform based on analytics, to improve the user's movie watching experience.

Steps to setup Media Streaming with IBM Cloud Video Streaming:

1. **Sign up and Login:** Creating an IBM Cloud account and logging into the IBM Cloud Video Streaming platform.



2. **Create a Channel:** In the IBM Cloud Video Streaming dashboard, create a channel for the user's content in which the channel represents a single stream or playlist of videos.

3. **Configure Encoding:** Setting up encoding settings for the channel, choosing the appropriate video and audio resolution based on the contents and audience.

4. **Input Sources:** Determining the sources of the content, using webcams and other input devices to input the movies and videos.

5. **Streaming Options:** Configuring the streaming options by deciding whether live streaming or upload on-demand content. Also, setting up scheduling and access controls if needed.

6. **Authentication:** Implement security measures such as user authentication and authorization to control the access to the uploaded contents, defining user role and permission.



7.Content Upload and Management: Creating a system for uploading movies and videos, and ensuring that uploaded contents organised effectively.

8.Security Measures: Ensuring the platform having security measures to protect copyrighted content and user data.

9.Payment Integration: Integrating payment gateways to handle subscriptions, rentals or purchase of movies.

10.User Interface Design: Considering the features like user generated playlists and real time chat creates a user-friendly virtual cinema platform.



11.Monitoring and Analytics: Utilize the platform's monitoring and analytics features to track viewer engagement and the performance of the streams.

12.Testing: Test the platform to identify and resolve any issues

13.Documentation and Support: Providing user documentation and support resources to assist users and set up a help desk or customer support channels.

14. Manage and Analyse: Continuously monitor and analyse viewer data to improve your streaming strategy

15.Compliance: Ensuring that the platform complies with legal and regulatory requirements, especially regarding copyright and data protection laws.