# Media Streaming with IBM Cloud Video Streaming

# Phase 5: Project Documentation & Submission

# **Project Objective:**

The objective of this project was to develop a virtual cinema platform that enables users to browse and watch movies and TV shows on demand. The platform also allows users to upload their own videos and share them with others.

#### **Design Thinking Process:**

The following design thinking process was used to develop the virtual cinema platform:

- Empathize: The first step was to empathize with the target users, which included movie and TV show enthusiasts. This was done by conducting interviews and surveys to understand their needs and wants.
- Define: The next step was to define the problem that the platform would solve. The problem was defined as the lack of a convenient and affordable way to watch movies and TV shows on demand.
- Ideate: A variety of ideas were generated for how to solve the problem. These ideas were then evaluated and narrowed down to a few key features.
- Prototype: A prototype of the platform was developed using Flask and IBM Cloud Video Streaming. The prototype was then tested with users to get feedback.
- Test: The final step was to test the platform with users to ensure that it was easy to use and met their needs.

### **Development Phases:**

The virtual cinema platform was developed in the following phases:

# Phase 1: Requirements Gathering and Analysis

This phase involved gathering and analysing the requirements for the platform. This included identifying the key features, user interface design, and video upload process.

#### Phase 2: Design and Implementation

This phase involved designing and implementing the platform. This included developing the database, backend API, and user interface.

### Phase 3: Testing and Deployment

This phase involved testing and deploying the platform. This included unit testing, integration testing, and user acceptance testing. The platform was then deployed to the cloud.

#### **Platform Features:**

The virtual cinema platform has the following features:

- Browse and watch movies and TV shows on demand
- Upload your own videos and share them with others
- Create and manage playlists
- Rate and review movies and TV shows
- Get recommendations for movies and TV shows to watch

#### **User Interface Design:**

The user interface of the virtual cinema platform is designed to be simple, intuitive, and easy to use. The homepage features a search bar where users can search for movies and TV shows by title, genre, or actor. There is also a list of popular and trending movies and TV shows.

The video player is designed to provide a seamless and immersive movie-watching experience. The player features controls for playback, volume, and subtitles. Users can also create and manage playlists within the video player.

# **Video Upload Process:**

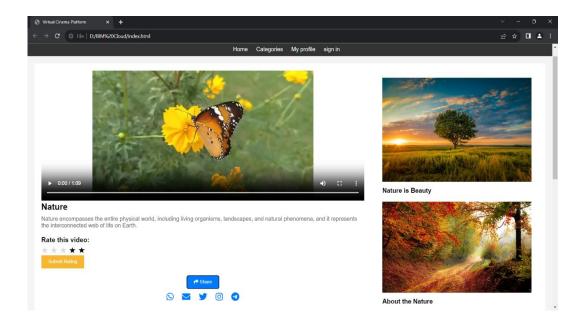
The video upload process is simple and straightforward. Users can select a video file from their computer and upload it to the platform. The platform will then transcode the video file and make it available for streaming.

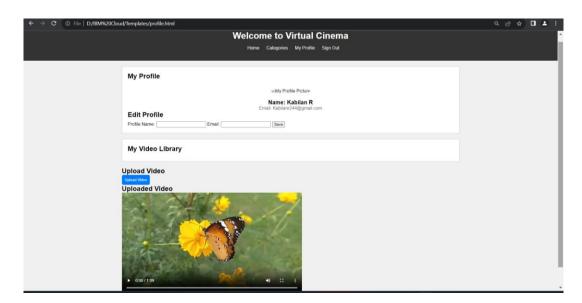
#### **Streaming Integration:**

The virtual cinema platform uses IBM Cloud Video Streaming to deliver video streams to users. IBM Cloud Video Streaming is a cloud-based video streaming service that provides a variety of features, such as adaptive bitrate streaming and global content delivery.

How the platform provides a seamless and immersive movie-watching experience

- The virtual cinema platform provides a seamless and immersive movie-watching experience by using the following features:
- Adaptive bitrate streaming: Adaptive bitrate streaming ensures that users can watch videos smoothly, even if they have a slow internet connection.
- Global content delivery: Global content delivery ensures that users can watch videos with low latency, regardless of their location.
- High-quality video playback: IBM Cloud Video Streaming transcodes videos to ensure that they are played back in high quality.
- In addition to these features, the virtual cinema platform also provides a user-friendly interface that is easy to navigate. The video player is also designed to provide a seamless and immersive viewing experience.





# **Conclusion:**

The virtual cinema platform is a complete and comprehensive solution for watching videos on demand. The platform is easy to use and provides a high-quality viewing experience.

