MEDIA STREAMING WITH IBM CLOUD VIDEO STREAMING

**PROBLEM DEFINITION**

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.

**APPROACH METHOD**

**Create an IBM Cloud Video Streaming Service:**

* Log in to your IBM Cloud account.
* From the IBM Cloud Dashboard, navigate to "Resources" and then click on "Create Resource."
* Search for "IBM Cloud Video Streaming" in the catalog and select it.
* Follow the prompts to create a new instance of the Video Streaming service.

**Access the IBM Cloud Video Streaming Dashboard:**

* Once your Video Streaming service is created, access the Video Streaming Dashboard from the IBM Cloud Dashboard.

**Set Up Channels and Content:**

* In the Video Streaming Dashboard, you can set up channels to organize your content. A channel represents a stream of videos.
* You can upload videos, create playlists, and manage your content within each channel.

**Configure Encoding and Transcoding**:

* Before streaming your media, you may need to configure encoding and transcoding settings based on your content and target audience. IBM Cloud Video Streaming provides options for various quality levels and adaptive streaming.

**Generate Embed Codes or Shareable Links:**

* Depending on how you want to deliver your content, you can generate embed codes to integrate videos into your website or create shareable links for direct access.

**Secure Your Content:**

* If necessary, implement security features such as password protection, IP whitelisting, or token-based authentication to control access to your content.

**Monitor and Analyze:**

* IBM Cloud Video Streaming offers monitoring and analytics tools to track viewer engagement, video performance, and other relevant metrics.

**Start Streaming:**

* Once everything is set up, you can start streaming your media content to your audience.

**Optimize and Scale:**

* As your streaming needs grow, you can optimize your configurations and scale your resources accordingly to handle more viewers and higher-quality streams.

**DESIGN THINKING**

**Platform Definition**:

* Clearly define the features and functionalities of the virtual cinema platform. This includes:
* Allow users to create accounts, manage profiles, and personalize their experience.
* Enable content creators to upload movies and videos securely, with options for metadata and categorization.
* Ensure that users can search for and access videos easily, including features like genre-based browsing, recommendations, and search.

**User Interface:**

* The user interface should offer an intuitive and seamless navigation experience. Users should be able to effortlessly move between different sections of the platform, such as the home page, content library, search, and user profiles.
* Make it easy for users to discover and access media content. Implement features like categorization, sorting options, and filters

**Video upload:**

* This feature allows content creators and administrators to securely upload videos, movies, and other multimedia content to be streamed to viewers
* Content creators can organize their videos, apply metadata, and categorize them effectively, ensuring easy access for viewers

**Streaming Integration**:

* IBM Cloud Video Streaming services seamlessly integrate with the video upload process, ensuring that uploaded content is optimized for streaming across various devices and network conditions.
* During the upload process, content creators have the opportunity to enrich their content with metadata, including titles, descriptions, cast and crew details, genres, and keywords.

**User experience:**

* Streaming integration plays a pivotal role in enabling a seamless and high-quality media streaming experience with IBM Cloud Video Streaming
* Streaming integration involves incorporating IBM Cloud Video Streaming services into your platform, allowing for the efficient and reliable delivery of video content to viewers worldwide.