**Project Title: Media Streaming using Cloud.**

**Phase 1: Problem Definition and Design Thinking**

**Problem Statement:**

Create a virtual cinema platform using IBM Cloud Video Streaming. Upload and stream your favourite movies and videos on-demand. Share the joy of movie nights with friends and family, no matter where they are located. Elevate the movie-watching experience with seamless streaming and high-quality video playback for a truly immersive cinematic experience!

**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.

**Design Thinking:**

**1.Platform Definition:** Define the features and functionalities of the virtual cinema platform, including user registration, video upload, and on-demand streaming.

**2.User Interface Design:** Design an intuitive and user-friendly interface that allows users to navigate, search, and watch videos effortlessly.

**3.Video Upload:** Enable users to upload movies and videos to the platform.

**4.Streaming Integration:** Integrate IBM Cloud Video Streaming services to enable smooth video playback and streaming.

**5.User Experience:** Focus on providing a seamless and immersive movie-watching experience with high-quality video playback.

**Here’s a design thinking framework for media streaming using Cloud.**

**1. Sign Up for IBM Cloud Account:**

If you haven't already, sign up for an IBM Cloud account.

**2. Create an IBM Cloud Video Streaming Account:**

Once you have an IBM Cloud account, you can create an IBM Cloud Video Streaming account. This is where you will configure and manage your streaming services.

**3. Create a Channel:**

In the IBM Cloud Video Streaming dashboard, create a channel. A channel represents the live stream or video content you want to broadcast. You can configure various settings for your channel, such as its name, description, and privacy settings.

**4. Configure Encoding Settings:**

Set up your video encoding settings. This includes defining the video bitrate, resolution, and other quality parameters. You may need to use encoding software or hardware to convert your video source into a compatible format for streaming.

**5. Set Up Broadcasting Software:**

You'll need broadcasting software to capture and encode your video content. Popular choices include OBS Studio, Wirecast, or IBM's own streaming software if available.

**6. Configure Streaming Endpoint:**

IBM Cloud Video Streaming will provide you with streaming endpoints (RTMP/RTSP URLs) for your channel. Configure your broadcasting software to use these endpoints to send your encoded video stream to IBM Cloud.

**7. Test Your Stream:**

Before going live, it's essential to test your stream to ensure everything is working correctly. Most streaming software allows you to test your stream without going public.

**8. Schedule or Go Live:**

Depending on your needs, you can either schedule a live event or go live instantly. Make sure to configure the start and end times if scheduling.

**9. Monitor and Interact with Viewers:**

During your live stream, you can monitor viewer statistics and interact with your audience through the IBM Cloud Video Streaming dashboard.

**10. End the Stream:**

Once your live event is over, make sure to properly end the stream to prevent further broadcasting.

**11. Record and Share:**

IBM Cloud Video Streaming may allow you to record your live streams for later use or share them with your audience.

By following this framework we will be able to video stream or movies in the IBM cloud, that gives immense user experience to the user, that allows the user to upload the videos in the cloud, and allows the user to record and share the media.