PHASE 1: Problem Definition and Design Thinking

**PROJECT OBJECTIVE:**

The objective of this project is to create a virtual cinema platform using IBM Cloud Video Streaming. This platform will allow users to upload and stream movies and videos on-demand. The 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.

**PROBLEM DEFINITION:**

IBM Cloud Video Streaming is a powerful platform that enables organizations to deliver live and on-demand video content to a global audience. While the platform offers numerous features and capabilities, there are several challenges and opportunities for improvement in the media streaming process. This problem definition outlines key issues and goals for enhancing the media streaming experience on IBM Cloud Video Streaming.

**DESIGN THINKING:** **FEATURES:**

**USER REGISTRATION (both sign up and login):**

* Users should be able to create accounts with unique usernames and passwords.
* Registration may require email verification for security.
* If necessary, users can be allowed on age basis.
* Enabling a checkbox or toggle for our apps “terms and conditions”.
* Users can have profile pages to manage personal information.

**USER INTEREST SORTING:**

* Users can be able to manage their interest like horror, thriller, sports etc.
* Users should be able to select their preferred languages.

**VIDEO UPLOADING:**

* Content creators can upload movies and videos.
* Upload process should support video file formats.
* Implement content moderation to ensure compliance with guidelines.

**CONTENT MANAGEMENT:**

* Users can edit video descriptions, titles, and metadata.
* Ability to remove or unpublish their content.
* Organize content by categories (e.g., genre, release date).
* Implement a search functionality with filters.

**USER INTERFACE DESIGN:**

**USER PROFILES:**

* Customizable avatars and user profiles.
* Viewing history and personalized settings.

**HOMEPAGE:**

* Engaging homepage showcasing featured content.
* Sections for new releases and personalized recommendations.
* Clear navigation menus for easy access to different sections.
* Breadcrumbs for easy navigation within the platform.
* Ensure the platform is accessible on various devices (smartphones, tablets, desktops).

**VIDEO PLAYER:**

* Modern, responsive video player.
* Support for subtitles, quality settings, and playback controls.

**VIDEO UPLOAD:**

* Intuitive content submission form with title, description, genre selection, and video upload options.
* User-friendly interface for content creators.
* Implement a content moderation system to review and approve uploaded videos.
* Notify users about the moderation status.

**CONTENT MANAGEMENT:**

* Content creators can manage their uploaded content, update metadata, and monitor video performance.

**OTHER MANAGEMENTS:**

* Configuring the platform to use IBM Cloud Video Streaming services for hosting and delivering videos.
* Implement adaptive streaming technology to adjust video quality based on users' internet connections.
* Ensure high-definition video quality for an immersive viewing experience.
* Encourage user engagement through interactive features like comments, likes, and social sharing.
* Collecting user feedback and continuously improve the platform based on user preferences and suggestions.

**CONCLUSION:**

This design document outlines the problem definition and the initial design thinking process for creating a virtual cinema platform using IBM Cloud Video Streaming.

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