CLOUD APPLICATION AND DEVELOPMENT(CAD)

Project: Media Streaming with IBM
Cloud Video Streaming

Phase 2: Innovation

Introduction:

By Transforming the proposed approach and design thinking into a fully functional and innovative Cloud Media Streaming Platform involves a series of steps.
Here, the transformation process encompasses:

- Development,
- Testing, and
- Deployment stages.

Innovative solutions:

Let's incorporate the features of user-generated playlists and real-time chat into the Cloud Media Streaming Platform. These features will enhance user engagement and create a more interactive movie-watching experience.

1. User-Generated Playlists

Development Steps:

1. Playlist Creation Tools:

- We can use frontend components like (UI, Drag&Drop, Preview) for users to create and customize their playlists.
- We can Implement backend services includes (Database(Db2),APIs for CRUD,Authentication) to manage and store user-generated playlists.

2. Collaborative Playlist Editing:.

- Implement real-time updates(eg. Socket.io) to reflect changes made by multiple users.

2. Real-Time Chat

Development Steps:

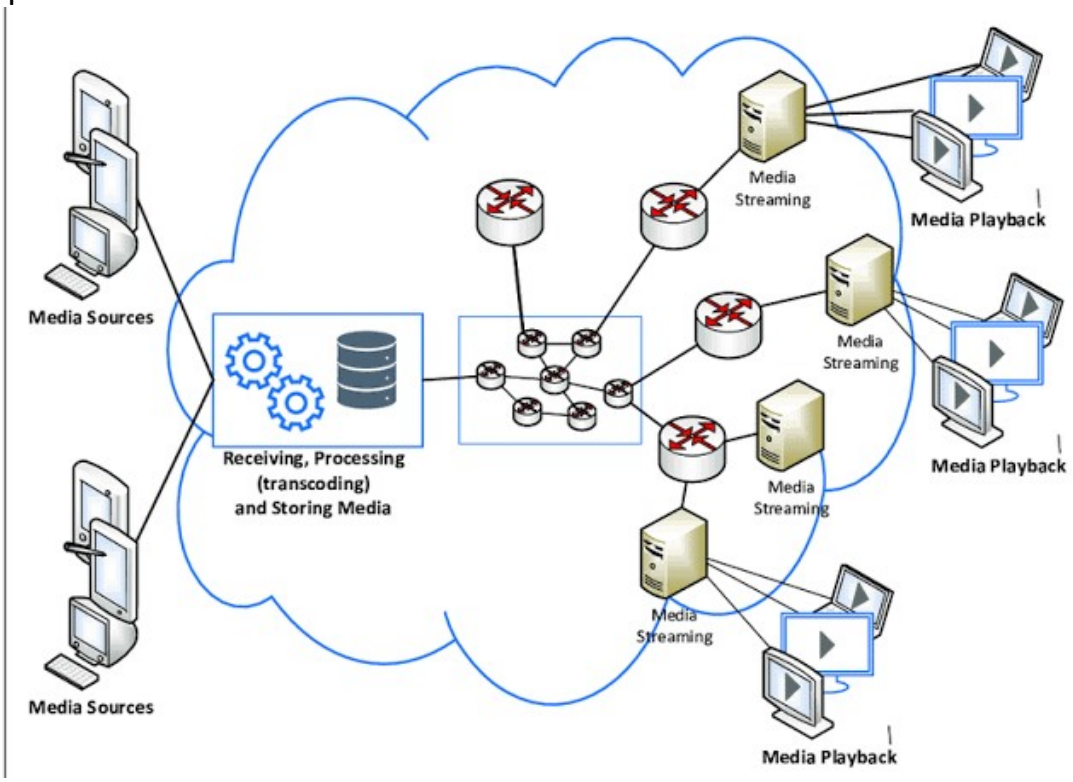
1. Chat Interface:

- we can develop a real-time chat interface (SDK-Software Deveploment Kit) and implement one-on-one and group chat functionality within the platform.
- we can implement chat rooms or channels for different user groups.(User groups and communities)

2. Chat Moderation Tools:

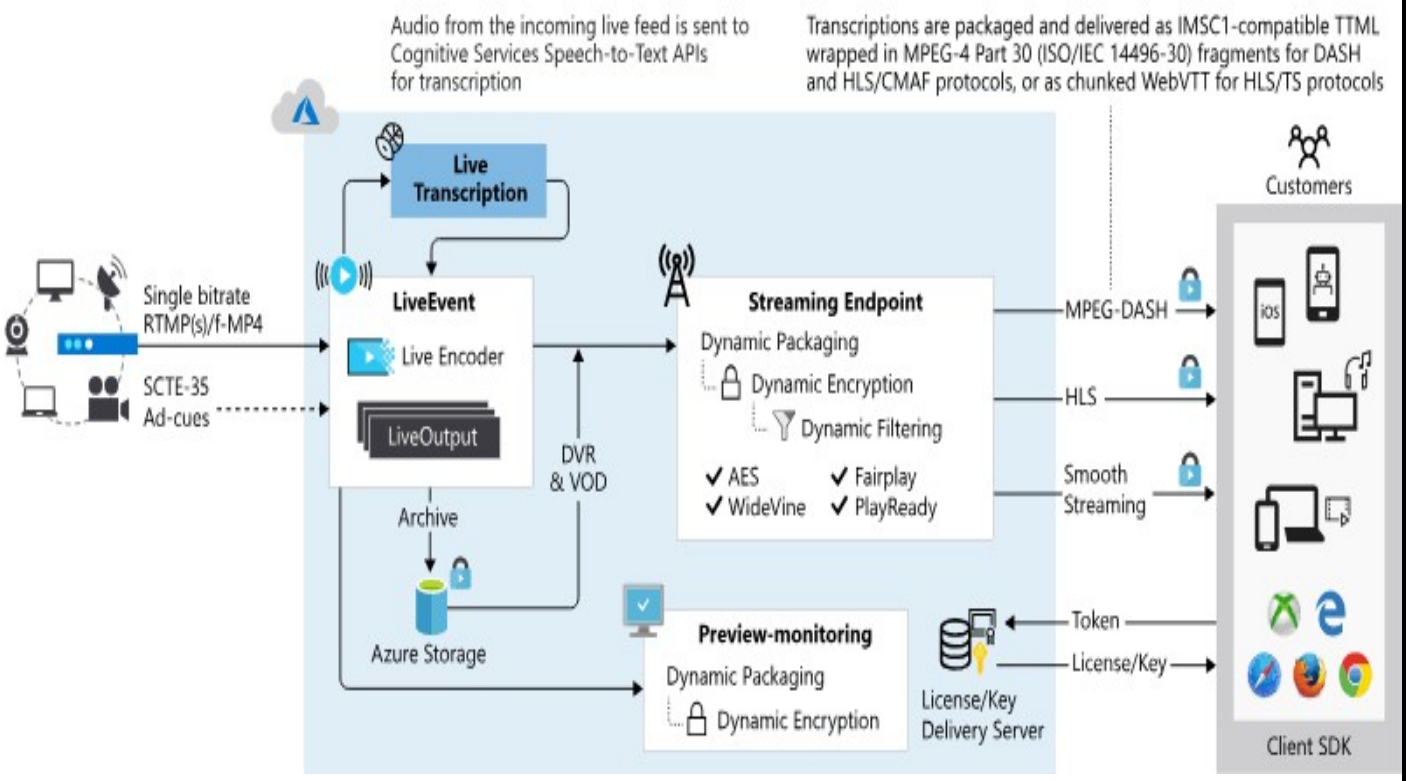
- we can implement moderation tools like (content Moderation API,Reporting ,Administrator dashboard) to ensure a positive and respectful chat environment.
- Develop reporting mechanisms for inappropriate content.

Integrating the above innovative solutions into the Cloud Media Streaming Platform involves a thoughtful implementation strategy that aligns with the design thinking principles.



These design innovation techniques or principles uses specific algorithm only can depend on the needs and requirements of the streaming service, as well as the technology available at the time.

Commonly, video streaming services use adaptive streaming algorithms like **HTTP Live Streaming (HLS)** or **Dynamic Adaptive Streaming over HTTP (DASH)**. These algorithms dynamically adjust the quality of the video based on the viewer's internet connection and device capabilities to ensure smooth playback.



it also provides features for content protection, analytics, and integration with other IBM Cloud services. it's advisable to refer to IBM's official documentation or contact their support for detailed information.

Conclusion:

In conclusion, Implementing and testing each of these innovative solutions, the Cloud Media Streaming Platform will not only address the design challenges outlined in the problem statement but also provide users with a unique, engaging, and community-driven streaming experience. The iterative deployment approach, combined with continuous user feedback and data analysis, ensures that these additional features seamlessly integrate with the existing innovative solutions. Regular updates and refinements based on user interactions will contribute to an ever-evolving, engaging, and user-centric Cloud Media Streaming Platform.