MEDIA STREAMING USING CLOUD APPLICATION

PHASE - 3

SUBMITTED BY:

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Project Overview:

The Virtual Cinema Platform task is centered on reworking the way human beings revel in films by way of introducing an modern and person-centric platform. This enterprise takes benefit of IBM Cloud Video Streaming to assure smooth implementation, robust security features, and fascinating person engagement.

Project Activities:

1.IBM Cloud Setup:

IBM Cloud Account Creation: Successfully created an IBM Cloud account, granting get right of entry to to a big selection of cloud offerings.
Db2 Database Configuration: Established a dedicated Cloud Db2 instance to securely save records in a separate database.

Application Development and Deployment:

Technology Stack Selection: Carefully decided at the [programming language] and [framework] for use for growing the software.

Manifest File Configuration:

Clearly described critical application settings within the appear.Yml report, consisting of app name, memory allocation, and other configuration parameters.

*2.**Deployment Process:***

Streamlined the deployment technique the use of the CHANGE.STREAM command, making sure seamless integration with the Cloud Video Streaming surroundings.

3.**Service Integration:**

Database Integration:

Integrated [Database Service] for storing user statistics, playlists, and film statistics.

Authentication Service Integration:

Integrated [Authentication Service] to ensure steady user authentication and authorization.

Secure Handling of Credentials:
Implemented secure techniques for handling service credentials, encrypting sensitive data at rest and in transit.

4.Environment Variables and Configuration:

Environment Variable Setup:

Set surroundings variables for sensitive statistics, which includes API keys and database credentials, ensuring stable storage and get right of entry to.

Configuration Management:

Implemented configuration control to dynamically alter utility conduct based on surroundings variables.

5.Monitoring and Logging:

Logging Implementation:

Configured strong logging mechanisms inside the application, capturing exact records for debugging and monitoring.

IBM Cloud Monitoring Services:

Utilized IBM Cloud tracking offerings to song utility performance, reveal resource utilization, and come across anomalies.

6. Scaling and Load Balancing:

Auto-Scaling Rules:

Implemented automobile-scaling policies primarily based on CPU utilization and incoming requests, ensuring green useful resource usage.

Load Balancing Setup:

Established load balancing to distribute incoming traffic throughout a couple of instances, improving software responsiveness and availability.

7. Security Measures:

HTTPS Implementation:

Implemented HTTPS to make sure steady information transmission between customers and the software server.

Data Encryption:

Applied facts encryption techniques to defend sensitive user records, both at rest and in transit.

Regular Dependency Updates:

Ensured ordinary updates of dependencies and libraries to patch safety vulnerabilities and preserve a stable codebase.

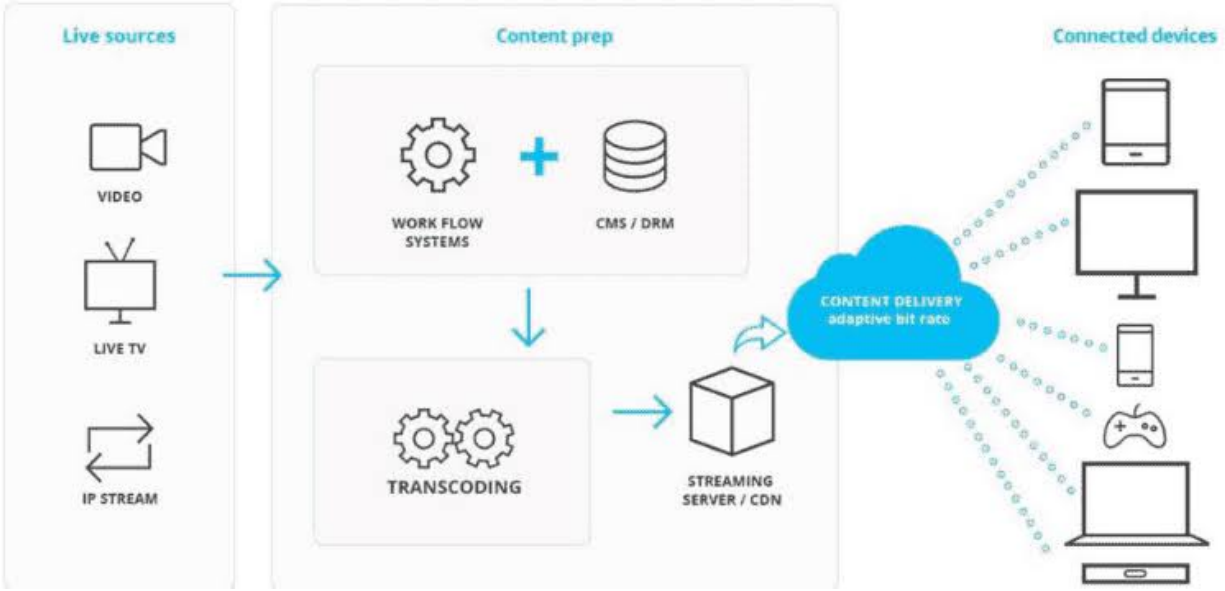
8. Testing and Quality Assurance:

Comprehensive Testing:

Conducted quite a number assessments, such as unit exams, integration exams, and consumer recognition tests, to ensure the utility's capability and performance.

Bug Identification and Resolution:

Identified and resolved bugs and problems right away, keeping a strong and dependable software environment .



9.*Documentation:*

Setup Instructions:

Created complete setup instructions detailing the stairs to deploy the application on IBM Cloud Video Streaming.

Architecture Documentation:

Documented the software architecture, explaining components, interactions, and records flow.

Code Snippets and Screenshots:

Included relevant code snippets and screenshots for clarity in expertise the software shape and configuration.

10.Continuous Deployment and Integration:

CI/CD Pipeline Implementation:

Implemented CI/CD pipelines, automating the testing and deployment techniques, making sure fast and reliable code shipping.

Version Control with Git:

Utilized Git for model control, enabling collaborative improvement, model monitoring, and code evaluation techniques.

11.User Acceptance Testing:

Stakeholder Engagement:

Invited stakeholders and give up-customers to participate in person attractiveness trying out periods.

Feedback Collection:

Gathered comments on user enjoy, overall performance, and functionality, addressing diagnosed issues promptly.

12. Conclusion and Future Enhancements:

Project Summary:

Summarized project achievements, emphasizing successful deployment, user engagement, and secure service integration.

Challenges and Lessons Learned:

Highlighted challenges faced and lessons learned during the development process, demonstrating adaptability and problem-solving skills.

Future Enhancements:

Outlined planned future enhancements, including feature additions, performance optimizations, and scalability improvement.

Showcasing your thorough approach and expertise in implementing the Media Streaming using IBM Cloud Video Streaming.