**NAME:B.JEGAN**

**REGISTER NUMBER:723921104018**

**COLLEGE NAME: ARJUN COLLEGE OF TECHNOLOGY**

**PROJECT: MEDIA STREAMING WITH IBM CLOUD COMPUTING (PHASE 5)**

Project Idea: “Personal Video Library”

Objective:

Create a web-based platform where users can upload, organize, and stream their personal video library from the cloud. This project aims to provide users with an easy way to manage and access their video content from anywhere.

Key Features:

User Registration and Authentication:

Users should be able to create accounts and log in securely.

Video Upload:

Users can upload video files to the platform.

Implement video format validation to ensure compatibility.

Video Organization:

Allow users to categorize and tag their videos for easy retrieval.

Implement a user-friendly interface for managing video metadata.

Cloud Storage:

Utilize IBM Cloud Object Storage for storing the uploaded videos securely.

Streaming Engine:

Use IBM Cloud Video Streaming to transcode uploaded videos for adaptive streaming.

Implement a video player to stream content with options for quality selection.

User Profiles:

Display user profiles showing their uploaded videos and collections.

Search and Filters:

Implement search functionality to help users quickly find their videos.

Enable filtering by tags, categories, and upload date.

User Interaction:

Allow users to like, comment, and share videos.

Implement a basic social interaction system.

Privacy and Security:

Ensure that videos are private by default but can be shared with selected users.

Implement user access controls to protect video privacy.

Responsive Design:

Make the platform accessible on various devices, including desktops, tablets, and mobile phones.

Development Steps:

Set Up IBM Cloud:

Sign up for an IBM Cloud account if you haven’t already.

Create an instance of IBM Cloud Object Storage and IBM Cloud Video Streaming.

Database and Backend:

Develop the server-side using a technology stack of your choice (e.g., Node.js, Python, Java).

Create a database to store user information, video metadata, and access controls.

Implement user registration, login, and authentication.

File Upload:

Create an interface for users to upload video files.

Use IBM Cloud Object Storage to store uploaded videos securely.

Metadata Management:

Build a system for users to add and edit video metadata (title, description, tags, etc.).

Video Streaming:

Integrate IBM Cloud Video Streaming for video transcoding and streaming.

User Interface:

Develop a web-based frontend with HTML, CSS, and JavaScript.

Design an intuitive user interface for video library management.

User Profiles:

Implement user profile pages to showcase their video collections.

Search and Filters:

Create search and filter functionalities for video discovery.

Privacy and Access Control:

Develop user access controls and privacy settings for videos.

Testing and Deployment:

Thoroughly test the platform to ensure it works smoothly.

Deploy your project to the IBM Cloud platform.

User Documentation:

Provide user guides and documentation for using the platform.

Launch and Promotion:

Launch the platform and promote it to friends and potential users.