

## Create a virtual cinema platform using IBM Cloud Video

### Development 3

#### Program:

#### Find the Average Rating:

```
Import pandas as pd
```

```
# Assuming the dataset is stored in a DataFrame named 'movies'
```

```
Data = {
```

```
    'Title': ['Inception', 'The Shawshank Redemption', 'Black Panther', 'La La Land', 'The Godfather'],
```

```
    'Description': ['A mind-bending heist thriller', 'Two imprisoned men bond over several decades',  
    'Marvel\'s superhero film with cultural impact', 'Musical romantic drama set in Los Angeles', 'Classic  
crime drama about the Corleone family'],
```

```
    'Genre': ['Sci-Fi, Action', 'Drama', 'Action, Sci-Fi', 'Musical, Drama', 'Crime, Drama'],
```

```
    'Release Date': ['2010-07-16', '1994-09-23', '2018-02-16', '2016-12-09', '1972-03-24'],
```

```
    'Average Rating': [4.5, 4.7, 4.2, 4.0, 4.8]
```

```
}
```

```
Movies = pd.DataFrame(data)
```

```
# Calculate the overall average rating
```

```
Overall_average_rating = movies['Average Rating'].mean()
```

```
Print(f"Overall Average Rating: {overall_average_rating}")
```

#### Output:

```
Overall Average Rating: 4.44
```

#### Filter Movies by Genre:

```
# Assuming the dataset is stored in a DataFrame named 'movies'
```

```
# Filter movies by a specific genre, e.g., 'Sci-Fi'
```

```
Sci-fi_movies = movies[movies['Genre'].str.contains('Sci-Fi')]
```

```
Print("Sci-Fi Movies:")
```

```
Print(Sci-fi_movies[['Title', 'Genre', 'Average Rating']])
```

#### Output:

	Title	Genre	Average Rating
0	Inception	Sci-Fi, Action	4.5
1	2 Black Panther	Action, Sci-Fi	4.2

## **Overview:**

### **Innovative Approaches:**

#### **AI-Driven Personalized Recommendations:**

Utilize artificial intelligence to analyze user preferences, viewing History, and genre preferences. Provide personalized movie Recommendations, enhancing user engagement and satisfaction.

Block chain for Content Ownership:

**Block chain for Content Ownership:** Implement block chain technology to ensure secure and transparent Ownership of content.

**Offline Viewing with Smart Downloads:** Develop an intelligent offline viewing feature that automatically Downloads content based on user preferences. Ensure a seamless Experience for users with limited or intermittent internet access.

**Technology Adoption:** Drive user adoption of emerging technologies like spatial audio, AR, And VR, positioning the platform as a pioneer in incorporating Cutting-edg

Global Accessibility:

Ensure global accessibility with offline viewing options, catering to Users with limited internet access and expanding the platform's reach diverse audiences.

**Data-Driven Iterative Improvements:** Implement continuous improvement based on user data and Feedback, enhancing the platform over time and

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### **Steps to follow:**

**Step 1 :**Sign up for an IBM Cloud account if you don't already have one.

**Step2:** Log in to your IBM Cloud account and navigate to the IBM Cloud Video Streaming service .

**Step 3:** Set up your virtual cinema platform by configuring the necessary settings, such as creating channels for different movies, setting up access controls, and customizing the user interface.

**Step 4:** Upload the movies or videos that you want to stream on your virtual cinema platform to the IBM Cloud Video Streaming service.

**Step 6:**Integrate the video player provided by IBM Cloud Video Streaming into your virtual cinema platform's website or application

**Step7:**Test your virtual cinema platform to ensure that the videos are streaming correctly and that all the desired features are working as expected.

**Step 8:** Once everything is set up and tested, launch your virtual cinema platform and start promoting it to your audience.

### **Implementation:**

**Design User Interface:** Create wireframes and design the user interface for your platform. Use tools like Figma, Adobe XD, or Sketch to visualize the layout and interactions.

**Set Up Backend:** Choose a backend technology like Node.js or Python, and set up a server to handle the business logic and data management. Use frameworks like Express.js or Django to streamline development.

**Database Setup:** Select a database like MongoDB or MySQL to store movie data, user information, and other relevant data. Design the database schema and set up the necessary tables or collections.

## **CONCLUSION:**

The IBM Cloud Videos project offers a robust and scalable solution for Media streaming needs. Its feature-rich platform, coupled with IBM's cloud Infrastructure, ensures high-quality content delivery and seamless user Experiences. With a focus on security, analytics, and customization options, IBM Cloud Videos is a comprehensive choice for businesses looking to optimize their Media streaming services.