

Create a virtual cinema platform using IBM Cloud Video Streaming.

DEVELOPMENT PART 2:

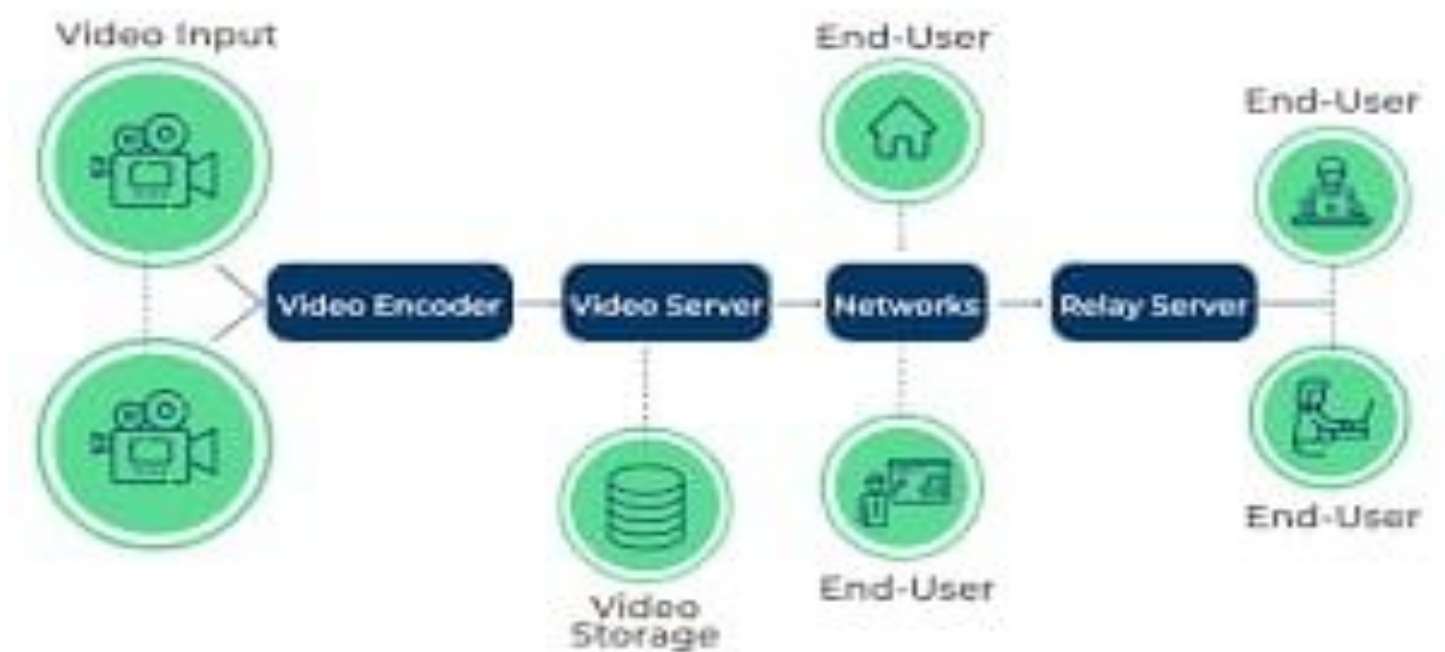
Implementing a virtual cinema platform involves several steps. Here's a high-level overview of the process:

1. Define Requirements: Clearly define the features and functionalities you want in your virtual cinema platform. This includes user registration, movie catalog, showtimes, ticket booking, payment integration, and video streaming capabilities.

2. 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.

3. Set Up Backend: Choose a backend technology like Node's 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.

4. 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.



5.User Authentication: Implement a secure authentication system to allow users to register, log in, and manage their profiles. You can use libraries like Passport.js or Firebase Authentication for this.



6.Movie Management: Create a system to manage movies, including details like title, description, genre, and cover images. Allow administrators to add, edit, and delete movies

	Logo	Rating	Price	Streaming
Hulu		4.0 out of 5	\$5.99 per month	movies, new and classic shows, live TV shows
HBO Max		4.0 out of 5	\$9.99 per month	popular shows and movies, Warner Bros. movies
Prime Video		4.0 out of 5	\$8.99 per month	movies and TV shows, live Thursday Night Football, and WNBA games
Netflix		4.5 out of 5	from \$8.99 per month	best movies and TV shows

from the platform.

7.Showtimes and Ticket Booking: Implement a feature to manage showtimes for each movie and allow users to book tickets for specific showtimes. Integrate a payment gateway to handle transactions securely.

8.Video Streaming Integration: Utilize the IBM Cloud Video Streaming service to upload and stream movies on your platform. Follow the service’s documentation to integrate it into your backend and frontend.

9 .Testing and Deployment: Test your platform thoroughly to ensure all features work as expected. Deploy your backend and frontend code to a hosting provider like Heroku or AWS, ensuring scalability and reliability.

10. Continuous Improvement: Gather user feedback and iterate on your platform to improve its performance, user experience, and add new features based on user needs.

Sure, here are some example SQL queries that you can use for your virtual cinema platform project:

Database like MySQL to store movie data, user information, and other relevant data.

1. Retrieve all movies from the database:

```
```sql
SELECT * FROM movies;
```
```

2 . Retrieve movies of a specific genre:

```
```sql
SELECT * FROM movies WHERE genre = 'Action';
```
```

3. Retrieve upcoming showtimes for a specific movie:

```
```sql
SELECT * FROM showtimes WHERE movie_id = 123 AND
date >= CURRENT_DATE;
```
```

4. Retrieve all tickets booked by a specific user:

```
```sql
SELECT * FROM tickets WHERE user_id = 456;
```

```

5.Retrieve the total number of tickets booked for a specific showtime:

```sql

SELECT COUNT(\*) FROM tickets WHERE showtime\_id = 789;

```

6. Retrieve the top 5 movies with the highest ticket sales:

```sql

SELECT movies.\*, COUNT(tickets.movie\_id) AS ticket\_sales

FROM movies

LEFT JOIN tickets ON movies.id = tickets.movie\_id

GROUP BY movies.id

ORDER BY ticket\_sales DESC

LIMIT '''5

## DATASET

| Movie ID    | Movie Title  | Genre                    | Release date  | Director  |
|-------------|--------------|--------------------------|---------------|-----------|
| 1           | Avengers     | Action                   | April 26,2019 | Joe Russo |
| Theater id  | Theater Name | Location                 | Address       | Capacity  |
| 1           | Cineplex     | Ilayampalayam, Tamilnadu | 123 main road | 300       |
| Showtime ID | Movie ID     | Time                     | Date          | Price     |

|                  |                |                  |                       |                         |
|------------------|----------------|------------------|-----------------------|-------------------------|
| 1                | 1              | 6pm              | Nov<br>1,2023         | ₹10.99                  |
| <b>User ID</b>   | <b>Name</b>    | <b>Email</b>     | <b>Password</b>       | <b>Members</b>          |
| 1                | John           | John@gmail.com   | [Hashed<br>space]     | 2                       |
| <b>Ticket ID</b> | <b>User ID</b> | <b>Show time</b> | <b>Set<br/>number</b> | <b>Booking<br/>date</b> |
| 1                | 1              | 6pm              | A1                    | Oct<br>31,2023          |

### Result:

### Movie Details:

Movie ID: 1

Movie Title: Avengers: Endgame

Genre: Action

Release Date: April 26, 2019

Director: Anthony Russo, Joe Russo

Description: The Avengers must assemble once more to undo the devastating effects of Thanos' snap.

### Theater Details:

Theater ID: 1

Theater Name: Cineplex

Location: Ilayampalaiyam, Tamil Nadu, India

Address: 123 Main Street

Capacity: 200

**Showtime Details:**

Showtime ID: 1

Movie ID: 1

Theater ID: 1

Date: November 1, 2023

Time: 6:00 PM

Price: ₹10.99

**User Details:**

User ID: 1

Name: John Doe

Email: [johndoe@example.com](mailto:johndoe@example.com)

Password: [hashed password]

**Ticket Details:**

Ticket ID: 1

User ID: 1

Showtime ID: 1

Seat Number: A1

Booking Date: October 31, 2023