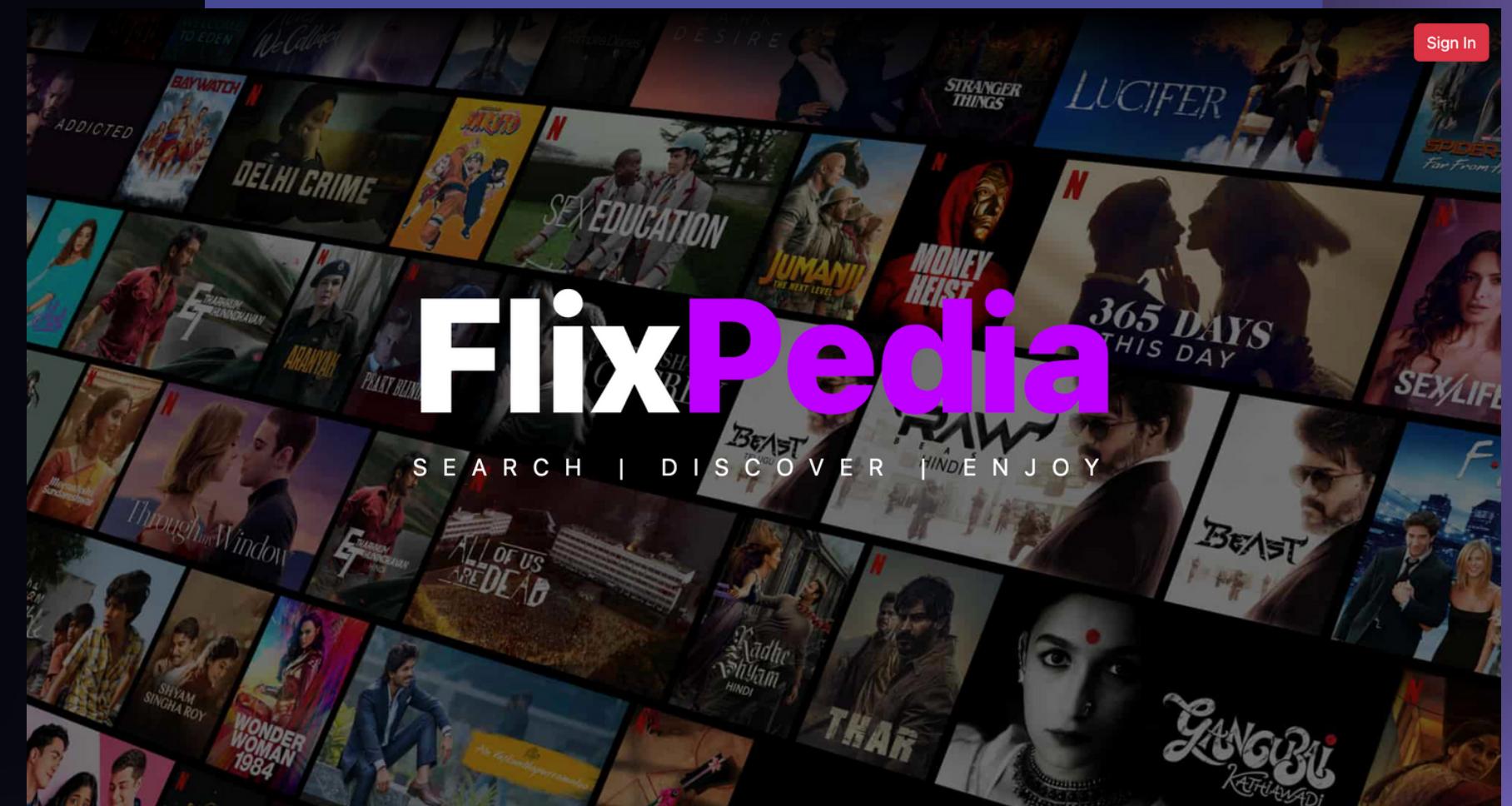


Team - 121

Opensoft 2023-24

FlixPedia



Flixpedia

Index

We have divided the presentation into six key sections which will be explained

01 Design

02 Authentication

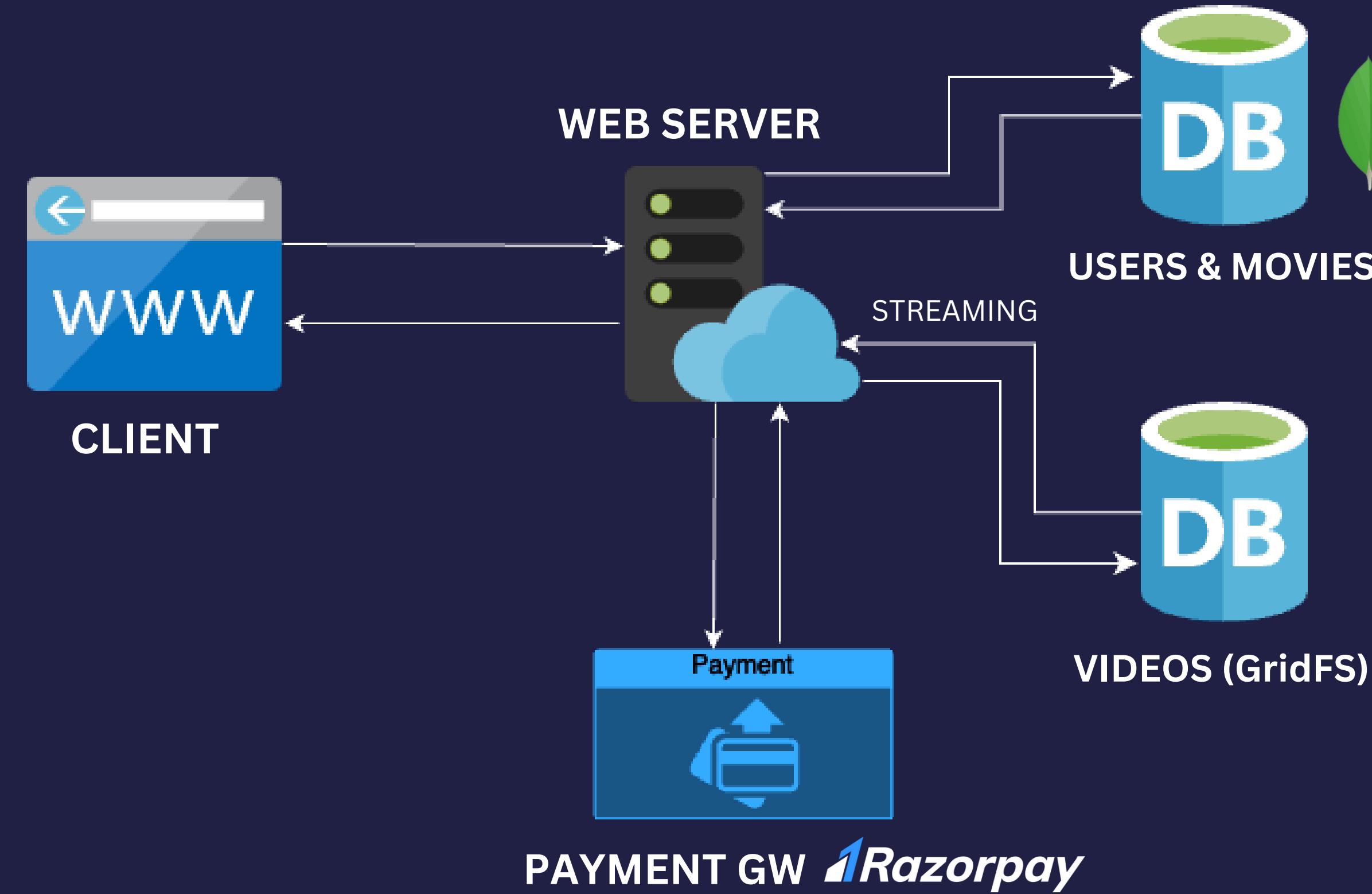
03 Search Objective

04 Video Streaming

05 Subscription

06 Demonstration

Design



Authentication

Solution

JWT Authentication

JSON Web Tokens (JWT) are compact, URL-safe means of representing claims between two parties. JWTs can be used for authentication, authorization, and exchanging information securely between parties.

- Ensure exclusive access! Content availability is tied to subscription plans, allowing seamless management of user privileges.
- Prioritize security! The video server authorizes the users before granting access, safeguarding content from unauthorized viewers.
- Fortify all access points! Every route undergoes authentication checks, bolstering overall system security and integrity.
- Safeguard user credentials! Passwords are securely stored using hashing techniques, enhancing data protection against potential breaches.

JWT example

eyJhbGciOiJIUzI1NilsInR
5cCl6IkpxVCJ9.**eyJ1c2V**
yX2lkljoiNjYwNjk5NTM1
MWMwZjdkMjUxMTc4Y
2MzliwiZXhwIjoxNzExOD
MwNTYzfQ._rqCnB-
FPGlE1sjMrI04LulR9ifYd
cD6hmWmBnJ6jXk

Header

```
{  
  "alg": "HS256",  
  "typ": "JWT"  
}
```

Payload

```
{  
  "user_id":  
  "6606995351c0f7d251178cc3"  
,  
  "exp": 1711830563  
}
```

Signature

```
HMACSHA256(  
base64UrlEncode(header) + "." +  
base64UrlEncode(payload),  
your-256-bit-secret  
)
```

Search Objective

...

Autocomplete

Autocomplete in MongoDB Atlas is a handy feature that enhances query efficiency by providing suggestions for query completion as you type in the MongoDB Shell.

Autocomplete returns results that contain predicted words based on the tokenization strategy. TokenOrder is sequential.

Fuzzy Search

Fuzzy search in MongoDB enables users to retrieve documents that are relevant to a query even if there are minor spelling mistakes, typos, or variations in the search terms.

We added a “Fuzzy” field in autocomplete to incorporate fuzzy search. We adjusted the values of “maxEdits” and “prefixLength” to yield satisfactory results.

Semantic Search

Atlas Vector Search is a feature that is provided by MongoDB Atlas, allowing us to two find documents with fields having value as a vector that is the most similar to our query vector.

We utilize Sentence-BERT to encode the “plot” of each into a vector 768 floating point number and use the same model to encode the query to get the query vector. Finally utilizing Atlas Vector Search to get the movies closest to the meaning of the query.

Search Optimisation

...

Combined Result

Autocomplete suggests search queries for faster formulation, while semantic analysis improves search precision by understanding user intent, resulting in relevant and accurate search outcomes, enhancing usability and satisfaction.

Sort by Popularity

The sorting mechanism prioritizes search results by combining popularity and relevance scores. Popularity sorting ranks items based on their overall usage or engagement metrics to show frequently accessed or highly rated content prominently.

Debouncing

Reduces the amount of search requests to the web server by not sending requests on every key press, instead depends on the inactivity threshold set.

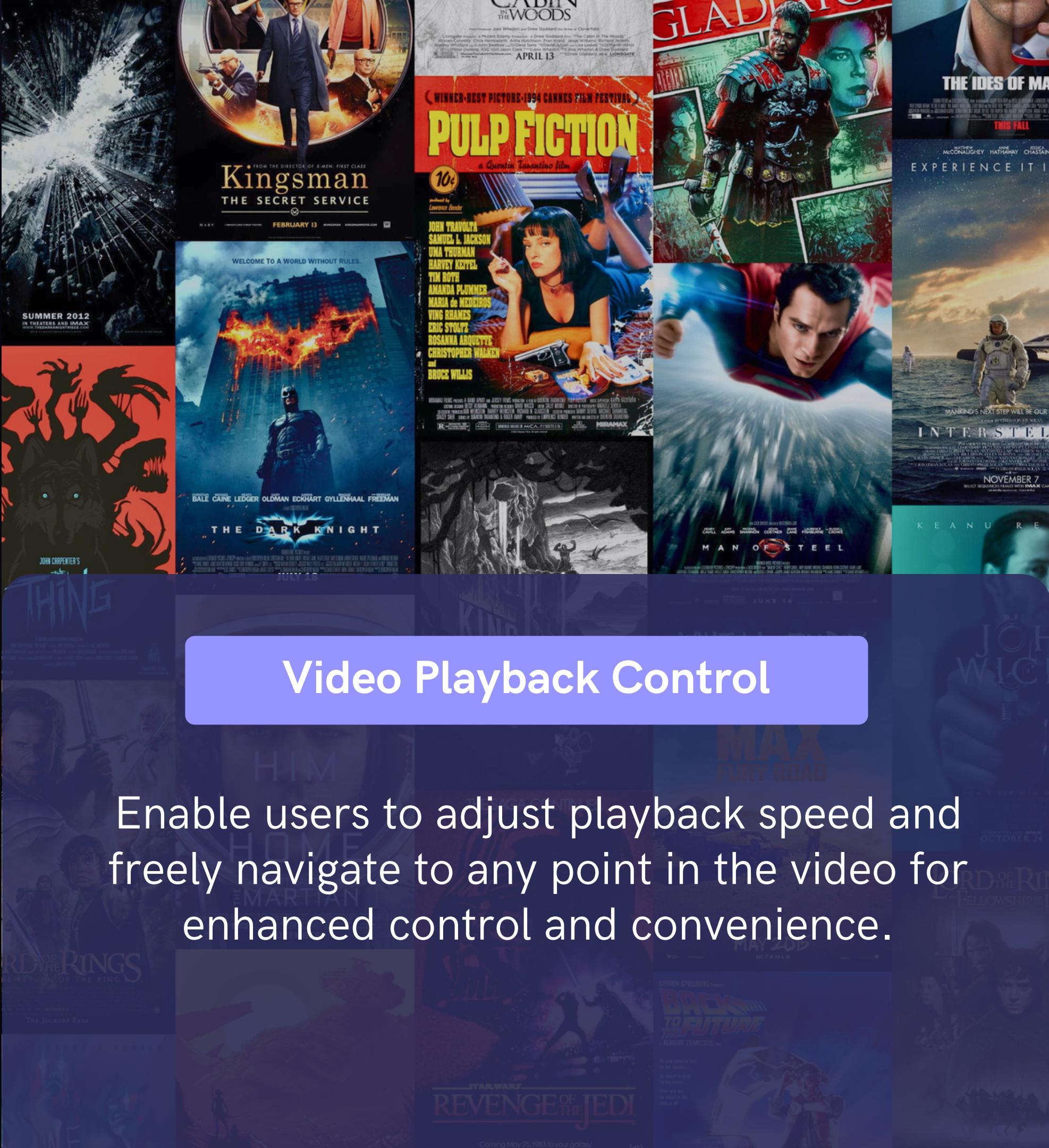
Video Player

Streamlined Video Retrieval

Instead of downloading entire files, retrieve only the necessary data chunks, optimizing efficiency and reducing resource consumption.

Tailored Streaming Experience

Offer users a range of resolution options to match their internet speed and device capabilities, ensuring optimal viewing experiences.



Video Playback Control

Enable users to adjust playback speed and freely navigate to any point in the video for enhanced control and convenience.

Video Server

Efficient Storage with MongoDB GridFS

Maximize database efficiency! Movie files are stored seamlessly using MongoDB GridFS, optimizing storage and retrieval within the database.

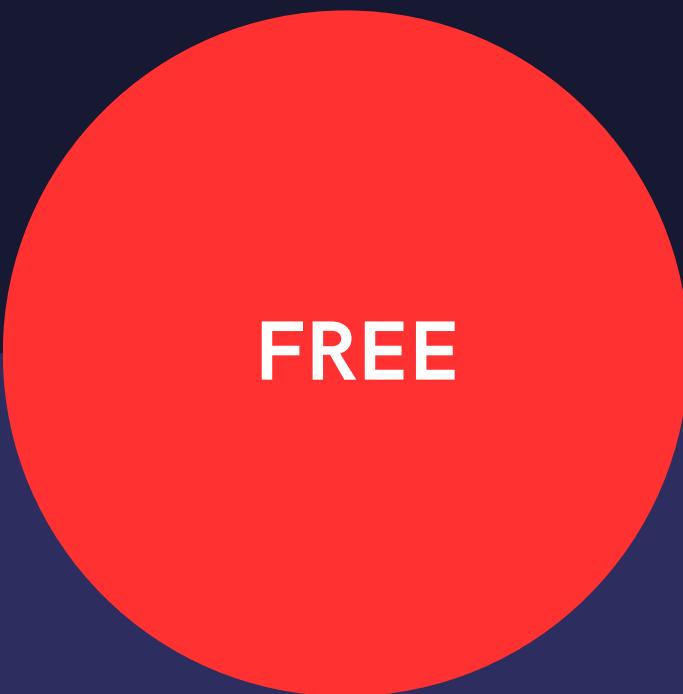
Optimizing Movie File Transmission

Enhance performance! Leveraging GridFS streaming options ensures efficient transmission of movie files, eliminating the need to send the entire file at once.

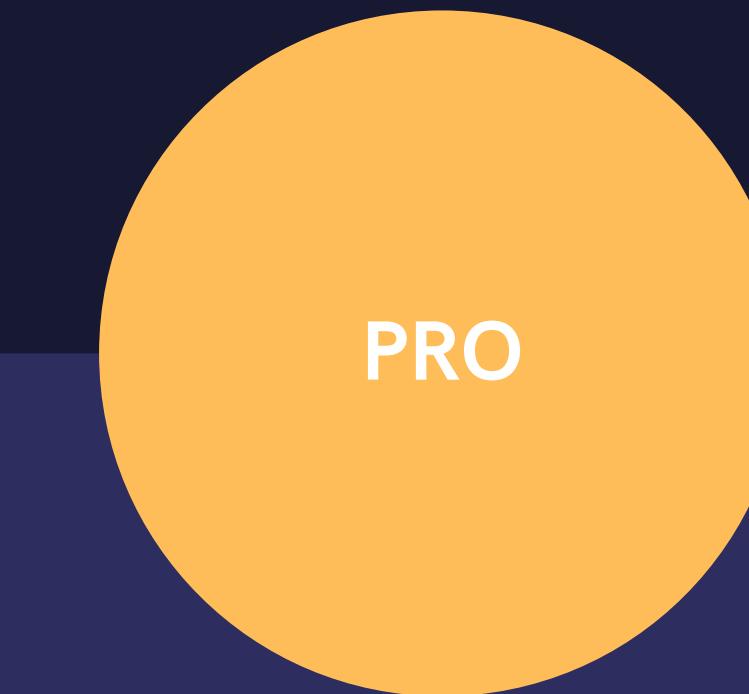
Universal Video Access

Ensure compatibility and accessibility! Videos are served using the standard HTTP protocol, facilitating easy access and playback across various platforms and devices.

Subscription Model



5000+ Movies
Upto 720P quality streaming



10000+ Movies
Upto 1080P quality streaming



23000+ Movies
Upto 4K streaming

Seamless Subscription Management

Subscription Flexibility

Tailored Choices: Present users with a range of subscription options tailored to their preferences and requirements.

Budget-Conscious Solutions: Avail cost-effective subscription packages.

Secure User Data Management

Rely on MongoDB: Safeguard user data with the robust data storage capabilities of MongoDB, ensuring steadfast reliability and security throughout every stage of operation.

Smooth Payment Processing

Efficient Transactions: Employ Razorpay as the payment gateway, facilitating streamlined and secure payment experiences for users seeking hassle-free subscription services.

Get An Upgrade

←

Plans

Our Pricing Plan

Free

Movies : 5000+

₹ Free

Quality : 720p

UPGRADE

Premium

Movies : All

₹ 499

Quality : 4k

UPGRADE

Pro

Movies : 10000+

₹ 299

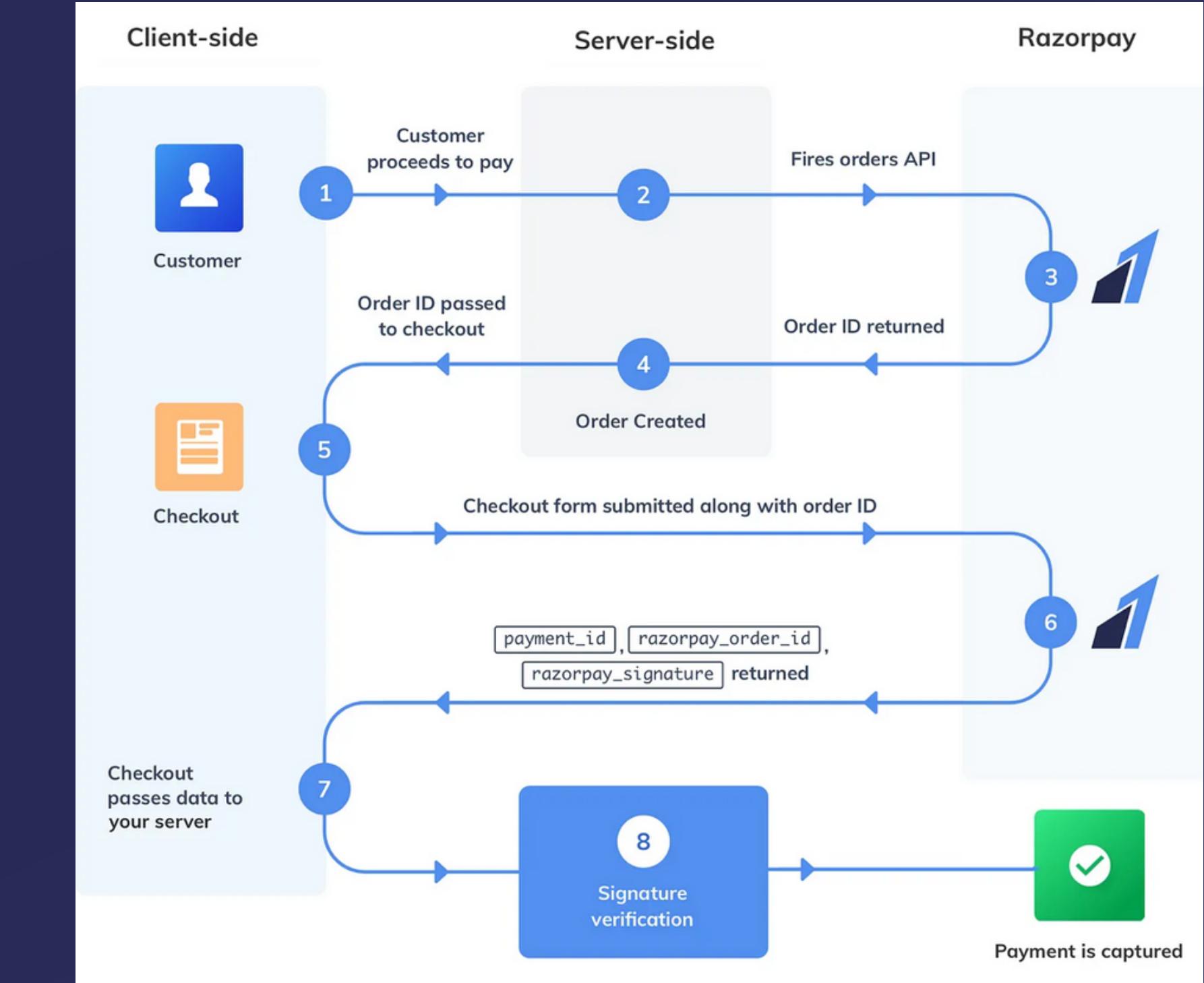
Quality : 1080p

UPGRADE

Payment Gateway



Razorpay is a leading payment gateway in India, known for its user-friendly interface and seamless transaction experience. It supports multiple payment methods and offers quick integration, making it a popular choice for businesses looking to facilitate online payments.



Further Expansion

Recommendor System

Enables users to watch the content that they like thus increasing the participation.



Advanced Analytics

Allows users and admins to track daily activity and other metrics to meet their goals.



**THANK
YOU**

WE ARE OPEN TO QUESTIONS