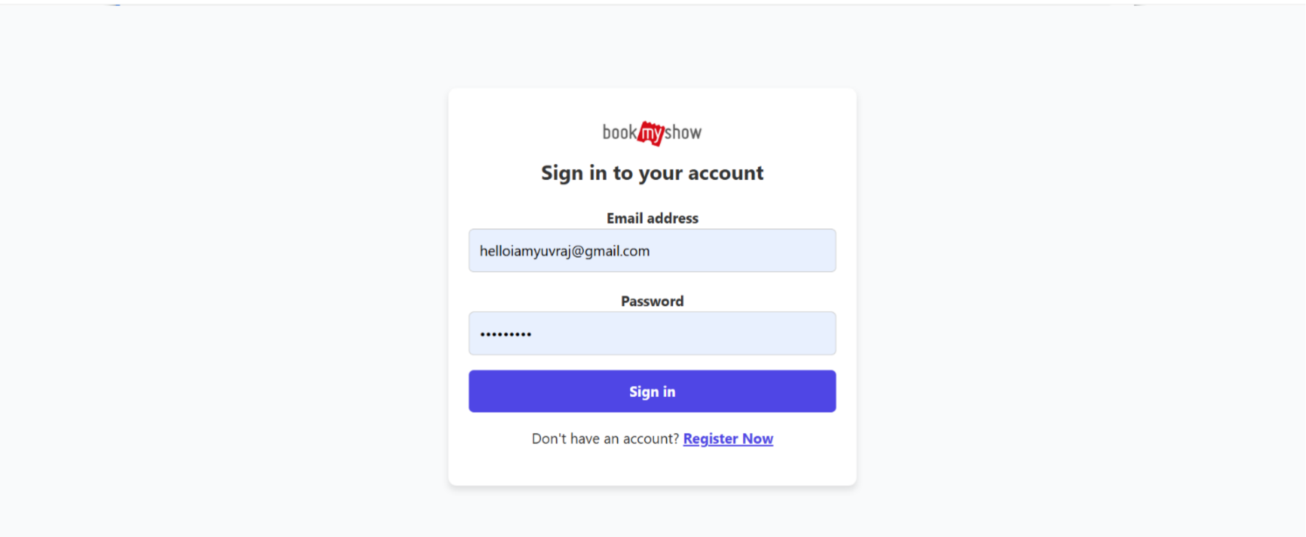
Movie Ticket Booking System Documentation

Overview

This project is a full-stack movie ticket booking system inspired by BookMyShow. It allows users to browse movies, view available slots, select seats, and book tickets seamlessly.

Frontend

1. Login Page
    - Users must enter valid credentials to proceed to the home page.
    - If credentials are incorrect, an error message is displayed.
    - URL: /api/auth/login



Sign in to your account

Email address

helloiamyuvraj@gmail.com

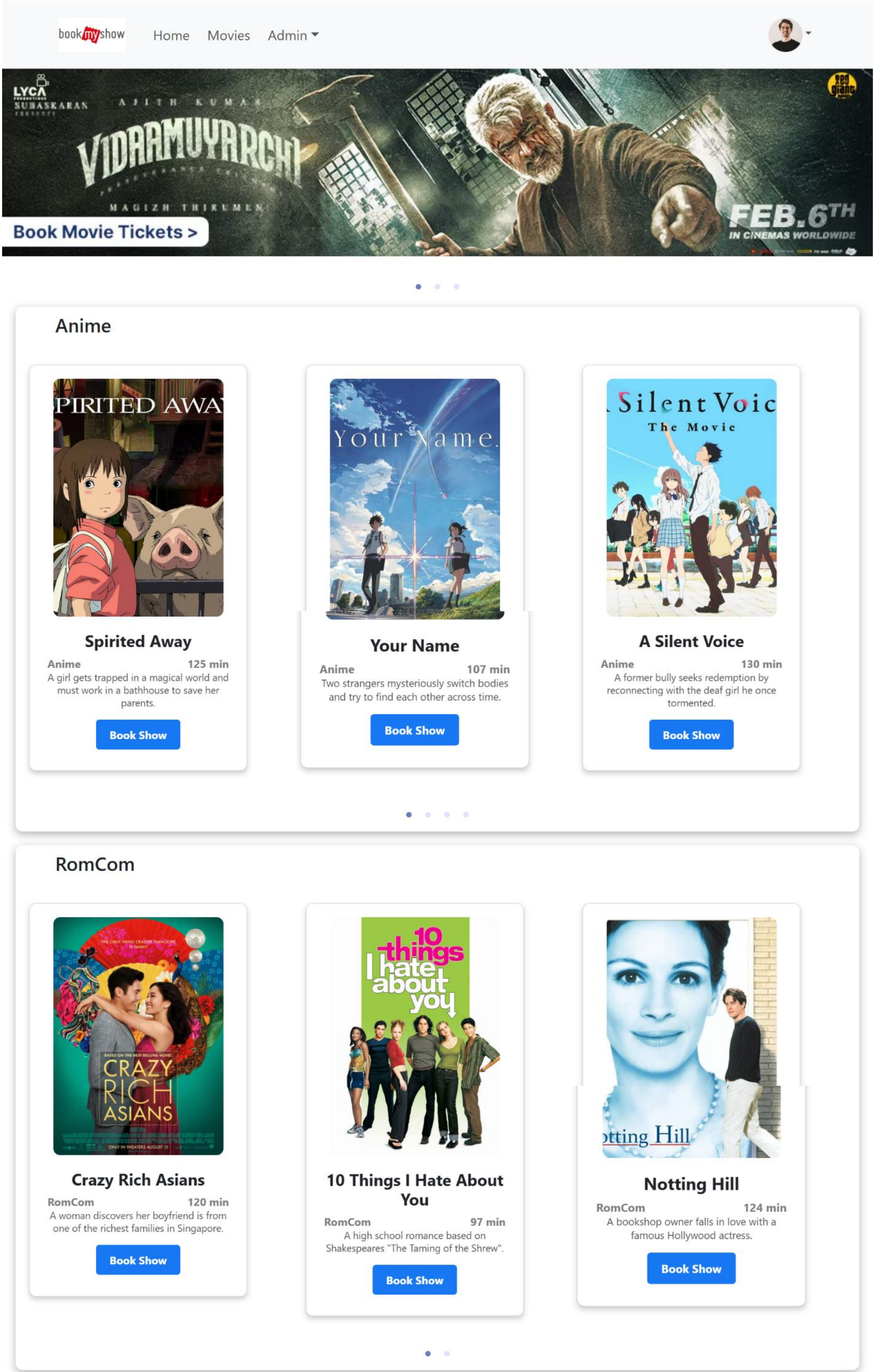
Password

•••••••••

Don't have an account? Register Now

2. Home Page

    - Displays a carousel with featured movies.
    - Shows movies categorized by genre.
    - Clicking on a movie card navigates to its booking page.
    - URL: /api/HomePage



Anime

Spirited Away

Anime 125 min

A girl gets trapped in a magical world and must work in a bathhouse to save her parents.

Book Show

Your Name

Anime 107 min

Two strangers mysteriously switch bodies and try to find each other across time.

Book Show

A Silent Voice

Anime 130 min

A former bully seeks redemption by reconnecting with the deaf girl he once tormented.

Book Show

RomCom

Crazy Rich Asians

RomCom 120 min

A woman discovers her boyfriend is from one of the richest families in Singapore.

Book Show

10 Things I Hate About You

RomCom 97 min

A high school romance based on Shakespeares "The Taming of the Shrew".

Book Show

Notting Hill

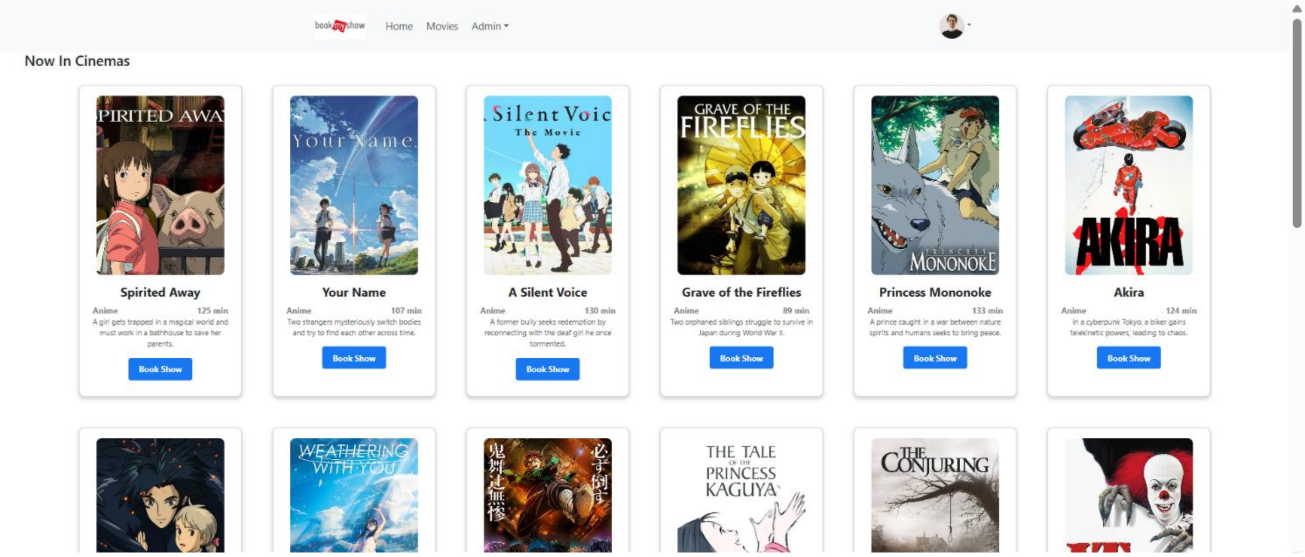
RomCom 124 min

A bookshop owner falls in love with a famous Hollywood actress.

Book Show

3. Movie Page

- Shows all the movie available.
- Click on Book Now button to book a ticket.
- URL: /api/movies



Now In Cinemas

Spirited Away
Anime 125 min
A girl gets trapped in a magical world and must work in a bathhouse to save her parents.

Your Name
Anime 107 min
Two strangers mysteriously switch bodies and try to find each other across time.

A Silent Voice
Anime 130 min
A former bully seeks redemption by reconnecting with the deaf girl he once tormented.

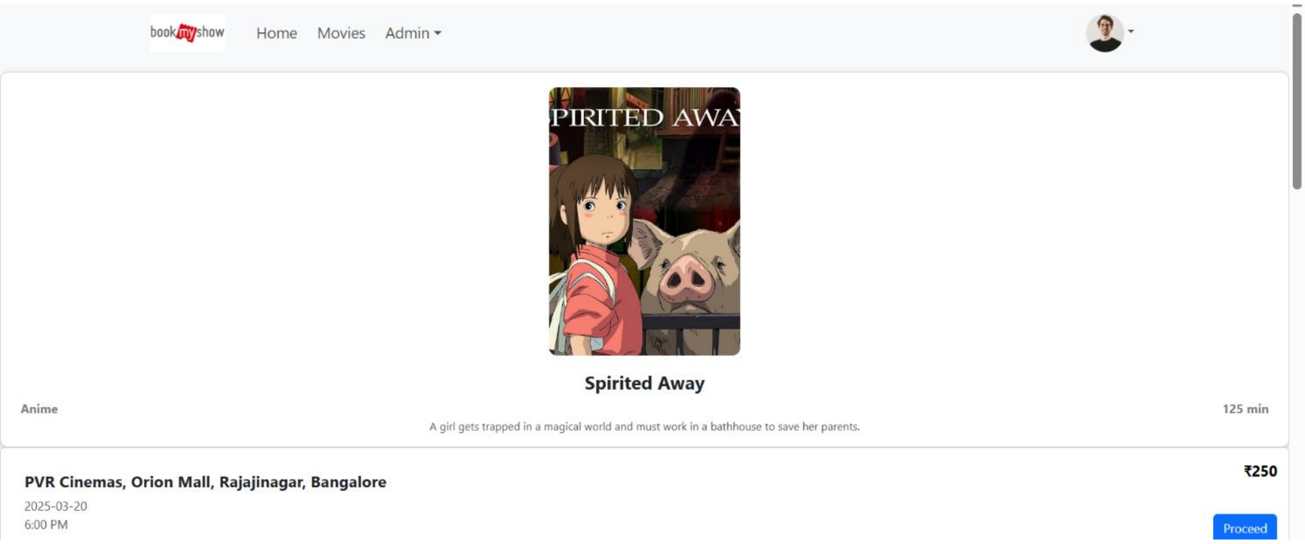
Grave of the Fireflies
Anime 89 min
Two orphaned siblings struggle to survive in Japan during World War II.

Princess Mononoke
Anime 133 min
A prince caught in a war between nature spirits and humans seeks to bring peace.

Akira
Anime 124 min
In a cyberpunk Tokyo, a biker gains telekinetic powers, leading to chaos.

4. Show Booking Page

- Show the details about the movie.
- Shows all the available slots based on seat availability.
- Proceed Button to continue.
- URL: /api /book/{movieId}

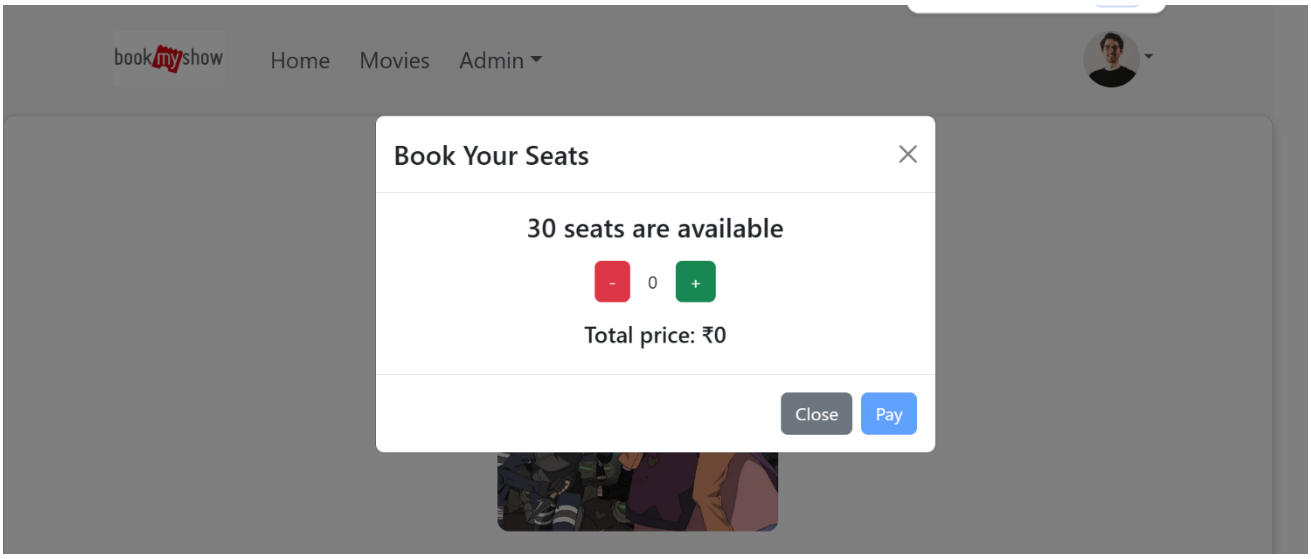


Spirited Away
Anime 125 min
A girl gets trapped in a magical world and must work in a bathhouse to save her parents.

PVR Cinemas, Orion Mall, Rajajinagar, Bangalore ₹250
2025-03-20
6:00 PM

5. Seat Booking page

- A pop up to select number of tickets.
- User can’t select more than available number of tickets.
- Button to submit.
- URL: /api /book/{movieId}



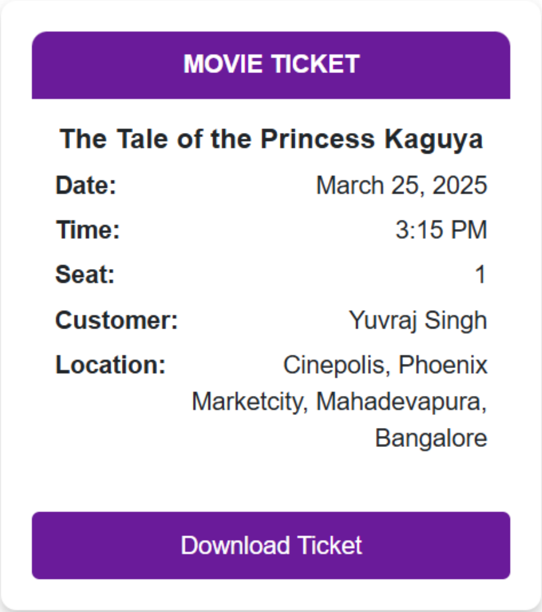
Book Your Seats

30 seats are available

Total price: ₹0

6. Ticket Confirmation

- Ticket Generation.
- URL: /api/ticket



MOVIE TICKET

The Tale of the Princess Kaguya

Date: March 25, 2025

Time: 3:15 PM

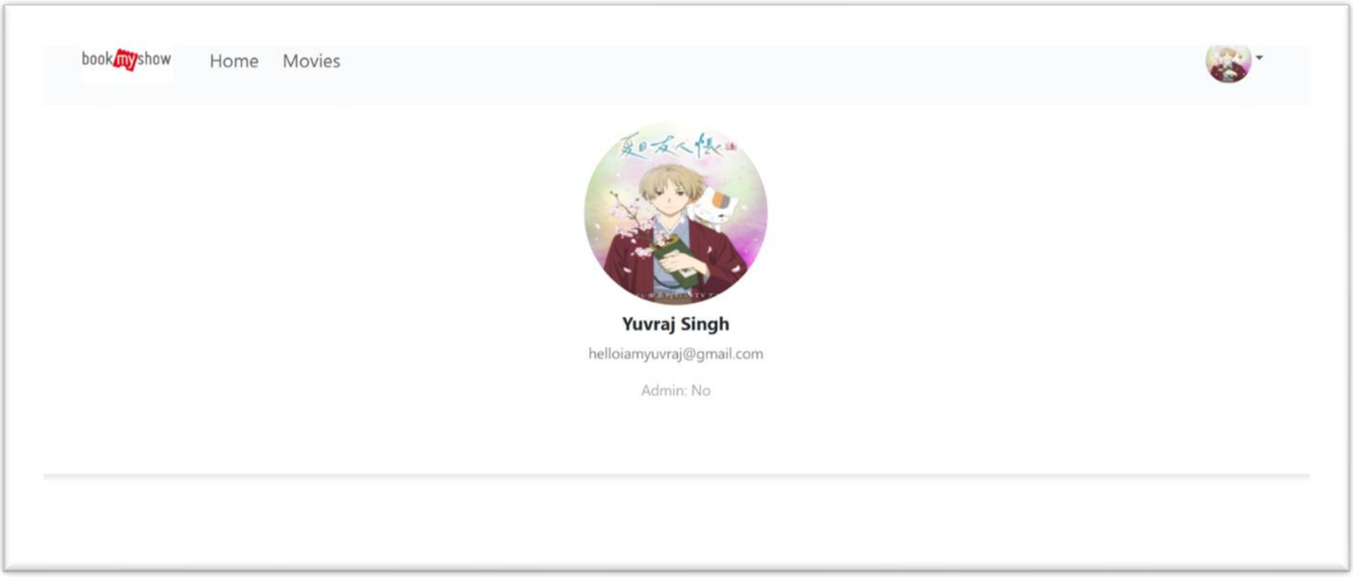
Seat: 1

Customer: Yuvraj Singh

Location: Cinepolis, Phoenix Marketcity, Mahadevapura, Bangalore

7. Profile page

- Check User details.
- URL: /api/profile



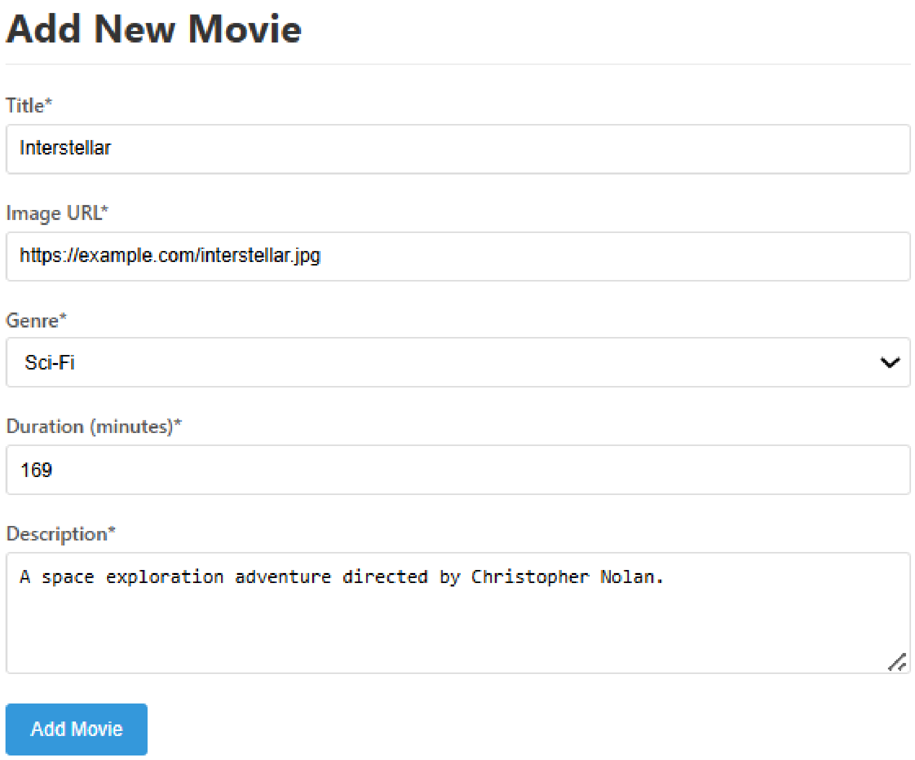
Yuvraj Singh

helloiamyuvraj@gmail.com

Admin: No

8. Add Movie

- Add a movie.
- Only admin has access
- URL: /api/movie/add



Add New Movie

Title*

Interstellar

Image URL*

https://example.com/interstellar.jpg

Genre*

Sci-Fi

Duration (minutes)*

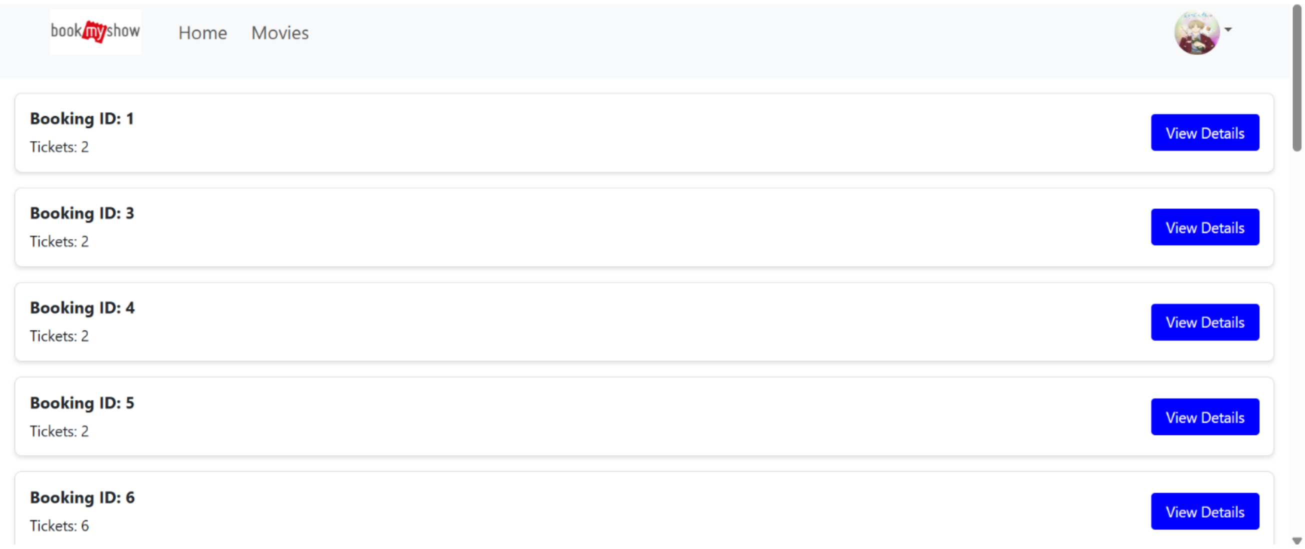
169

Description*

A space exploration adventure directed by Christopher Nolan.

9. Booking History

- Check booking history of user.
- When more details are required. Press the button to open more details.



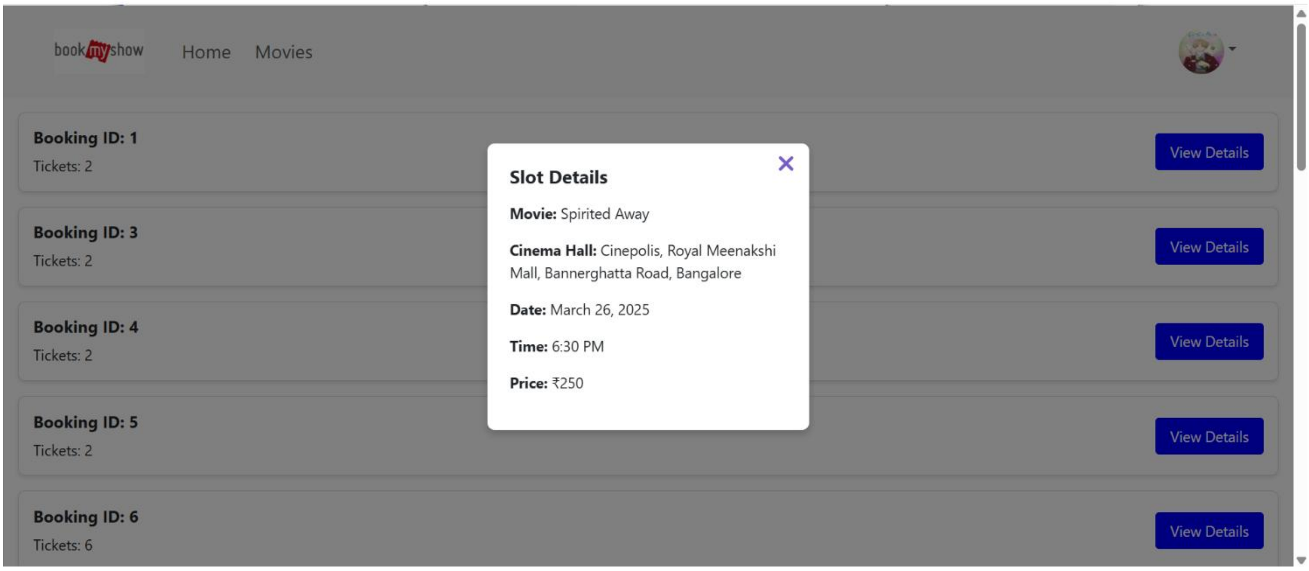
Booking ID: 1
Tickets: 2
View Details

Booking ID: 3
Tickets: 2
View Details

Booking ID: 4
Tickets: 2
View Details

Booking ID: 5
Tickets: 2
View Details

Booking ID: 6
Tickets: 6
View Details



Slot Details

Movie: Spirited Away

Cinema Hall: Cinepolis, Royal Meenakshi Mall, Bannerghatta Road, Bangalore

Date: March 26, 2025

Time: 6:30 PM

Price: ₹250

API Documentation

(All endopints are secured with JWT)

1. Get All Movies

    - Endpoint: GET /api/movies/
    - Description: Returns a list of all available movies.
    - Response Example:

```
[
 {
  "movieId": 1,
  "title": "Inception",
  "imageUrl": "https://example.com/inception.jpg",
  "genre": "Sci-Fi",
  "duration": 148,
  "description": "A mind-bending thriller by Christopher Nolan."
 },
 {
  "movieId": 2,
  "title": "Spirited Away",
  "imageUrl": "https://example.com/spiritedaway.jpg",
  "genre": "Anime",
  "duration": 125,
  "description": "A Studio Ghibli masterpiece."
 }
]
```

2. Get Movies by Genre

- Endpoint: GET /api/movie/?genre={genre}
- Description: Returns movies filtered by genre.
- Query Parameters:

  genre (string) – Required. One of Anime, Horror, Action, RomCom.

- Example Request:

  GET /api/movie/?genre=Sci-Fi

- Response Example:

```
[
 {
   "movieId": 1,
   "title": "Inception",
   "imageUrl": "https://example.com/inception.jpg",
   "genre": "Sci-Fi",
   "duration": 148,
   "description": "A mind-bending thriller by Christopher Nolan."
 }
]
```

3. Get Movie Details by ID

- Endpoint: GET /api/movie/:id
- Description: Fetches details of a specific movie by ID.
- Example Request:

  ```
  GET /api/movie/1
  ```

- Response Example:

  ```
  {
    "movieId": 1,
    "title": "Inception",
    "imageUrl": "https://example.com/inception.jpg",
    "genre": "Sci-Fi",
    "duration": 148,
    "description": "A mind-bending thriller by Christopher Nolan."
  }
  ```

---

4. Get Available Slots for a Movie

- Endpoint: GET /api/movie/:id/slot/
- Description: Returns all available show slots for a given movie.
- Example Request:
  GET /api/movie/1/slot/
- Response Example:

```
[
 {
  "showId": 101,
  "movieId": 1,
  "cinemaHall": "IMAX",
  "date": "2025-03-25",
  "timing": "18:30",
  "price": 250,
  "availableSeats": 50
 },
 {
  "showId": 102,
  "movieId": 1,
  "cinemaHall": "PVR",
  "date": "2025-03-26",
  "timing": "20:00",
  "price": 200,
  "availableSeats": 30
 }
]
```

5. Get Slot Details

- Endpoint: GET /api/slot/:id
- Description: Fetches details of a specific show slot by ID.
- Example Request:

  GET /api/slot/101

- Response Example:

  ```
  {
    "showId": 101,
    "movieId": 1,
    "cinemaHall": "IMAX",
    "date": "2025-03-25",
    "timing": "18:30",
    "price": 250,
    "availableSeats": 50
  }
  ```

---

6. Book a Ticket

- Endpoint: POST /api/slot/:id/book
- Description: Books tickets for a specific show and returns booking details.
- Request Body:

```
{
  "userId": 5,
  "tickets": 2
}
```

- Example Request:

  POST /api/slot/101/book

- Response Example:

```
{
  "bookingId": 1001,
  "userId": 5,
  "showId": 101,
  "tickets": 2,
}
```

---

7. Add a Movie

- Endpoint: POST api/movie/add
- Description: Adds a new movie to the database.
- Request Body

```
{
  "title": "Interstellar",
  "imageUrl": "https://example.com/interstellar.jpg",
  "genre": "Sci-Fi",
  "duration": 169,
  "description": "A space exploration adventure directed by Christopher Nolan."
}
```

- Response

```
{
  "movieId": 3,
  "title": "Interstellar",
  "imageUrl": "https://example.com/interstellar.jpg",
  "genre": "Sci-Fi",
  "duration": 169,
  "description": "A space exploration adventure directed by Christopher Nolan.",
  "message": "Movie added successfully"
}
```

Database Schema

Movies

Column	Type	Constraints
movieId	INT	PRIMARY KEY
title	VARCHAR	NOT NULL
imageUrl	VARCHAR	NOT NULL
genre	VARCHAR	CHECK IN (Anime, Horror, Sci-Fi, RomCom)
duration	INT	NOT NULL
description	TEXT	NOT NULL

Shows

Column	Type	Constraints
showId	INT	PRIMARY KEY
movieId	INT	FOREIGN KEY -> Movies
cinemaHall	VARCHAR	NOT NULL
date	DATE	NOT NULL
timing	VARCHAR	NOT NULL
price	INT	NOT NULL
availableSeats	INT	NOT NULL

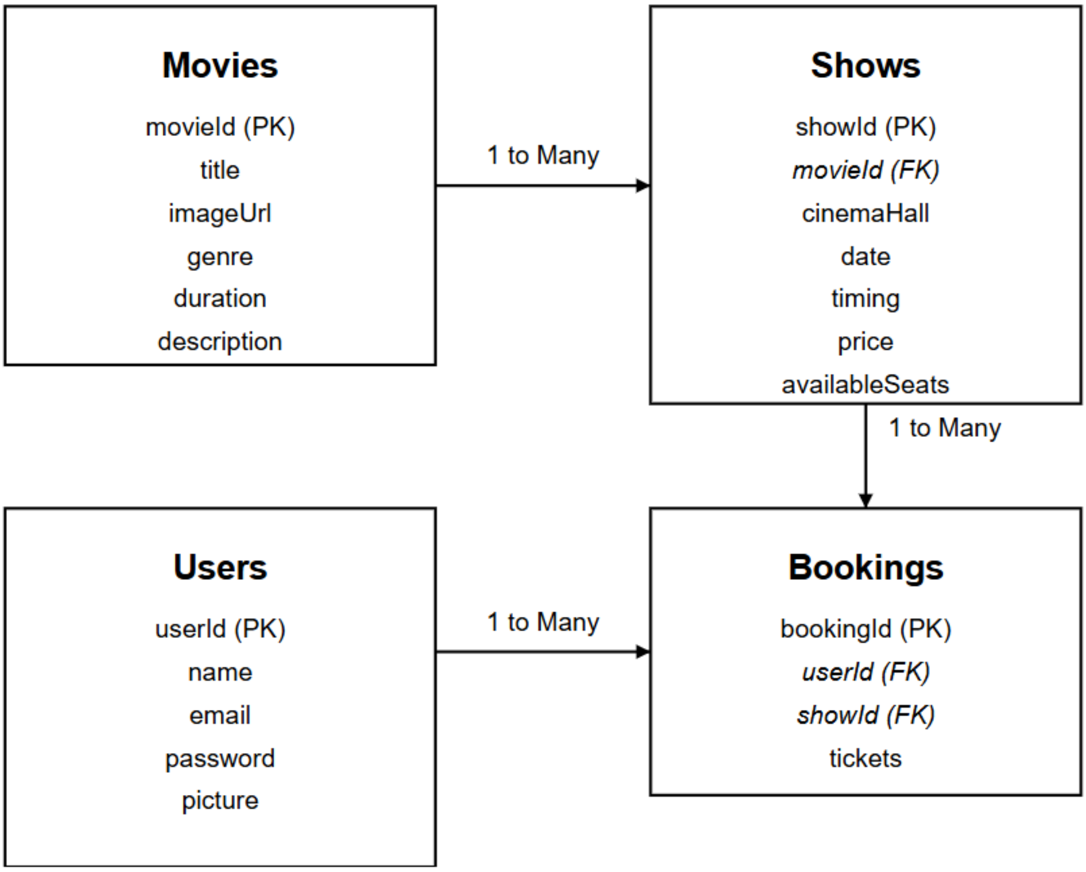
Bookings

Column	Type	Constraints
bookingId	INT	PRIMARY KEY
userId	INT	FOREIGN KEY -> Users
showId	INT	FOREIGN KEY -> Shows
tickets	INT	NOT NULL

User

Column	Type	Constraints
userId	INT	PRIMARY KEY
name	VARCHAR	NOT NULL
email	VARCHAR	NOT NULL
password	VARCHAR	NOT NULL
picture	VARCHAR	NOT REQUIRED
isAdmin	BOOL	NOT NULL

ER Diagram


Movies
movieId (PK)
title
imageUrl
genre
duration
description
1 to Many
Shows
showId (PK)
movieId (FK)
cinemaHall
date
timing
price
availableSeats
1 to Many
Users
userId (PK)
name
email
password
picture
1 to Many
Bookings
bookingId (PK)
userId (FK)
showId (FK)
tickets