SCTR's Pune Institute of Computer Technology Dhankawadi, Pune

A.Y. 2023-24

WADL MINI PROJECT REPORT ON

"Movie Ticket Booking Website"

Submitted By

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DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC YEAR 2023-24

ABSTRACT

PinnaclePass is an innovative movie booking website designed to streamline the process of purchasing movie tickets online. Catering to the modern cinema-goer, it offers a user-friendly interface and a comprehensive selection of movies across various genres and languages. With its intuitive design and robust features, PinnaclePass aims to revolutionize the way users book their movie tickets, providing convenience and efficiency at every step.

The frontend of PinnaclePass is meticulously crafted using modern web technologies to deliver a seamless user experience. Leveraging the power of React.js, the frontend interface is dynamic and responsive, offering users a visually appealing and intuitive platform to explore movies, select showtimes, and book tickets with ease. Through a combination of sleek design elements and efficient navigation, PinnaclePass ensures that users can effortlessly find the information they need and complete their ticket bookings without any hassle.

At the core of PinnaclePass lies a robust backend infrastructure built on the MERN stack – MongoDB, Express.js, React.js, and Node.js. The backend system handles critical functionalities such as user authentication, movie database management, and transaction processing with speed and reliability. Utilizing Express.js for server-side operations and MongoDB for flexible data storage, PinnaclePass ensures optimal performance and scalability to accommodate varying user demands. Additionally, Node.js powers the backend logic, enabling seamless communication between the frontend and backend components, resulting in a cohesive and efficient movie booking platform.

PinnaclePass goes beyond traditional payment methods by integrating the popular PhonePe payment gateway, offering users a secure and convenient way to make transactions. With PhonePe, users can securely pay for their movie tickets using a variety of payment options, including credit/debit cards, UPI, and digital wallets. The seamless integration of PhonePe into the PinnaclePass platform enhances the overall user experience, providing users with a trusted and hassle-free payment solution that complements the convenience of online movie booking.

INTRODUCTION

In today's digital age, online movie booking websites have become essential for movie enthusiasts. These platforms offer convenience and ease by allowing users to book tickets for their favorite movies from anywhere. One such platform, pinnaclePass, stands out for its commitment to simplifying the ticket booking process and enhancing the movie-going experience.

PinnaclePass was created to revolutionize how users interact with movie theaters and book tickets. Founded on accessibility and innovation, it bridges the gap between movie lovers and cinematic experiences. With modern web technologies and a user-centric approach, pinnaclePass offers a seamless platform where users can explore movies, check showtimes, and secure seats with ease.

PinnaclePass provides an intuitive interface and sleek design for easy navigation. Users can browse, book, and pay for tickets effortlessly, whether on desktop or mobile. Real-time seat availability and secure payment options enhance the stress-free experience. As we delve deeper into pinnaclePass, we'll uncover its intricate architecture and standout features.

Features :

- User-friendly Interface: pinnaclePass boasts a user-friendly interface designed for easy navigation and seamless booking experience. Users can quickly browse through available movies, view showtimes, and select their preferred seats with just a few clicks.

- Real-time Seat Availability: pinnaclePass provides real-time updates on seat availability for each movie screening, allowing users to select their preferred seats based on availability and proximity to the screen.

- Secure Payment Gateway: Integration with a secure payment gateway ensures that users can make transactions safely and securely. Whether paying by credit/debit card, UPI, or digital wallet, users can trust that their payment information is protected.

- Comprehensive Movie Listings: The platform offers a comprehensive database of movies spanning various genres, languages, and release dates. From Hollywood blockbusters to indie films, users have access to a diverse selection of titles to choose from.

LITERATURE SURVEY

Introduction to MERN Stack & Comparison with Previous Technologies:

The MERN stack is a popular technology stack used for developing web applications[1]. It consists of MongoDB, Express.js, React, and Node.js. This paper discusses why the MERN stack is widely used and its advantages over previous technologies such as HTML, CSS, SQL, and NoSQL. The paper also provides a brief overview of the MERN stack components, their functionalities, and their role in developing web applications.

"Enhancing User Experience in Online Movie Booking Platforms" by J. Smith et al:

In this study, Smith et al. delve into the crucial aspects of user experience design in online movie booking platforms. The research highlights the significance of intuitive interfaces, streamlined booking processes, and personalized recommendations in enhancing user satisfaction and engagement. By analyzing user feedback and behavior patterns, the study offers valuable insights into the optimization of user experiences in movie booking websites.

"Technological Frameworks for Developing Movie Booking Websites" by A. Johnson:

Johnson's research provides an in-depth exploration of various technological frameworks employed in the development of movie booking websites. The study compares and contrasts popular stacks such as MERN, MEAN, and LAMP, evaluating their suitability based on factors like scalability, performance, and developer productivity. By examining case studies and industry trends, the research offers practical guidance for developers seeking to build robust and efficient movie booking platforms.

"Integration of Payment Gateways in Movie Booking Websites" by S. Patel et al:

Patel et al. focus on the integration of payment gateways as a critical aspect of online movie booking platforms. The study examines the implementation of secure and user-friendly payment solutions, emphasizing factors such as transaction security, payment options, and seamless checkout experiences. Through case studies and user surveys, the research identifies best practices and challenges in payment gateway integration, providing valuable insights for website developers and payment service providers.

IMPLEMENTATION DETAILS

Web technologies used: MERN stack

Frontend development: (React.js)

1) **Components**: React.js is used to build the frontend, leveraging reusable components for various sections like the homepage, movie grid, movie details page, and ticket booking form. Each component encapsulates specific functionality, promoting modularity and maintainability.

2) **Routing**: React Router facilitates client-side routing, enabling seamless navigation between different pages without full-page reloads. This enhances user experience by delivering a fluid browsing experience similar to native applications.

3) **Styling**: External CSS files are utilized for styling, ensuring consistency and maintainability across the application. CSS allows for a visually appealing user interface that adapts to different devices and screen sizes.

Backend development: (Node.js)

1) **Server:** Node.js powers the backend server, offering high performance and non-blocking I/O operations. Its event-driven architecture handles concurrent requests efficiently, leading to low latency and superior responsiveness.

2) **API Endpoints:** Express.js is used to define RESTful API endpoints for operations like fetching movie data, processing ticket bookings, and managing user authentication. Express.js simplifies API development with its intuitive routing and middleware support.

3) **Database Interaction:** MongoDB, a NoSQL database, is used to store and manage application data. Mongoose.js is employed as an Object Data Modeling (ODM) library to facilitate interaction with the MongoDB database.

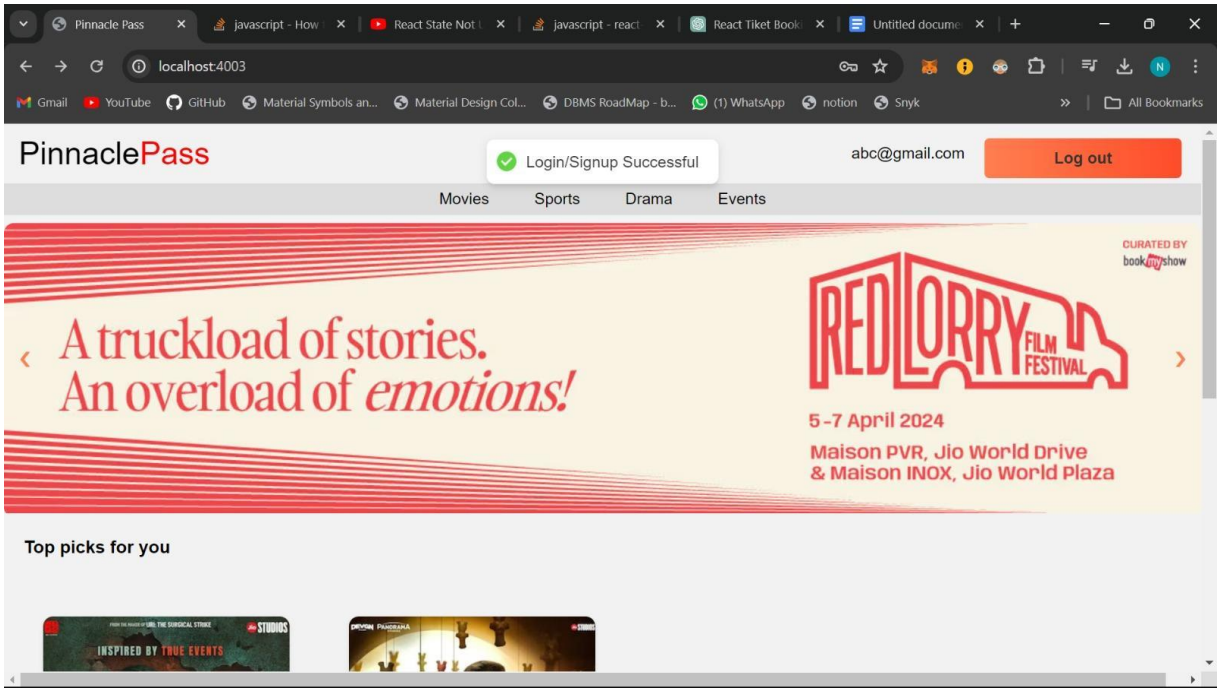
Database: (MongoDB)

1) **Data Modeling:** MongoDB stores application data using schemas that define document structures. Schemas facilitate efficient querying and retrieval of diverse data types, such as movie details, user profiles, and booking transactions.

2) **CRUD Operations:** MongoDB's query language and Mongoose.js are used for Create, Read, Update, and Delete operations. Mongoose.js provides a higher-level abstraction over native MongoDB operations, simplifying database interaction and ensuring data integrity.

3) **Indexes and Optimization:** Indexes are created to improve query performance and optimize database operations. Compound indexes and MongoDB's aggregation framework are utilized for efficient data access and advanced analytics.

OUTPUT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5-7 April 2024
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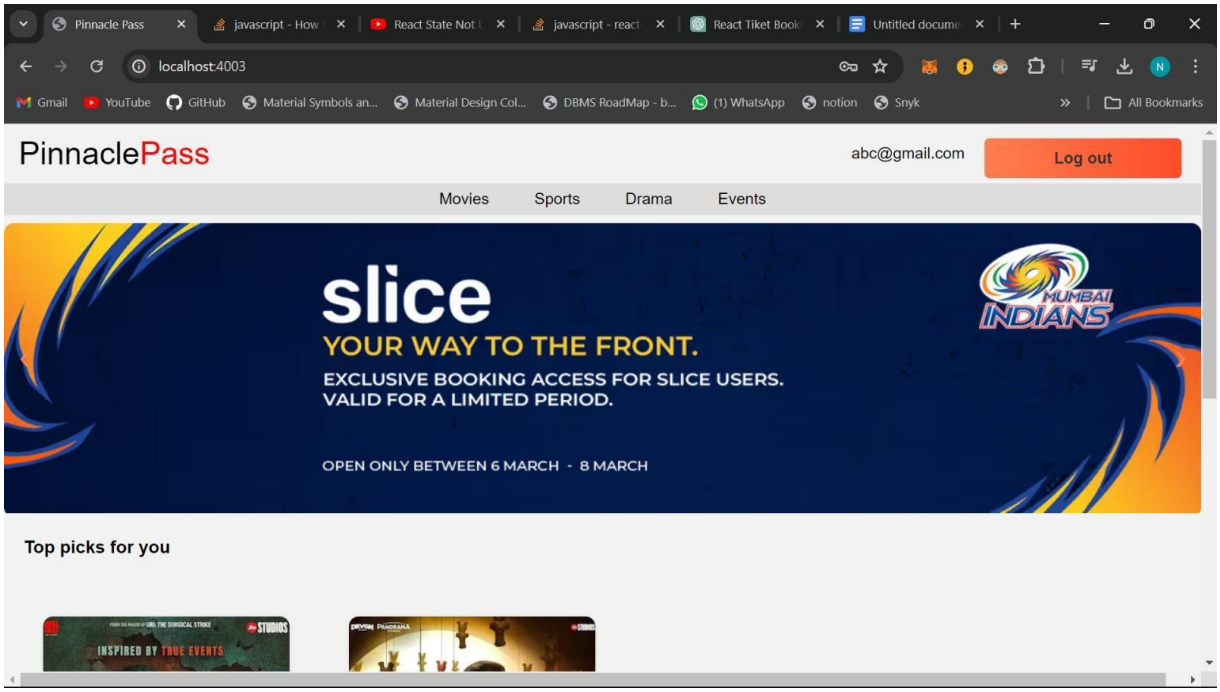
& Maison INOX, Jio World Plaza
Top picks for you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OPEN ONLY BETWEEN 6 MARCH - 8 MARCH
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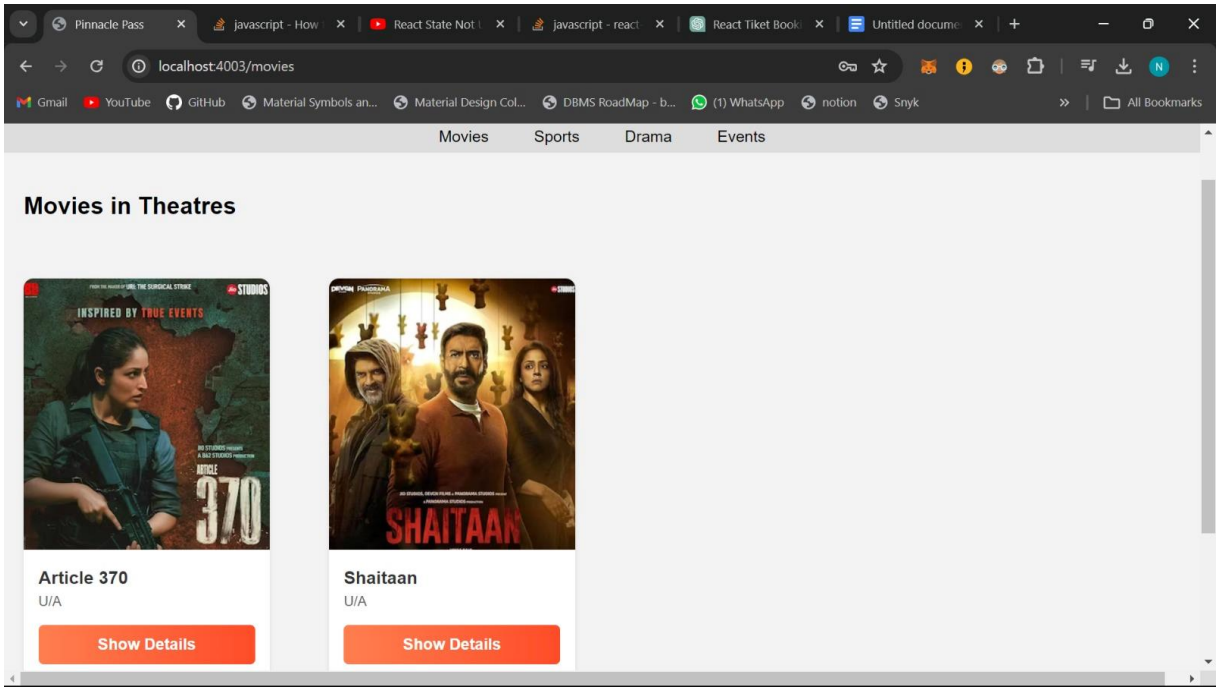
Top picks for you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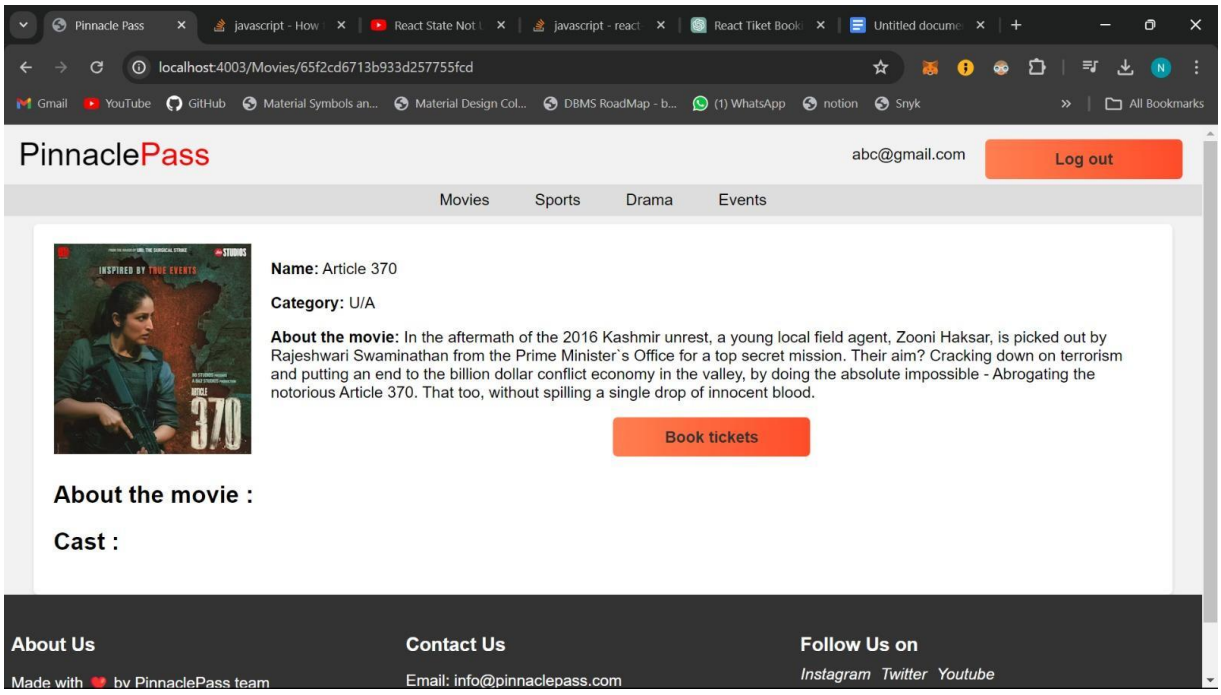
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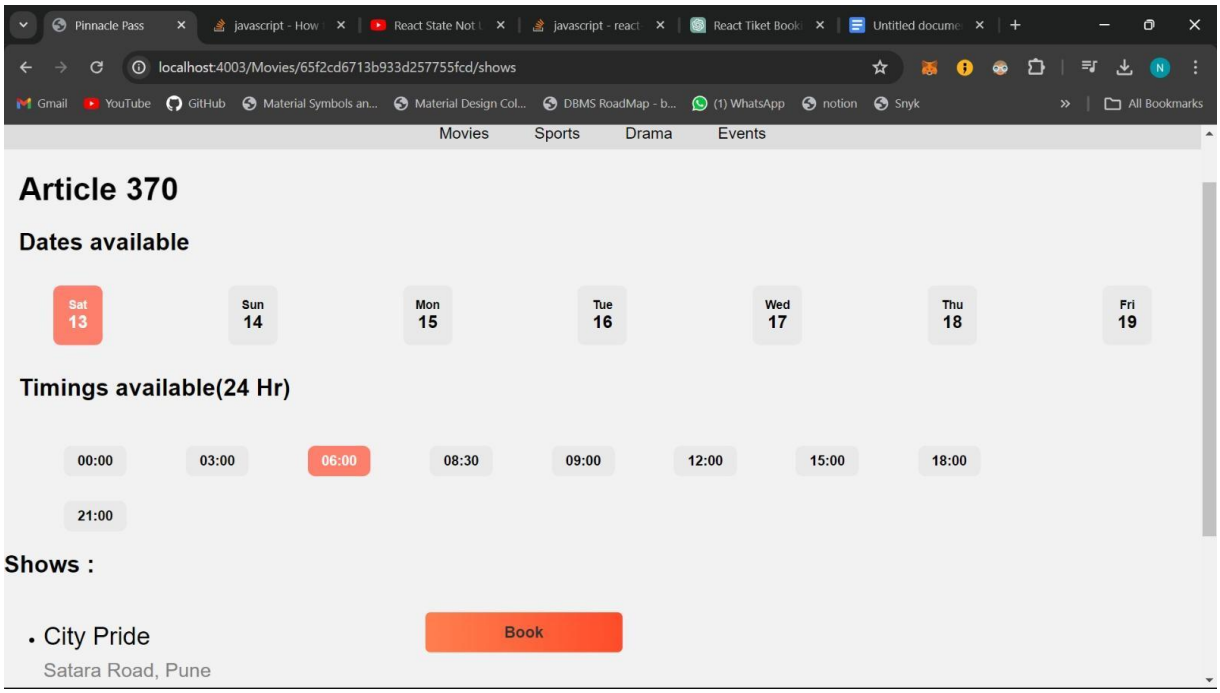
ARTICLE 370
Name: Article 370
Category: U/A
About the movie: In the aftermath of the 2016 Kashmir unrest, a young local field agent, Zooni Haksar, is picked out by Rajeshwari Swaminathan from the Prime Minister`s Office for a top secret mission. Their aim? Cracking down on terrorism and putting an end to the billion dollar conflict economy in the valley, by doing the absolute impossible - Abrogating the notorious Article 370. That too, without spilling a single drop of innocent blood.
Book tickets
About the movie :
Cast :
About Us
Made with by PinnaclePass team
Contact Us
Email: info@pinnaclepass.com
Follow Us on
Instagram Twitter Youtube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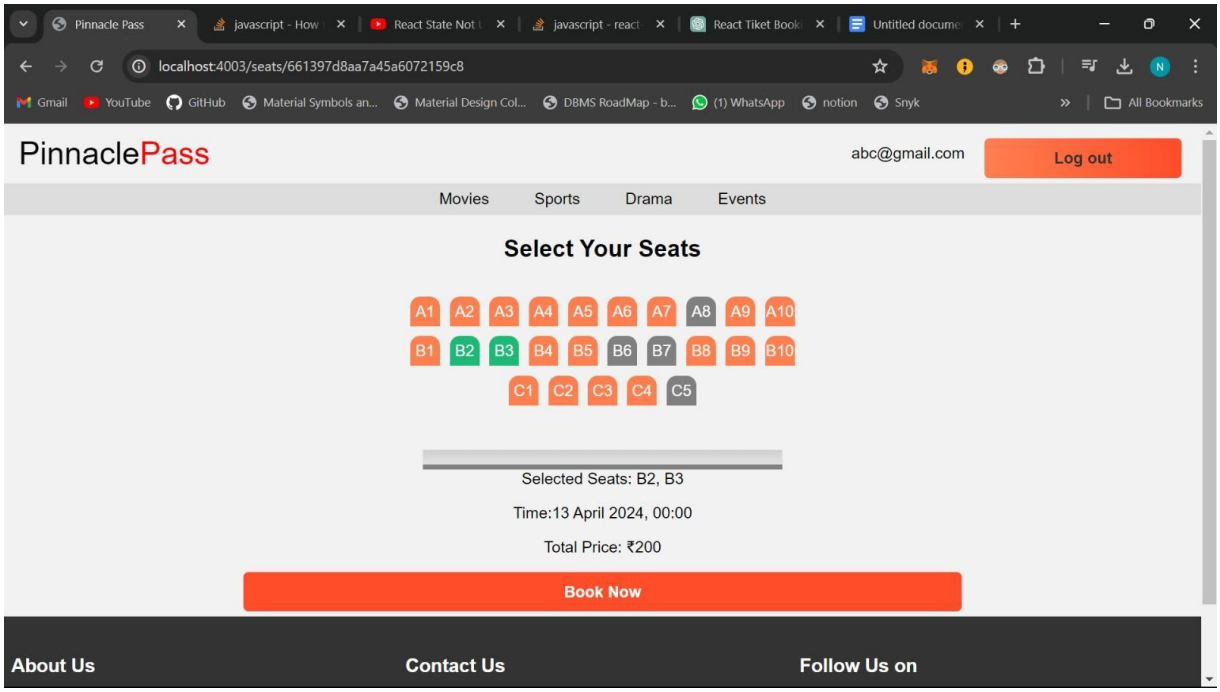
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Total Price: ₹200
Book Now
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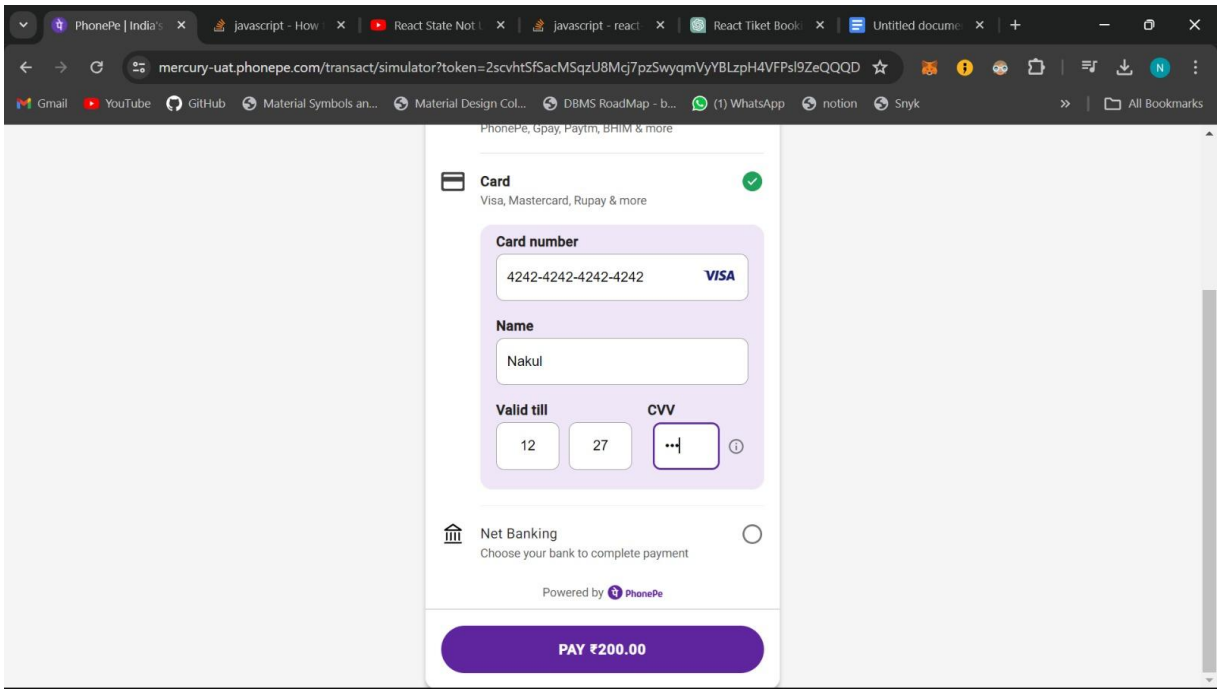
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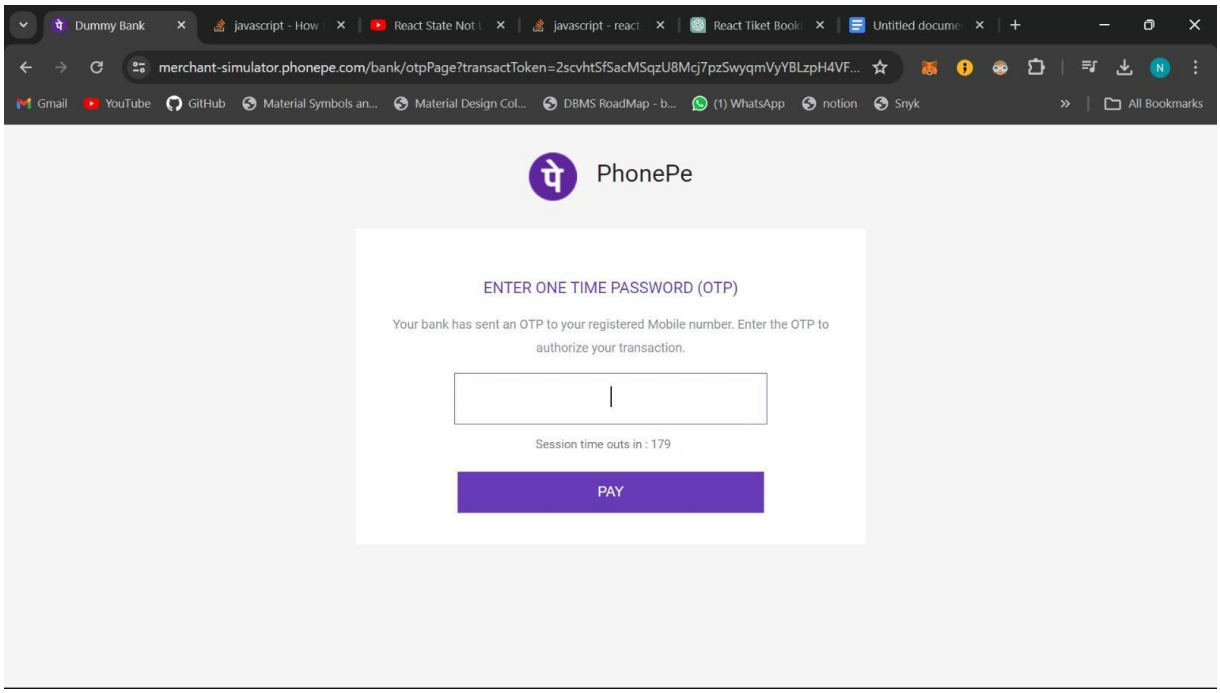
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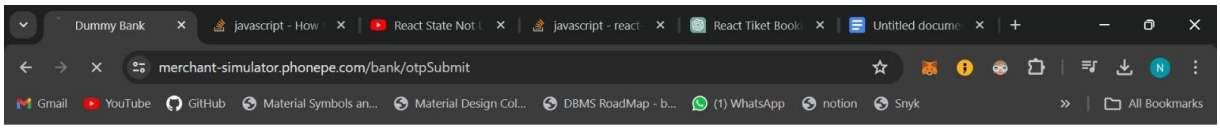
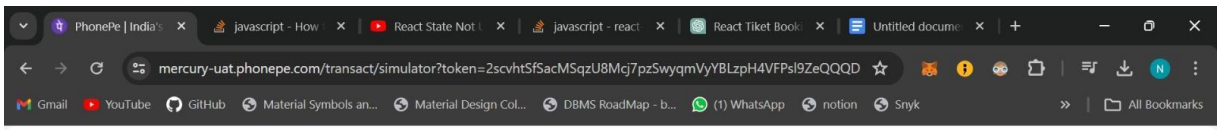
Session time outs in : 179
PAY



Please wait,
processing your request

Please don't refresh or hit the back button until the action is complete.



Payment of ₹200.00
processed successfully

Redirecting you to
PGTESTPAYUAT in

2 seconds

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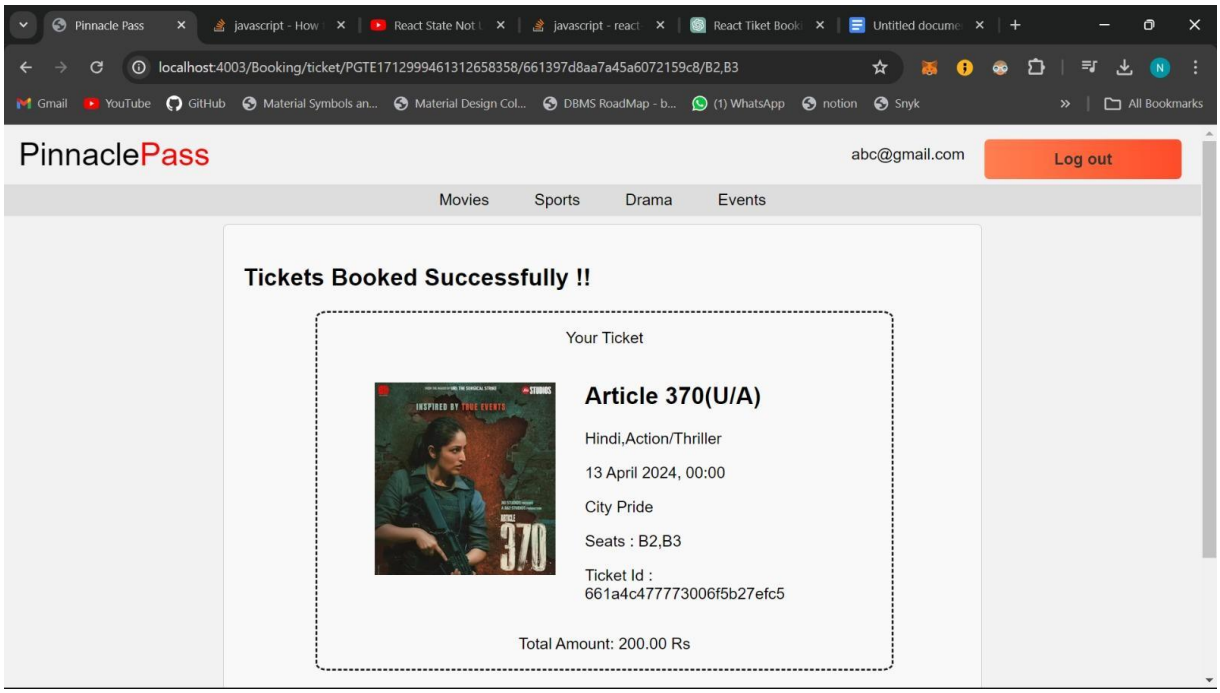
redirected, click here

Please do not press back or close this window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abc@gmail.com
Log out
Movies
Sports
Drama
Events
Tickets Booked Successfully !!
Your Ticket
Article 370(U/A)
Hindi,Action/Thriller
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City Pride
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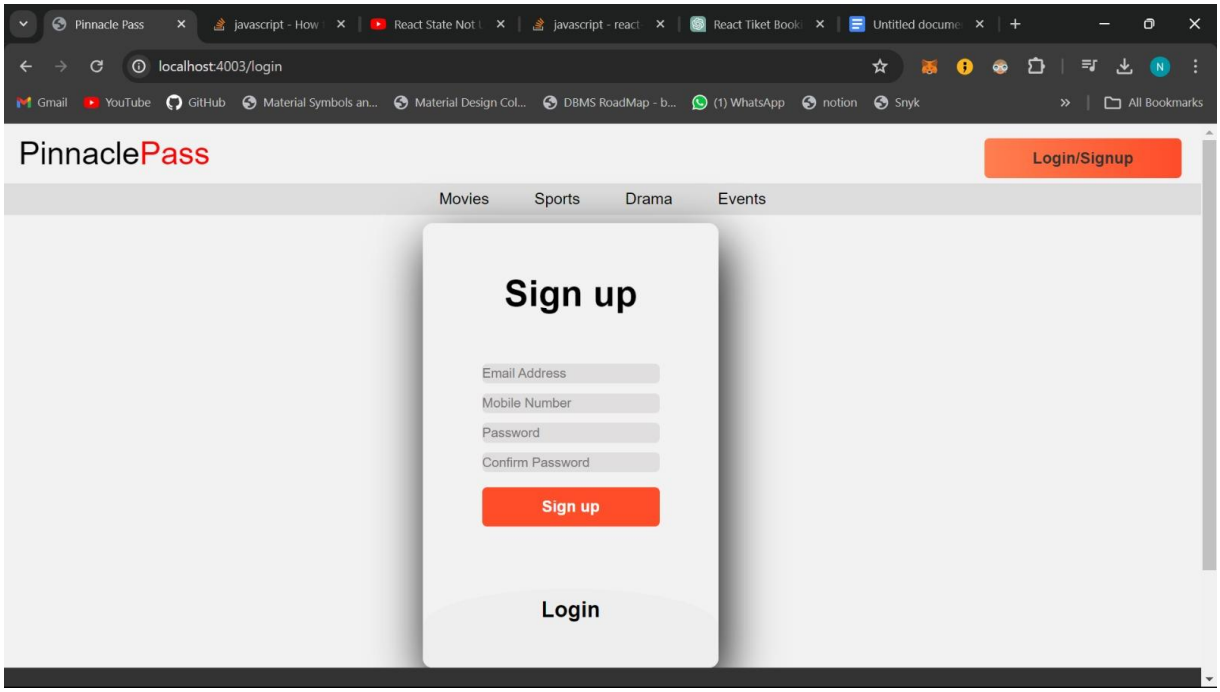
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PinnaclePass
Login/Signup
Movies
Sports
Drama
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Sign up
Email Address
Mobile Number
Password
Confirm Password
Sign up
Login

CONCLUSION

In conclusion, the Movie Ticket Booking Application marks a notable leap forward in the world of online ticket booking. Thanks to its savvy use of the latest tech and commitment to doing things the right way, it provides users with a sleek, user-friendly way to snag those coveted movie seats.

Looking ahead, we're committed to keeping the momentum going. We'll keep fine-tuning the app, adding new features, and making sure it stays ahead of the curve. By staying responsive to user feedback and staying on top of industry trends, we're determined to keep the Movie Ticket Booking Application as the go-to choice for movie buffs everywhere

References

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- Mongoose.js Documentation: https://mongoosejs.com/docs/