SECURED QUEUE-DRIVEN RESEVADOCRYPTO PLATFORM: LEVERAGING ADVANCED ENCRYPTION STANDARD (AES) FOR ENHANCED RESERVATION SECURITY.

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Abstract -The advent of online platforms has revolutionized the way individuals access services and products, and the ticket booking industry is no exception. This abstract introduces an innovative online ticket booking portal designed to enhance convenience, accessibility, and efficiency for users worldwide. Our online ticket booking portal aims to offer a seamless experience for users seeking to book tickets for various events, including concerts, movies, sports events, and travel. Leveraging cutting-edge technology and user-centric design principles, our platform prioritizes ease of use, accessibility, and reliability. Key features of the portal include a user-friendly interface that simplifies the ticket booking process, allowing users to browse events, select seats, and make secure payments effortlessly. Advanced search filters enable users to find events based on preferences such as location, date, genre, and price range, ensuring personalized recommendations tailored to individual interests. Moreover, the portal integrates robust security measures to safeguard users' personal and financial information, instilling trust and confidence in the booking process. Seamless integration with various payment gateways ensures hassle-free transactions, while real-time updates and notifications keep users informed about event details, ticket availability, and booking status.

Index Terms – JDBC(Java DataBase Connectivity), DBMS(Data Base Management System), MY SQL(Structured Query Language).

Introduction

By providing a cohesive platform for diverse bookings, users can effortlessly navigate and fulfill their requirements without the need for multiple interfaces. It reduces registration time, contributing to a secure and efficient booking environment. It minimizes errors, optimizes processes, and, most importantly, allows users the flexibility to book tickets anytime and anywhere with our user-friendly interface and extensive range of offerings, booking tickets for flights, trains, buses, events, and more has never been easier. we understand the value of time and convenience. That's why we've designed our platform to provide hassle-free ticket booking right at your fingertips. No more waiting in long queues or dealing with complex booking processes. With just a few clicks, you can compare prices, check availability, and secure your tickets instantly. But convenience is just the beginning. We pride ourselves on offering competitive prices and exclusive deals to ensure that you get the best value for your money. Whether you're a frequent traveler or a first-time user, our platform caters to all your needs with transparency and reliability. Safety and security are paramount to us. That's why we utilize the latest encryption technologies to safeguard your personal information and ensure secure transactions.

I. OBJECTIVES

The primary objective of an online ticket booking system is to provide a convenient and efficient platform for users to browse, select, and purchase tickets for various events, services, or modes of transportation. This system aims to streamline the ticket booking process, offering users an intuitive interface to search for available options, compare prices, and make secure transactions seamlessly. Additionally, the system should aim to provide real-time updates on ticket availability, offer multiple payment options, and ensure reliability and trustworthiness in

handling sensitive customer data. Overall, the objective is to enhance the user experience, increase accessibility to tickets, and optimize the ticketing process for both customers and service providers.

II. PROBLEM DEFINITION

To design and develop an efficient and user-friendly online ticket-booking portal that provides seamless access to various events, transportation services, or entertainment options. The objective is to create a platform that offers convenience, reliability, and security to users while ensuring scalability and adaptability to accommodate evolving user needs and technological advancements. The portal should streamline the ticket booking process, enhance user experience, and foster trust and satisfaction among users, ultimately becoming the preferred choice for individuals seeking to purchase tickets online."

III. RELATED WORK

[1] One of the primary challenges faced by personalized flight ticket recommendation systems is the cold-start problem, which occurs when there is insufficient historical data or user preferences available for newly registered or infrequent users. This poses a significant hurdle in delivering accurate and relevant recommendations tailored to individual users' preferences and requirements. To mitigate this issue, advanced recommendation algorithms such as collaborative filtering, content-based filtering, and hybrid approaches can be employed. Collaborative filtering leverages the preferences and behaviors of similar users to make recommendations, while content-based filtering analyzes the attributes of flights and user profiles to suggest relevant options.[2] Hybrid approaches combine the strengths of both methods to provide more robust and accurate recommendations. Additionally, techniques such as active learning and user profiling can be utilized to gather initial user feedback and preferences, gradually improving the recommendation quality over time. By implementing these strategies, personalized flight ticket recommendation systems can effectively address the cold-start problem and enhance user satisfaction and engagement

[3] Furthermore, the system incorporates reputation management mechanisms to incentivize responsible parking behavior and foster a trustworthy parking environment. Users are encouraged to provide feedback and ratings based on their parking experiences, which are stored on the blockchain. Smart contracts autonomously analyze this feedback to calculate reputation scores for both parking spots and users. High-reputation users are rewarded with incentives such as discounts or priority parking, while low-reputation users may face penalties or restrictions.

IV. EXISTING SYSTEM

An online ticket booking portal typically consists of several key components and functionalities to facilitate the process of purchasing tickets for various events, such as movies, concerts, sports events, or travel bookings. Here's an overview of the existing system for an online ticket booking portal. Users are required to create an account by providing personal information like name, email address, and password. Once registered, users can log in securely using their credentials. The portal displays a list of available events based on categories such as movies, concerts, sports, etc. Users can browse through these listings to find events they are interested in attending. Clicking on a specific event reveals detailed information such as venue, date, time, and available seats. Users can select their preferred seats from an interactive seating chart or choose from available options. After selecting seats, users proceed to the booking and payment stage. The portal typically supports various payment methods, including credit/debit cards, digital wallets, and sometimes cash-on-delivery. Users enter their payment details and confirm the booking. Once the payment is successful, users receive a booking confirmation via email or SMS. The portal generates electronic tickets or booking references that users can present at the event venue for entry.

V. PROPOSED SYSTEM

User Registration and Login: Users would need to create an account on the platform by providing basic information like name, email, and password. Once registered, they can log in securely using their credentials. Event Search and Selection: The portal should have a user-friendly interface where users can easily search for events based on criteria like date, location, type, or name. They should be able to view details about each event, such as venue, timing, ticket availability, and pricing. Ticket Booking: Users should be able to select the desired event and choose from available ticket options (e.g., seating categories or ticket types). They can then proceed to book the tickets by providing necessary details like the number of tickets required and payment information. Payment Gateway Integration: The system should support secure online payment processing using popular payment gateways like PayPal, Stripe, or credit/debit cards. Users should have multiple payment options to choose from for a seamless booking experience. Seat Selection (if applicable): For events with assigned seating, users should be able to select their preferred seats from a graphical seating map displayed during the booking process. The system should prevent double bookings and ensure that seats are allocated accurately. Booking Confirmation: After successful payment, users should receive a booking confirmation email or SMS containing details of their reservation, including ticket information, event details, and a unique booking ID. Account Management: Users should have access to a dashboard where they can manage their bookings, view past transactions, print tickets, or cancel/reschedule bookings if allowed by the event organizer's policies. Admin Panel: An admin panel should be available to manage the entire system, including adding/editing events, setting ticket prices, managing user accounts, handling payments, 10 March 2024 14:27:32 generating reports, and monitoring system performance. Security Features: The system should implement robust security measures to protect user data, prevent unauthorized access, and secure online transactions. This includes using encryption, implementing firewalls, and adhering to industry standards for data protection. Feedback and Ratings: Users should have the option to provide feedback and ratings for events they have attended, helping other users make informed decisions when booking tickets. Mobile Responsiveness: The portal should be accessible from various devices, including desktops, laptops, tablets, and smartphones, with a responsive design optimized for different screen sizes. Integration with Social Media: Users should be able to share events they are interested in or have booked on social media platforms, enhancing the portal's visibility and user engagement.

Figure1. Verification.

BOOK YOUR FLIGHT

| ADMIN |

NO. OF PASSENGERS

GET TICKET ID

DATE OF BOOKING | 1 ▼ | JAN ▼ | 2023 ▼

S.No 1

DON'T HAVE A VISA | APPLY VISA

TYPE OF ID PROOF | AADHAR CARD ▼

○ WITHIN INDIA

○ ONE WAY TRIP

PROOF DATA

○ OUTSIDE INDIA | FROM COIMBATORE ▼ TO DELHI ▼

Passport No.

1 ▼ | JAN ▼ | 2023 ▼

SEARCH

GET YOUR DETAILS

FLIGHT NUMBER

DEPARTURE DATE

CUSTOMER DETAILS

FLIGHT NAME

COST 0

Surname

CLASS

Name

○ ROUND TRIP

ARRIVAL DATE

Gender

FROM COIMBATORE ▼ TO DELHI ▼

DOB

1 ▼ | JAN ▼ | 2023 ▼

AGE | Click enter to get the age

SEARCH

Phone No.

FLIGHT NUMBER

ARRIVAL DATE

Email ID

FLIGHT NAME

COST 0

Address

CLASS

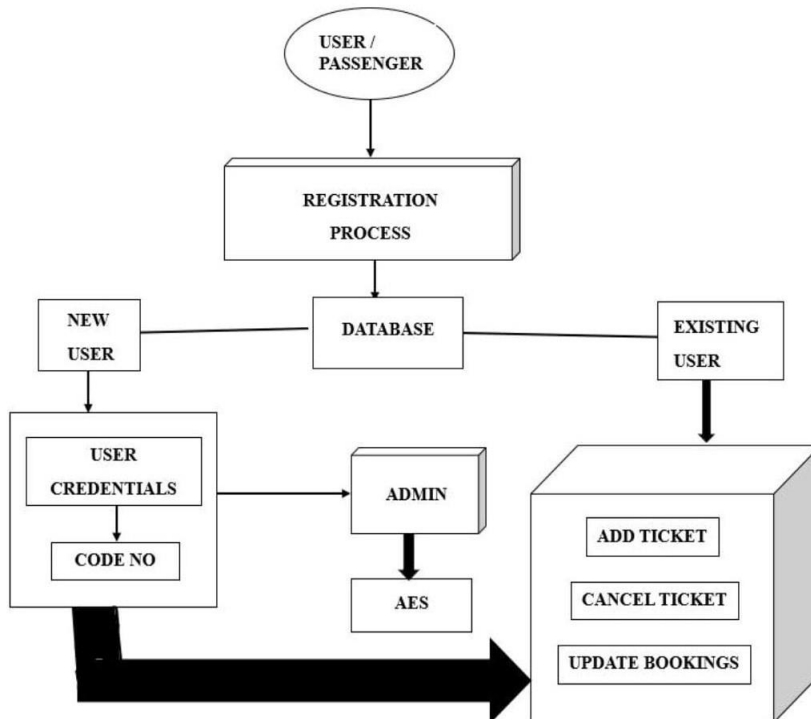Nationality

GENERATED CODE

ADD | EXIT

SECRET NO

GENERATE BARCODE

PAYMENT

Figure.2.Airline Reservation.

VI. SYSTEM ARCHITECTURE

VII. MODULE DESCRIPTION

ADD DETAILS

This feature enables administrators to input or modify reservation details such as booking dates, guest information, special requests, and other relevant information to ensure accurate and up-to-date records. Administrators can enhance reservation entries with pertinent details, facilitating smoother coordination and better customer service.

SIGN UP AND LOGIN PAGE

This essential component of the reservation system provides users with a secure platform to create accounts or log in, granting access to reservation features. Users can sign up to manage bookings, view reservation history, and personalize their experience. The login page ensures authentication for accessing reservation services, offering a streamlined and secure process for users to interact with the system.

FORGET PASSWORD PAGE

This feature provides users with a mechanism to reset their forgotten passwords securely. Users can initiate the password reset process by entering their email or username associated with their reservation account. Upon submission, instructions are sent via email or SMS for resetting the password, ensuring users regain access to their accounts swiftly and securely, enhancing the user experience, and minimizing disruptions in managing reservations.

TRAVEL TICKETS

This system facilitates the booking of tickets for various modes of transportation including buses, trains, cabs, and flights. Users can conveniently search, select, and purchase tickets for their desired travel routes and dates. With options spanning multiple transportation modes, this reservation platform offers flexibility and convenience to travelers, ensuring seamless planning and booking of their journeys.

ROOM BOOKING

This system allows users to reserve accommodations such as hotel rooms, guesthouses, or vacation rentals. Users can browse available rooms, select desired dates, and complete bookings online. With features for specifying preferences, amenities, and special requests, this reservation platform offers a convenient and customizable experience for travelers seeking lodging arrangements.

MOVIE TICKETS

This platform allows users to easily browse, select, and book movie tickets for their preferred showtimes and cinemas. Users can explore available movie titles, seating options, and showtimes, then securely reserve their tickets online. With convenient features such as seat selection and secure payment processing, this reservation system ensures a hassle-free experience for moviegoers, enabling them to enjoy their favorite films with ease.

FLIGHT BOOKING WITH VISA APPLICATION

Our reservation system enables users to effortlessly search, compare, and book flights to their desired destinations. With a user-friendly interface and comprehensive search options, travelers can easily find the best flight options based on their preferences and budget. From selecting departure and arrival locations to choosing travel dates and class preferences, our platform offers a seamless experience for booking flights, ensuring a smooth and hassle-free travel planning process. Visa Application Reservation enables users to schedule appointments and submit applications for visas through a streamlined reservation system. Users can select preferred dates and times for their visa appointments, input necessary personal and travel information, and track the status of their application. The reservation platform simplifies the visa application process, enhancing efficiency and providing a convenient experience for applicants and administrative staff alike.

PAYMENT MODULES

This integral component of the reservation system facilitates secure and efficient transactions for booking accommodations, transportation, or activities. It supports various payment methods including credit/debit cards, mobile wallets, and online banking, ensuring flexibility for users. With robust encryption and fraud prevention measures, the payment module guarantees the safe handling of sensitive financial information, enhancing trust and confidence in the reservation process.

VERIFICATION BLOCK

This feature enables swift and accurate verification of reservations by scanning unique barcodes associated with each booking. Utilizing a barcode scanner, administrators can efficiently authenticate reservations at check-in points or entry gates, ensuring a seamless and secure process. By instantly validating bookings via barcode scanning, this system enhances operational efficiency, reduces errors, and enhances the overall user experience for reservation management**.**

DELETE ACCOUNT

This feature allows users to permanently remove their accounts from the reservation system. By accessing the delete account functionality, users can initiate the process of erasing their personal information, booking history, and any associated data from the system's database. This ensures users have full control over their data privacy and can discontinue their use of the reservation service as needed.

VIII. CONCLUSION

In conclusion, the advent of online ticket-booking portals has revolutionized the way people plan and manage their travel arrangements. These platforms offer unparalleled convenience, allowing users to effortlessly browse, compare, and book tickets for various modes of transportation from the comfort of their own homes. Moreover, the integration of advanced technologies such as artificial intelligence and machine learning has enhanced the user experience by providing personalized recommendations and real-time updates. With their user-friendly interfaces and secure payment gateways, online ticket booking portals have become indispensable tools for modern travelers, streamlining the entire booking process and saving valuable time and effort. As these platforms continue to evolve and innovate, they will undoubtedly play a pivotal role in shaping the future of travel, making it more accessible, efficient, and enjoyable for people around the globe.

IX. REFERENCE

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