



Research Paper

ONLINE TICKETING SYSTEM

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Abstract

Ticket booking and reservation activities often involve multiple users, events, venues, schedules, and payment-related records. Manual or fragmented booking processes can cause duplicate reservations, incorrect seat allocation, delayed confirmation, and difficulty in tracking ticket availability. The Online Ticketing System is a web-based application designed to provide a centralized and convenient platform for searching events or services, checking availability, selecting tickets, completing bookings, and managing reservations.

The proposed system provides a structured mechanism for users to register, log in, browse available events or services, view schedules and ticket categories, select seats or quantities, and create ticket bookings. Users can review booking details and access their booking history. Administrators can manage events, schedules, ticket categories, seat availability, users, and booking records.

The system is designed using HTML, CSS, and JavaScript for the client-side interface. A backend service and database can be integrated to support authentication, ticket inventory, booking records, and administrative operations. The design focuses on usability, accurate availability information, secure booking workflows, and transparent ticket management.

Keywords: Online Ticketing, Ticket Booking, Event Management, Seat Reservation, Web Application, User Authentication, Booking Management.

I. Introduction

The Online Ticketing System is a digital platform designed to simplify and automate the process of searching, booking, and managing tickets for various events, transportation services, entertainment programs, and other activities. Traditional ticket booking methods often require customers to visit booking counters, wait in queues, or depend on manual communication. These methods can consume time and may create difficulties in checking ticket availability, selecting preferred options, making payments, and maintaining booking records.

The proposed Online Ticketing System provides a convenient platform through which users can create accounts, log in, search for available services or events, view ticket details, and select suitable dates, times, seats, or ticket types. The system displays real-time or updated availability information and allows users to complete the

booking process through a simple interface. After successful booking, users can view their booking details and receive a confirmation of their ticket.

The system also provides management features for administrators, allowing them to add, update, and remove events or services, manage ticket availability, monitor bookings, and maintain customer information. By automating these activities, the system reduces manual work and helps minimize errors associated with traditional ticket management.

II. Literature Survey

Various studies have been conducted to improve traditional ticket booking methods through web-based and digital platforms. Traditional ticketing generally requires customers to visit physical booking counters or depend on manual communication to purchase tickets. These methods can result in long queues, increased waiting time, and difficulties in checking availability. Online ticketing systems have been developed to overcome these limitations by providing users with a digital platform to search for events or services, view available tickets, select preferred options, and complete bookings. Such systems improve accessibility and reduce the manual effort involved in ticket management.

Existing online ticketing platforms provide several features to improve the user experience. Common functionalities include user registration, login, event or service search, ticket availability checking, seat selection, booking confirmation, and booking history. Some systems also provide cancellation and refund facilities, allowing users to manage their bookings conveniently. Administrators can manage events, ticket categories, pricing, availability, and customer bookings through an administrative interface. These features demonstrate that digital ticketing can provide a more organized and efficient method of managing ticket reservations.

Recent ticketing systems have also focused on integrating online payment and automated confirmation mechanisms. Payment gateways allow users to complete transactions electronically, while email or notification services can provide booking confirmations and ticket details. Some advanced systems use QR codes or digital tickets to simplify the verification process at the venue or service location. However, certain existing systems may have limitations such as complicated user interfaces, limited availability updates, insufficient personalization, and security concerns related to user and payment information.

Based on the study of existing approaches, the proposed Online Ticketing System aims to provide a simple, secure, and user-friendly platform for searching, booking, and managing tickets. The system combines important functionalities such as user authentication, ticket search, availability checking, selection, booking, confirmation, and booking history in a centralized platform. It can also support administrative management of events, services, ticket details, and bookings. The proposed system is intended to reduce manual effort, minimize booking errors, improve accessibility, and provide users with a convenient digital ticketing experience.

III. System Analysis

System analysis is an important phase in the development of the Online Ticketing System. It focuses on understanding the requirements of users and administrators involved in the ticket booking process. Users need a convenient platform to search for available events, services, or transportation options and view their ticket details. The system should provide updated information about ticket availability, pricing, dates, timings, and seat options. Users should be able to select their preferred ticket or seat and complete the booking process easily. The system should also maintain booking information and provide confirmation after a successful transaction. Administrators require features to manage events, ticket categories, prices, availability, and user bookings. The analysis also considers important requirements such as security, usability, reliability, and performance. By automating the ticket booking process, the system can reduce manual effort and improve efficiency. The analysis provides the necessary requirements for designing and implementing a reliable and user-friendly ticket booking platform.

Existing system

In the existing system, ticket booking is often performed through physical counters, telephone calls, or separate booking platforms. Customers may need to visit a booking counter to check availability and purchase tickets. During busy periods, customers may have to wait in long queues, resulting in increased waiting time. Information about available seats, ticket prices, dates, and timings may not always be easily accessible. Manual ticket management can also create problems such as incorrect records, duplicate bookings, and human errors. Customers may need to contact staff directly for cancellation or changes to their bookings. Maintaining customer and booking records manually requires additional administrative effort. In some systems, users may have limited options for selecting seats or ticket categories. Payment and confirmation processes may also require additional steps. Administrators have to spend considerable time managing ticket availability and booking information. These limitations demonstrate the need for a centralized online system that can make the ticket booking process faster, easier, and more efficient.

Disadvantages of Existing System

- Requires physical visits to ticket counters in many cases.
- Customers may have to wait in long queues.
- Ticket availability may not be easily accessible.
- Manual booking can result in human errors.
- Duplicate or incorrect bookings may occur.
- Cancellation and rescheduling can be inconvenient.
- Requires more administrative effort.
- Limited flexibility in selecting tickets or seats.
- Booking records may be difficult to maintain manually.
- Payment and confirmation may require additional communication.
- Customers may not receive immediate booking information.
- Access to booking services can be limited by counter operating hours.

Proposed system

The proposed Online Ticketing System is a digital platform designed to simplify the complete ticket booking and management process. The system allows users to register and log in to access ticket booking services. Users can search for available events, services, or transportation options based on their requirements. The system displays important information such as ticket categories, prices, dates, timings, and available seats. Users can select their preferred ticket or seat and proceed with the booking process through the online platform. After successful booking, the system generates booking details and provides confirmation to the user. Users can also view their booking history and manage their existing tickets. Administrators can add, update, and remove events or services and manage ticket availability and pricing. The system maintains booking and customer information in a centralized database for easy management. Online payment and digital ticket features can also be integrated into the platform. Overall, the proposed system provides a faster, convenient, secure, and organized approach to ticket booking.

Advantages of Proposed System

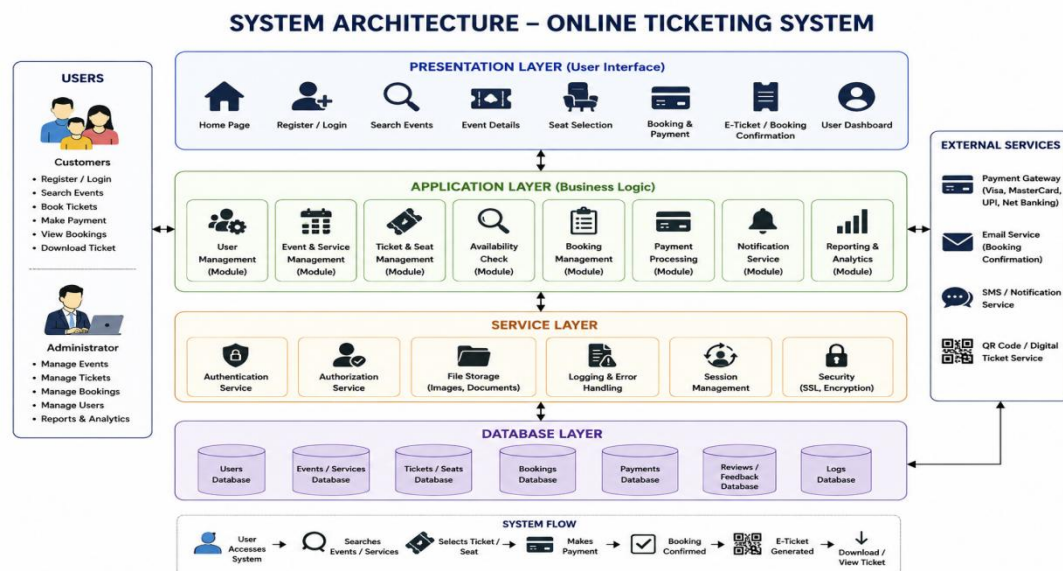
- Provides online ticket booking from anywhere.
- Reduces waiting time and physical queues.
- Allows users to check ticket availability easily.
- Provides information about ticket prices, dates, and timings.
- Supports convenient seat or ticket selection.
- Reduces manual work and human errors.
- Maintains booking records systematically.
- Provides quick booking confirmation.
- Allows users to view booking history.
- Makes cancellation and ticket management easier.
- Helps administrators manage tickets and bookings efficiently.
- Can support online payment and digital tickets.

IV. Methodology

The methodology describes the systematic approach followed for developing the Online Ticketing System. The development process begins with identifying the requirements of users and administrators. Functional requirements such as registration, login, ticket search, availability checking, selection, booking, and booking management are identified. Non-functional requirements such as security, usability, reliability, and system performance are also considered. Based on the requirements, the system architecture and database structure are designed. The application is divided into different modules to simplify development and maintenance. The user interface is developed to provide simple navigation and easy access to ticket booking features. Backend services are implemented to handle user accounts, ticket information, availability, bookings, and other business operations. A database is used to store user details, event information, ticket details, and booking records. After implementation, individual modules are tested to identify and correct errors. Integration testing is then performed to verify communication between different modules. Finally, the complete system is tested to ensure that it meets the required functionality, reliability, usability, and performance standards.

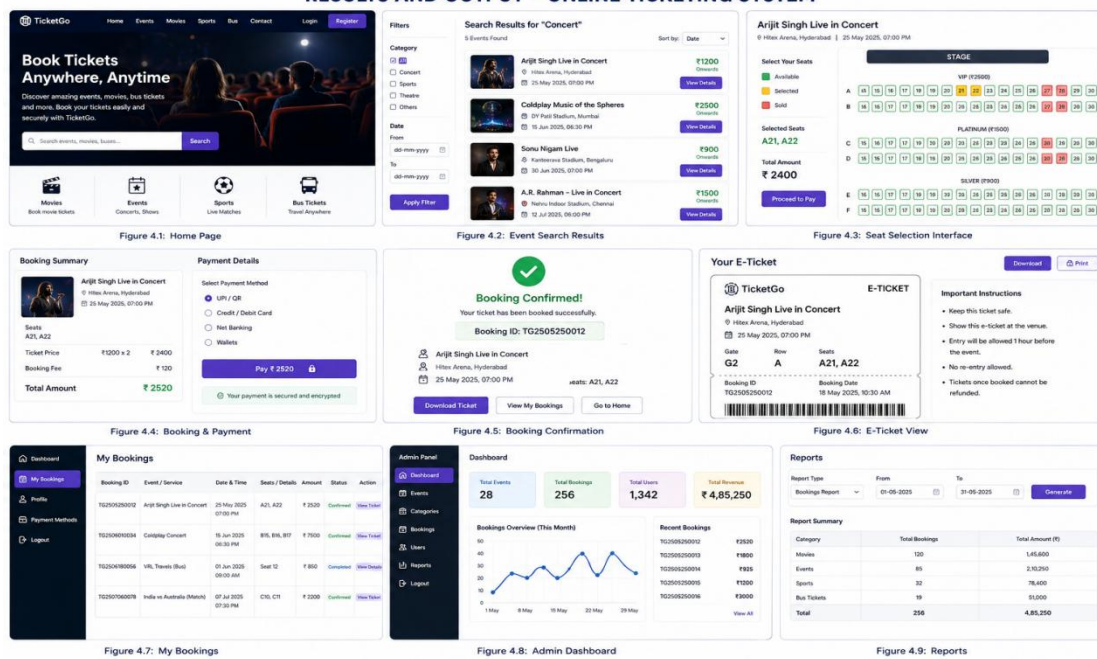
System Architecture

The system architecture defines the overall structure and interaction between the different components of the Online Ticketing System. The proposed system can follow a layered architecture consisting of the presentation layer, application layer, payment or service layer, and database layer. The presentation layer provides the user interface through which customers and administrators interact with the system. Users can register, log in, search for tickets, check availability, select seats, and make bookings through this layer. The application layer manages the main business logic, including authentication, ticket management, availability checking, booking, cancellation, and confirmation. The payment layer can communicate with an online payment gateway to process transactions securely. The database layer stores user details, event or service information, ticket categories, seat availability, and booking records. Administrators can manage ticket information and monitor bookings through the administrative interface. After a successful booking, the system can generate a digital ticket and confirmation for the user. Authentication and authorization mechanisms help protect user and booking information. The layered architecture makes the system easier to maintain, test, and extend.



V. Result and Output

RESULTS AND OUTPUT – ONLINE TICKETING SYSTEM



VI. Conclusion

The Online Ticketing System successfully provides a digital solution for searching, booking, and managing tickets in a simple and efficient manner. The system allows users to register, log in, search for available events or services, view ticket details, check availability, select preferred seats, and complete the booking process. It also provides booking confirmation and allows users to view their booking history and ticket details. The administrator module helps manage events, ticket categories, prices, availability, and customer bookings in an organized manner. Functional testing confirms that the major features of the system perform according to the expected requirements. The system reduces the need for physical visits and manual ticket booking, thereby saving time and reducing human errors. It also improves the accessibility and convenience of the ticket reservation process. Overall, the proposed Online Ticketing System provides a reliable, user-friendly, and efficient platform for digital ticket management. In the future, the system can be enhanced with advanced features such as secure online payments, QR-code-based ticket verification, real-time notifications, refunds, and personalized recommendations.

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