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AIRLINE TICKET BOOKING SYSTEM

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ABSTRACT

The project to create an airline reservation system seeks to provide an effective and user-friendly software programme that allows users to make and manage aircraft reservations. Users can utilise the system's extensive platform to look for available flights, check flight information including departure and arrival times, choose their favourite seats, and book tickets.

The user registration and login system, the flight search module, the booking and payment module, and the reservation administration module are the main components of the airline reservation system. Users can add personal data and preferences to their profiles after registering. Users of the flight search module can look for flights using parameters like destination, departure date, and number of passengers.

1. INTRODUCTION

The airline reservation system project aims to deliver an efficient and user-friendly software application that enables users to make and manage aeroplane reservations. The technology allows users to look up available flights, review travel details including arrival and departure times, select their preferred seats, and make reservations utilising a comprehensive platform. Some of the crucial elements of the airline reservation system are the user registration and login procedure, the flight search module, the booking and payment module, and the reservation administration module. After registering, users can create profiles with personal information and interests. The flight search module allows users to search for flights based on criteria such as destination, date, and passenger count. The airline reservation system project's overall goals include streamlining the aircraft reservation process, improving user experience, and giving users a dependable and effective platform to manage their travel arrangements.

2. WORKFLOW

Workflow of airline reservation system is as follows-

• User Registration: Users create accounts in the airline reservation system to start the procedure to construct their profiles, they give personal information such their name, phone number, and email address.

• Flight search : Users can access the flight search section after registering. They fill out the requested trip information, including the destination, departure time, and number of passengers.

• Flight Selection: Customers can look through the list of flights and pick the one they like. Each flight's specific details are provided by the system, including hours of departure and arrival, participating airlines, and cost of tickets. Users can contrast the available choices and select the best one.

• User Seat Selection: Users can choose their favourite seats after choosing a flight. Users can select seats based on their preferences using the system's seat map of the aircraft.

• Booking and Payment: Users proceed to the booking and payment module after choosing a flight and seats.

• **Confirmation and e- ticket generation :** Users receive a confirmation message along with their e-ticket following a successful transaction.

• **Reservation Management:** Users can view and manage their reservations through a reservation management module.

• Flight Updates and Notifications: The system notifies users in real-time if there are any updates or modifications to their flights. This includes details on cancellations, gate changes, and delayed flights.

• Check in and boarding: Before the flight takes off, passengers can check in using the airline reservation system. They can choose the check-in method they choose, such as mobile or online check-in, and get their boarding cards electronically.

• **Travel Experience:** The users head to the airport for boarding after completing the check-in process. At the assigned gate, they submit their electronic boarding permits or e-tickets to board the plane.



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3. PROPSED SYSTEM

The management of flight reservations and trip plans will be completely transformed by our suggested airline reservation system. We aim to offer a seamless and effective experience for both travellers and airlines by utilising cutting-edge technology and user-centric features.

The system will have an intuitive and user-friendly interface that makes it simple for users to move between different functions. To ensure a consistent user experience across platforms, the design will be aesthetically pleasing and optimised for various devices, including desktops, laptops, and mobile devices.

4. ANALYSIS

Compared to conventional methods of flight booking and travel management, the suggested airline reservation system offers a number of advantages and improvements. Let's examine a few crucial elements of the system:

• **Improved User Experience:** The system's user-friendly interface and intuitive design enhance the user experience. Users may quickly and easily use the site, do customised flight searches, choose seats, and complete bookings.

• Effective Booking Process: The system offers users a variety of flight alternatives by linking with the databases of numerous airlines. Users may find the best flights depending on their selected parameters thanks to the thorough flight search feature.

• **Real-Time Updates and Notifications:** It is essential that passengers are kept aware of any changes or delays by the system's ability to deliver real-time flight updates and notifications.

• Effective Reservation Management: Users have more control over their bookings thanks to the dashboard that is specifically designed for managing reservations.

• **Improved efficiency for airline :** Airline efficiency is increased because to the system's extensive administration panel, which gives airlines useful tools to control flight inventory, change schedules, establish pricing policies, and track booking and revenue information.

• Scalability and Integration: The suggested system is made to work with a variety of ancillary services, allowing for the seamless integration of travel-related services including insurance, hotel reservations, vehicle rentals, and more.

5. CONCLUSION

In conclusion, the airline reservation system project was a huge undertaking that delivered a reliable and effective system while effectively accomplishing its goals. Our team carefully worked to design a user-friendly platform that speeds the booking process and improves the overall client experience throughout the development process.

We have successfully developed a variety of capabilities within the airline reservation system by utilising cutting-edge technologies and applying a strict development process. Online reservations, seat selection, flight management, payment processing, and customer assistance integration are a few of these features.

6. FUTURE WORK

Although the initiative to develop an airline reservation system was successful, there are still a number of areas that could use improvement in the future to meet changing demands. These areas include, among others:

• **Mobile Application Development :** Creating a mobile application specifically for the airline reservation system would make it easier for travellers to make reservations, maintain those reservations, get real-time flight updates, and access other pertinent data on their cellphones.

• Integration with Ancillary Services: Increasing the system's capabilities to include integration with ancillary services like car rentals, hotel stays, and travel insurance will give customers a thorough and seamless travel booking experience.

• **Personalization and recommender System :** Customised flight options, seat preferences, and ancillary services can be suggested by the system more effectively if personalised recommendations are implemented based on user preferences and previous booking history.

• **Integration with Loyalty Programmes:** Passengers can earn and spend loyalty points or miles in a smooth manner by integrating the reservation system with airline loyalty programmes.

• Improved Data Analytics and Reporting: Airlines will be able to make data-driven decisions, optimise operations, and identify areas for improvement by improving the system's analytical capabilities to give complete reporting and insights.

• Adoption of Emerging Technologies: The airline reservation system can get further advantages by investigating and implementing emerging technologies including artificial intelligence (AI), blockchain, and chatbot interfaces.



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7. REFERENCES

- [1] By Mirna Sleiman and Marianne Akiki, "Airline Reservation Systems: A Comparative Study," 2015
- [2] Gurudatt Kulkarni and Balaji Nikam's "A Survey of Airline Reservation Systems" (2016).
- [3] Abdul-Rahman Al-Ali and Hazem El-Bakry's "Airline Reservation System: Design and Implementation" was published in 2016)
- [4] "The Evolution of Airline Distribution Systems: Impacts on Travel Agencies" by Dorota Ujma-Wasowicz and Ksenia Borodina (2019)
- [5] Ivan Sovic, Milan Zdravkovic, and Zoran Anisic's book "Airline Reservation Systems: Lessons from the Past, Preparing for the Future" was published in 2019.
- [6] https://projectworlds.in/java-projects-with-source-code/airline-reservation-system-java-project/
- [7] https://code-projects.org/flight-booking-system-in-java-with-source-code/
- [8] https://itsourcecode.com/free-projects/java-projects/airline-reservation-system-project-in-java-with-source-code/