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FLEXIBLE AIRLINES RESERVATION SYSTEM USING SERVICE QUALITY ATTRIBUTES OF AIRLINES

Ashwini Ingle[1], Meghali Waghmode[2],Piyush More[3], Akshata pawar[4]

Department of E&TC, SKNCOE, SPPU, Pune

[1]ashwiniingle777@gmail.com, [2]meghali.waghmode1@gmail.com
[3]piyushmore244@gmail.com, [4]akshatapwar990@gmail.com

Abstract- The airline reservation system is a computerized system that facilitates the booking of airline tickets and related services. It enables passengersto searchforflights, makereservations, purchasetickets, andcheck-in for flights from anylocationwithinternet access. Thesystem iscritical to theairlineindustry, allowingairlines tomanagetheirticketinventoryandbookingsefficiently. Thesystemincludesseveralmodules thatworktogethertodeliveraseamlessexperienceforpassengers, suchasinventorymanagement, reservation, ticketing, andcheck-inmodules. Theairlinereservationsystemalsointegrateswithothersystems, suchaspaymentgateways, customerrelationshipmanagementsystems, and flight tracking systems, to provide a complete range of services to passengers. The system's primary objective is to improve the efficiency, security,andusabilityoftheairlinereservationprocess,ultimatelyenhancingcustomersatisfactionandloyalty.

Keyword - Login, Reservation, Admin, User, SQL Connection, Operations, Flights, Domestic and International Flights,Reservation, Ticket Review, Tickets Cancellation, Add Flight, Reports.

I. INTRODUCTION

An airline reservation system is a computerized system that facilitates the booking of airline tickets and other related services. The system allows passengers to search for flights, make reservations, and purchase tickets from any location with internet access. It is a critical component of the airline industry, enabling airlines to manage their ticket inventory and bookings efficiently.The airline reservation system includes several modules that work together to deliver a seamless experience for passengers. These modules include the inventory management module, which keeps track of available flights and seats, the reservation module, which allows passengers to book flights, the ticketing module, which issues tickets, and the check-in module, which enables passengers to check in for their flights.The airline reservation system also integrates with other systems, such as payment gateways, customer relationship management systems, and flight tracking systems, to provide a complete range of services to passengers.

II. LITERATURE SURVEY

[1] A literature check of airline reservation systems reveals that there have been significant advancements in this area over the once many decades. With the arrival of the internet and ultramodern technologies, airlines have been suitable to ameliorate stheir reservation systems to give better services to their guests.[2] Several studies have concentrated on the design and development of airline reservation systems. For illustration, a study by Ranganathan and Ganapathy(2013) proposed a design for a pall- grounded airline reservation system that could be penetrated from anywhere in the world. The system was designed to be largely scalable and could handle a large number of druggies contemporaneously.[3] Another study by Al- Shehab and

Al- Shehabi(2016) proposed a mobile- grounded airline reservation system that allowed guests to bespeak and manage their breakouts using their mobile bias. The system was designed to be stoner-friendly and easy to use, with a focus on furnishing a flawless experience for guests.[4] Several studies have also concentrated on the security aspects of airline reservation systems. For illustration, a study by Jin etal.(2019) proposed a secure and effective airline reservation system that used blockchain technology to cover client data and help fraudulent conditioning.[5] In addition, several studies have concentrated on the impact of airline reservation systems on

[2] client satisfaction and fidelity. A study by Choi etal.(2018) set up that an effective and stoner-friendly airline reservation system could significantly increase client satisfaction and fidelity.[6]Overall, the literature check reveals that there's a nonstop trouble to ameliorate airline reservation systems to give better services to guests.

III. METHODOLOGY

The methodology of designing and developing an airline reservation system can vary depending on the specific requirements and objectives of the project. However, a typical methodology may involve the following steps

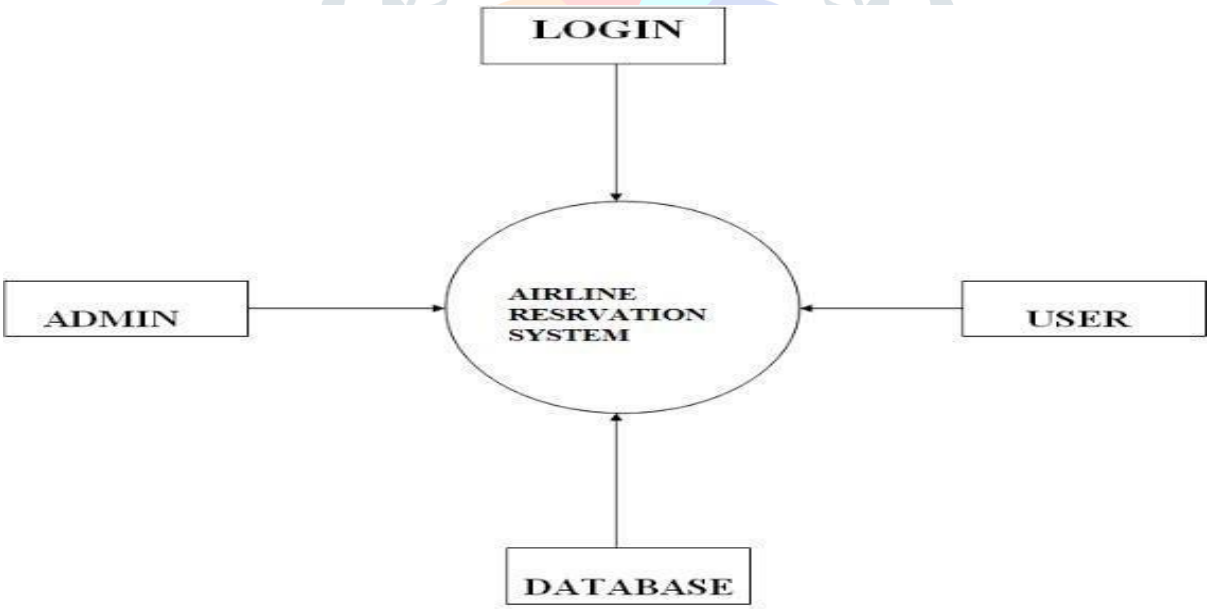

Figure 1. Proposed System

1) Requirements gathering: This involves identifying and documenting the requirements of the stakeholders, such as airlines, customers, and related parties.

2) System analysis and design: This step involves analyzing the requirements and designing the system architecture, including the database schema, user interface, and system components.

3) Implementation and coding:This step involves writing code and building the system components according to the system design.

4) Testing and debugging: This step involves testing the system for bugs, errors, and inconsistencies, including unit testing,

integration testing, and system testing.

5) Deployment and maintenance: This step involves deploying the system in the production environment, configuring it for production use, and providing ongoing support and maintenance.

6) Release and monitoring: This step involves releasing the system to the end-users and monitoring its performance and usage.

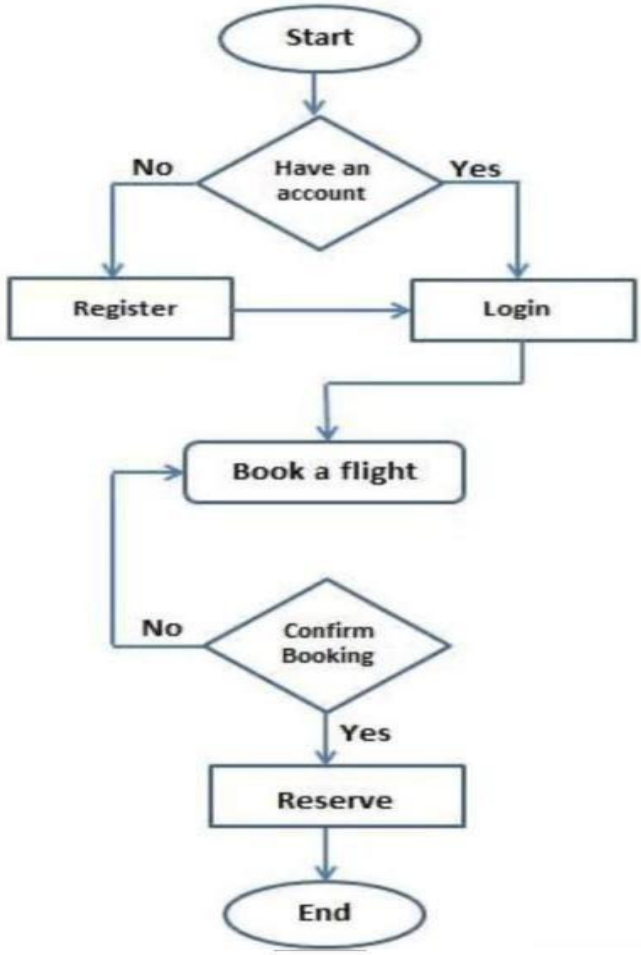

Figure 2.Flow Diagram

Here is a possible flow of the website based on the given sequence:

Start: The user visits the website's homepage.

New user: If the user is new, they can click on the "Sign up" button to create a new account.

Log in or sign up: If the user already has an account, they can log in using their credentials. Otherwise, they can create a new account by filling out a registration form.

Ask for service: After logging in, the user can browse the available services and select the one they need.

Select service: The user selects the desired service and specifies any additional details, such as the type of service or any special requests.

Select date and time: The user selects the date and time they would like to receive the service.

User information: The user fills out a form with their contact information and any additional details necessary for the service provider.

Payment: The user selects a payment method and enters the necessary payment information.

Online or cash on delivery: If the user selects an online payment method, they are redirected to a payment gateway to complete the transaction. If the user selects cash on delivery, they can pay the service provider directly when they receive the service.

End: Once the payment is processed, the user receives a confirmation of their booking, and the service provider is notified. Theuser can then log out or continue browsing the website for additional services.

IV. FUTURE SCOPE

Artificial Intelligence (AI) Integration: Airlines may use AI to personalize travel experiences, from recommending flights to offering tailored in-flight services based on passenger preferences.

Block-chain Technology: Block-chain can be used to create a secure, decentralized database of airline passenger information, including ticketing and payment data, that can be accessed by various parties in the travel industry.

Mobile Integration: As more customers use smartphones and mobile devices for travel bookings, airlines may develop more user-friendly mobile applications with features like real-time flight status updates and easy booking and payment processes.

Virtual Reality (VR) Technology: Airlines may incorporate VR technology to create immersive in-flight experiences, including virtual tours of destinations and on-demand entertainment.

Enhanced Safety Measures: As the world grapples with the COVID-19 pandemic, airlines may need to implement enhanced safety measures, such as contact less check-in and boarding processes and new cabin configurations that prioritize social distancing.

V. RESULT AND DISCUSSIONS

In this fig.3, First user need to login by providing details like username and password as shown in fig

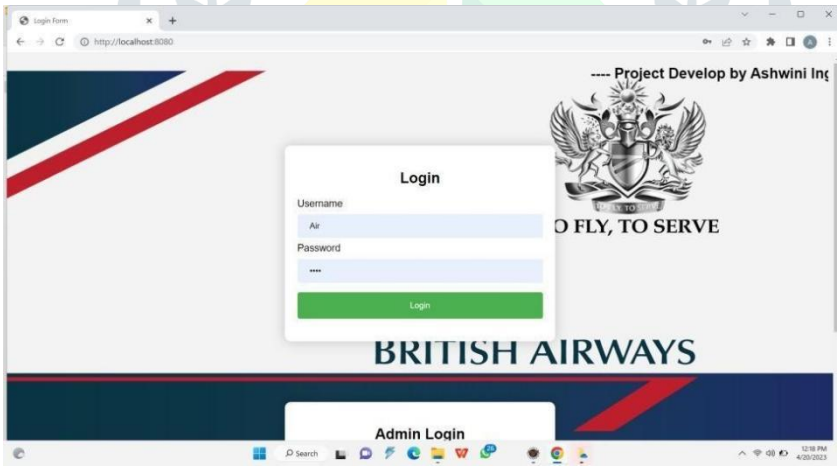

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Figure 3. Login Page

In this fig 4 User will enter into system by providing username and password,now user will be able to do further actions such as ticket booking,watching ,live map,browsing vacancies.

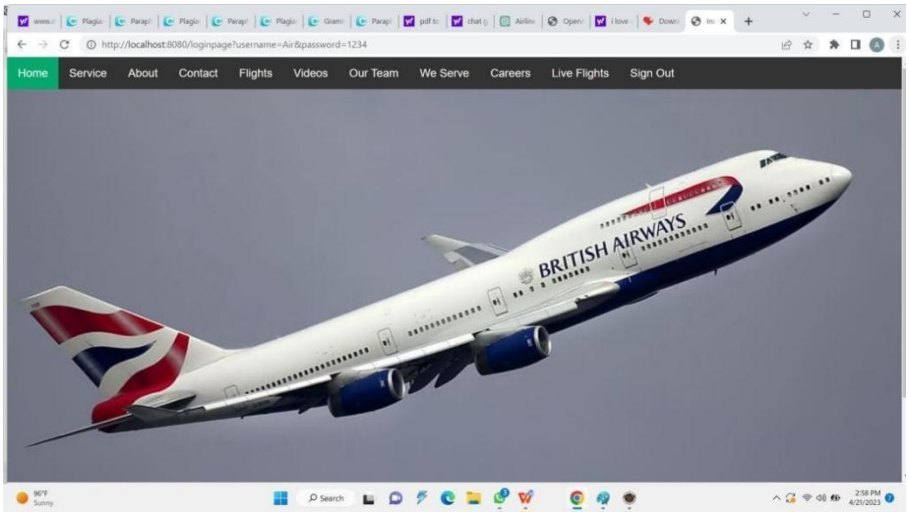

Figure 4. Home Page

Here,User can book economy,Standard,Business class tickets as per users need,Also,can make payment via credit,debit card etc.

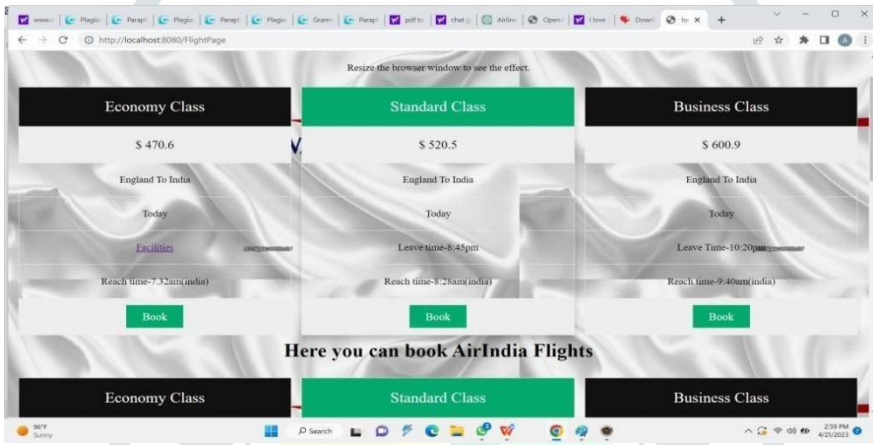

Figure 5. Flight

PageUser can apply for vacancies via uploading CV/resume if

eligible.

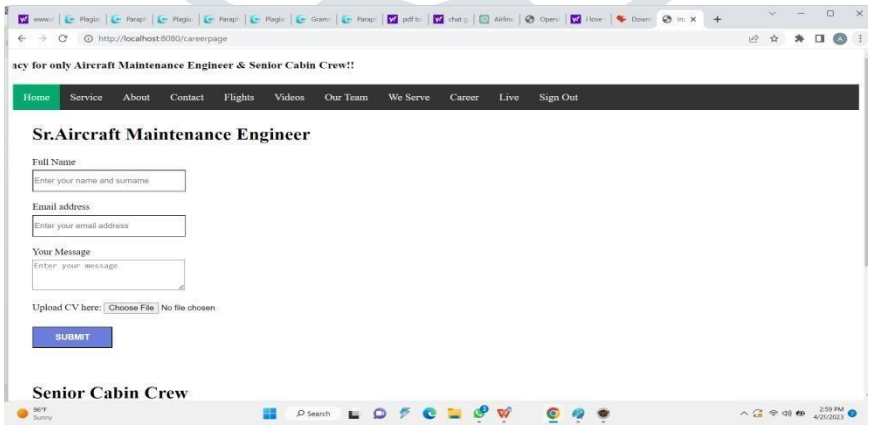

Figure 6. Careers Page

VI.CONCLUSION

In airline reservation system, the streamlining of the process of reservation without human interaction is highly needed so as to perform well in the highly competitive market. This paper work surveyed some of the existing airline reservation systems of previous work. We will configuration utilizing a web browsing source program which gives us adaptability in design. This system is valuable for the traveler in straightforward the task of booking and for airline organizations in overseeing client reservation data and refreshing battles information An improved airline reservation system was designed in such a way that allows potential customers to select seats for their flights and print their boarding pass directly from the reservation system.

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