WETRAVELO : FLIGHT BOOKING PORTAL

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Abstract: This article analyzes the possibilities of booking airline tickets and accomodation services electronically via the use of the internet. The use of more user friendly and convenience bookings with integrations of GDS-API which will provide a hassle free booking with more added features that are not usually provided by other platforms. GDS API is used for booking flights worldwide from a single interface. Complete booking cycle will be created from booking the ticket to cancellation of tickets.

Keywords: Airline booking system; electronic tickets; booking flights; wetravelo.

I. INTRODUCTION

It is so obvious that everything around us that is sustainable in nature will go through advancement. The advancement of technology in every field has made us take a time leap in future,where in today's world every model is now backed up by Information and communication technology. This is so apparent in every detail of our lives and the airline industry is not excluded. Travelling has been so common not only for business purposes as well as for pleasure. The airline industry has made it possible to travel across thousand miles in hours. Airline industry controls the world of travel. People in sake of saving their valuable time prefers air travelling. It has managed to connect to geographical distance very far away in hours. In traditional days it was a complicated process when we had to visit a travel agent and every booking is made using phone calls. Nowadays it's not the case with the availability of web tools and platforms that helps to generate a complete booking process to payment has made our work a lot easier than traditional ways. Now anyone can book a ticket with the help of internet using a smartphone or a laptop/pc and it is the most trusted way and even it saves a lot of time.[1] The era of Computer reservation system or generally a CRS in the field of Airline began back in the 1970s , with the advancement of technology the airline industry also updated , maintained and modified their reservation systems to generate more revenue in the industry. The reservation portal provides all the necessary information schedule,fares,seat availability etc. that a user needs while booking a flight. [2]

A great majority of these airlines industries have an automated online web based system or they provide APIs that help booking a seat in a airline.It is because the number of persons such as frequent travelers,business travelers etc are inclined to facilitate their booking process by online based systems that helps in generating airline tickets.[3]

Most of us prefer a air travel if the distance is big and also to save a lot of times in our busy schedule life. And nowadays people generally don't prefer a travel agent to book a ticket .We all have the internet and we are becoming more digital in most cases. when it comes to reserve a seat in the flight. We usually come up with a limited number of platforms for booking and

their offers and we have less number of platforms also to compare price and get a good deal in the reservation of seats.

Using GDS's API we are building a portal for the ease of travellers to search and book flights at a better price rate compared to other provided platforms.

The users will not be charged unless they get a confirmed booking unlike other platforms like makemytrip which charges users beforehand and incase users do not get a booking, they have to wait for the refund cycle. But here will not be that case.

II. Architecture Model for Wetravelo

Architecture Model for a Flight booking system can serve as a guideline for booking flights on a flight booking system by a end user.
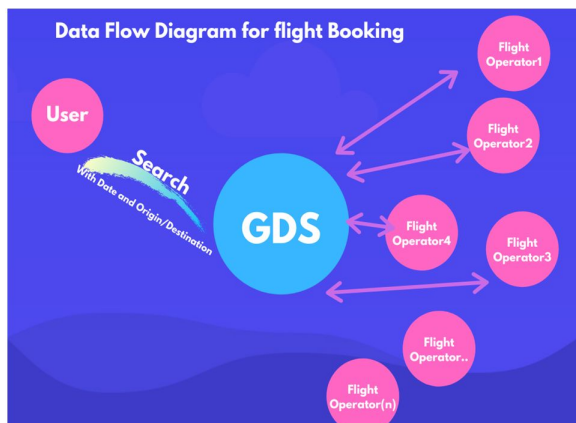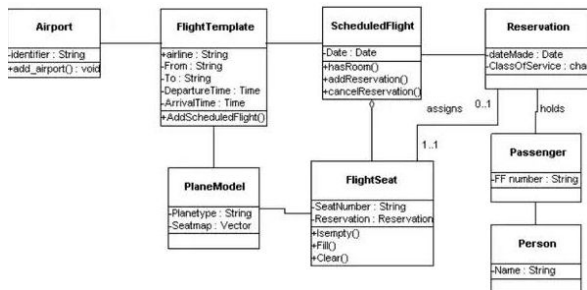
III. Materials and Methodology

Online booking systems are intended to help one search for and book travel tours via the Internet and effortlessly keep track of the status and progress of one"s bookings. Due to the rapid development of technology, old ways of receiving and exchanging information are being replaced by newer and more sophisticated ones. In the sphere of tourism, receiving information by telephone and booking via fax and email are becoming a matter of the past.[4]

It's based on the GDS-Api booking system. We will know a summary of how GDSs works .

GDSs are normally connected to the heart of the Airlines sales technologies Central Reservation Systems or CRSs.The CRSs is a software program that manages seat reservation on the airline site. Once a GDS requests a seat,te CRS distributes a seat to it but it doesn't cover the scheduling information and pricing. To set time tables and prices ,airlines must connect to two different 3rd parties at the same time. Airlines publish their prices on site so called ATPco(it's the main global source of fair information) that further distributes prices across GDSs and Online Travel Agencies and also to different price aggregators. On top of that airlines connect to scheduling providers such as Innovata and OAG. These technology companies provide the market with flight schedule , routing connection and flight code info.

Here are the steps in the purchase of an airline ticket:

● Users will provide and set the information panel with the following

parameters like : dates, seat availability ,number of passengers,direction etc.

- The client/user will be provided with all the information related to the search query. The list of flights will come in ascending order. i.e. from the cheapest to the most expensive tickets and picks the most suitable option.
- Then after selecting the desired flight and seats, users will be redirected to the purchase page, where all the relevant information is to be provided (the passenger's name, etc);followed by the payment option where users can choose from a wide range of payment options.
- At the end the users will be provided with the booking confirmation[5]

The Interface will be user-friendly and it has been developed in a sustainable platform.

Web Servers - Web Applications - clients

JavaScript ,Database Server My SQL Apache Server PHP, ASP.net Language.

The interface is gentle and yet provides all the information from searching and scheduling a flight.
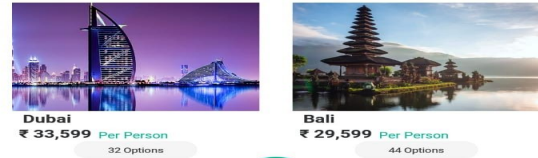
Fig. III

The user must have to sign in to get a reservation for the flight and further more actions(booking,payment,ticket history,etc) will be executed.

Fig. IV

The sign-in page ensures your safety as well as payment methods and gateways will be highly encrypted with the more updated,secure and reliable technologies.

IV.   Result

Keeping in mind a user friendly and a portal that provides with all the necessary information generally a user requires through his booking journey. The output of our portal is depicted in the figures below :
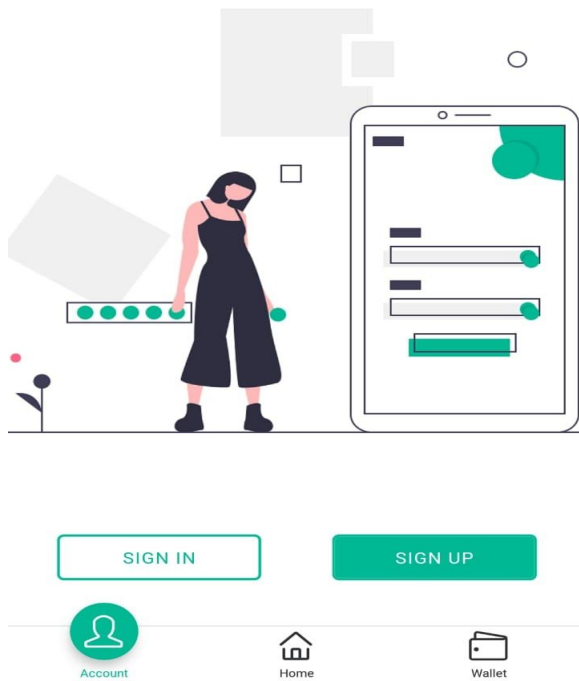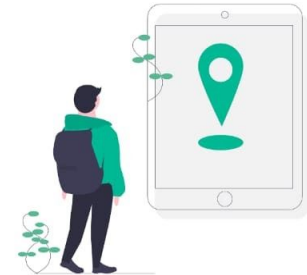

Fig. V

The above figure is the login page where a user can register a new account by providing details like name,email etc.If its an existing user he can browse through sign in option.
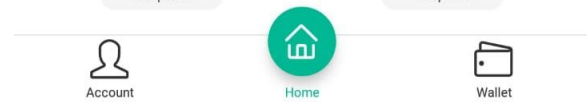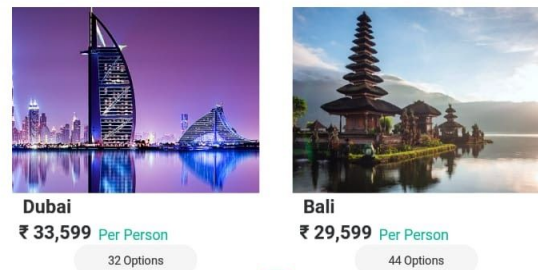

Fig. VI

The user interface has been designed responsive and attractive.

The user can navigate through (Account -Home-Wallet) in a single window.

Fig. VII

Fig. VIII

The above Fig. VII & VIII respectively shows how users can navigate through multiple options like one way,round trip,multi city option.User will have to enter information regarding his trip. Details like schedule,departure ,passenger information etc.

V. Conclusion

Back in the 60s, making a flight reservation will involve multiple peoples and a mainframe computer to process. American airlines and IBM made an automated flight booking system using the IBM 7090 computer. It was situated in New york and housed all flight reservation data. That computer was connected to 50000 American airlines remote terminal across the country. To make a reservation you needed to contact a travel agent who then reached the airline by phone to reserve a seat. That system could process upto 84000 bookings every single day. Its full name came out to be Semi Automatic business research environment or SABRE. Later similar computers were adopted by most carriers and SABRE became the leading flight distribution provider in the world.

This was the beginning of the Era of the Global distribution system or GDS.

Today GDSs are large flight aggregators,they collect flights from about 400 airlines and distribute them across travel agencies using their own application programming interfaces or APIs.

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VI. References

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