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AIRWAYS RESERVATION SYSTEM

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ABSTRACT

Airways reservation System is a computerized system that is used to store and retrieve information related to air travel. The project is aimed at exposing the relevance and importance of Airways Reservation Systems. It is projected towards enhancing the relationship between customers and airways agencies, making it favourable for the customers to book the flights as when they require such that they can utilize this program to make reservations. This system allows the passenger to search for flights that are available between the two travel cities, namely "Departure city" and "Arrival city" for a particular departure, arrival date and particular time. The system displays all the flight's details such as flight no, passenger details To book a flight, this system asks the customer to enter his details such as name, address, city, state, which class that is either business class or local class and number of passengers . If the passenger chooses the other place when it gives that no flights are available. The system also allows the customer to choose a flight within a wide range of flights .The main purpose of this software is to minimise the manual errors involved in the airline reservation process and make it user friendly for the customers to book the flights because when they require such that they can utilize this software to make reservations, modify reservations.

Keywords: Computerized, Airways, Reservation, Convenient ,departure, arrival.

I.   INTRODUCTION

The Airline industry controls the world of travel and has managed to minimise the distance between places that are geographically miles distant to merely in hours and minutes. "Few Technological inventions have changed how people used to live and experience the world as much as the creation of the airplane". There are thousands of airlines worldwide that cover greater distances daily and travel has become an acceptable part in our life. Therefore, to ensure that where we get to go,bwhich we time is convenient, individuals have to book flights As the world advances in these areas, it has become evident that technology has to play a vital role in helping customers in accessing general information about flights.
It is apparent that everything that is sustainable would have to go through advancement. In Information and

Communication Technology(ICT),the determination for improvement is a constant subject which triggers advancements. By convergence of the world into a global village, travelling greater distances has become a common for not only business , other commercial purposes but also for pleasure purposes. Due to the fast patrol nature of the world today, air travel is considered as one of the best choice among several ways of transportation to save time Reservation system should be such a way that it gives a variety of choice for different airlines to find out the most suitable flight for a particular customer, An airline reservation system is very important because it has the strong capability to reduce errors that might have occurred when using a manual system of reservation. This system makes it possible for client to book the flights as when they require. Customers can therefore make use of this system to make reservations, improve reservation system . The flight reservation system software should be developed that function as an independent application. It should be established as a self-contained result. The requirement of this system was realized in the early stages of the airline industry when information such as routes, scheme and fares about flights was published by airlines in books. The American Airline was the first to construct the computerized system to allow access to real time data to all its offices. In 1964, Semi-Automated Business Paper Environment (SABRE)

Our main objective of this project is to design and develop an Airline Reservation System. This project is mainly intended for the customers This report helps us to collect and analyse the ideas gathered for the project. Need of

Airlines system is to know few factors that directs us to improvise a system are given Faster System , Accurate, Reliable, Informative, Reservations and travelling from current city to destination .

Our project named "Airline Reservation System"is written in visual studio mainly because of its suitability for this type of application .Its user friendly nature and it consists of in-built header files . The compilation, error detection, binding facilities and interaction with other software packages make it most robust tool for software development .The VB-IDE has been eminently optimized to support rapid application development ("RAD").General purpose object-oriented programming language as is in tended to be an improved C with object capabilities like Classes ,objects ,inheritance, polymorphism, static binding and dynamic binding Assistance is provided to the user a teach and every step so that no problem is faced during using it .Every possible care has been taken to make the software and the report clear, simple and error free which makes accurate

II.   LITERATURE SURVEY

Author -Stair,Ralph M

In the arena of global competitiveness, organizations all over the world are competing the use of the most comprehensive and advanced technological attributes. The most common sample innovation is in the area   of documentation technology and communication. Diverse industries are using technology in the advancements of software and internet to keep going and monitor their business transactions. In the application of the informative systems, the airline industry is the most commonly used system. The airline reservations system was one of the changes to improve efficiency in the airline industry. Airline Reservation System eventually progress into the Computer Reservation System(CRS).Airline Reservations System (ARS) is a computerized system used to store and retrieve information and conduct transactions related to air travel. The systems was initially designed and operated by airlines, but were later extended for the use of travel agencies. Wikipedia, May, (2012)

Author -M.J.Smith

American Airlines was the first to launch an automated booking system in 1946. Using   to track information and improve efficiency was a highly appealing aim in the industry, drew the attention of other airlines worldwide. The system encountered years of development and alterations. Later, other airlines invested more in exploration and development to launch upgraded systems, and through the late 1960s and early 1970s, airlines accepted their own systems. United Airlines succeeded in the development the Apollo Reservation System, and shortly after permit travel agents access. The Apollo system was the Base for many further developments, which spread from just US airlines to European airlines as well. The research and development of Airline Reservation System became a notable aspect of the industry and all its air carrier corporation , and partnerships between airlines and technology emerged. Winston. Many other airlines soon established their own systems. Delta Air Lines launched the Delta Automated Travel Account System (DATAS) in 1968. United Airlines and Trans World Airlines followed in 1971 with the Apollo Reservation System and Programmed Airline Reservation System (PARS) respectively. Soon, travel agents began pushing for a system that could automate their side of the process by obtaining the various information Airline Reservation Systems directly to make reservations. Alarmed this would place too much power in the hands of agents; American Airlines executive Robert Crandall proposed constructing an industry-wide Computer Reservation System to be a central clearing house for United States travels; other airlines raised objections , citing fear of antitrust agents . Wikipedia, (2012) .Airline deregulation occurred in 1978, maximising the importance of computer airline reservation systems and their accessibility. During the early 1970s, as travel agents pushed for a control over data to reservation systems, and certain airline chief made outlay for the sake of retrieved the systems of other airlines, antitrust laws came into focus. The motive 1978 Airline Deregulation Act in the United States was to terminate government control over commercial aviation, and secure competitive etiquette and fair business practices in the airline industry. Passengers could gather knowledge of market forces and new market entry in the industry. Information on specific airlines and the industry as a complete became more widely and willingly accessible, evolving the airline reservation systems from "standalone" operations towards GDS. Today, airline reservation systems have evolved into computerized reservation systems which are of mission pedantic to the airline industry, about six major airline reservations systems are used by international airlines.Winston (1995)

Author -Desmond,J

Airline Reservation in creating nations is completed either manually or electronically. Either techniques, reservation and payment activities are done in piece-feast mold; this is cost restrictive, tedious and monotonous prompting wastefulness We exhibit an incorporated versatile airline reservation and payment system. Author's is a Client/Proxy/Server system with the intermediary layer filling in as portability mindful center layer giving continuous self-service support. The investigation demonstrates that versatile innovation is developed for airline administrators in creating nations as a road to enhance productivity, lessen activity costs, enhanced income age and arrangement of value-included customer service for airline currently, numerous individuals and organizations are grasping the mobile aircraft reservation system. Reservation systems had been actualized in numerous parts of the world for quite a long time, at first from manual to electronic reservation system. Portable, airline, transport ticketing and mechanized reservation systems are adequately expanding in the market. Because of the wild rivalry in the airline area, associations inside this segment are creating systems that will enhance their services to customers. Subsequently, a mechanized seat reservation system has kept on being an open territory of research. The target of this paper is to build up a portable airline situate reservation system that will help general society in picking up a simpler and speedier path for situate reservation and furnishing them with more alternatives to book a ticket for traveling on real time.

The world globalization is broadly utilized, and there are a few definitions that may fit this single word. However the truth remains that globalization has affected and is affecting every person on this planet. It is characterized to be more noteworthy development of individuals, merchandise, capital and thoughts because of expanded financial combination, which thus is impelled, by expanded exchange and venture. It resembles moving towards living in a borderless world. With the truth of globalization, the movement business has profited fundamentally. One might say that globalization is profiting from the flight business. Despite the path one looks at it, more people are voyaging every day and are investigating a few places that were inaccessible places on a guide. Similarly, technology has been developing at an inexorably quick pace and is being used by a few people everywhere throughout the world. With the mix of globalization and the expansion in technology and the recurrence in movement there is a need to give a wise application that is skilled to addressing the requirements of voyagers that use cell phones everywhere. It is an answer that fits in flawlessly to a client's bustling way of life, offers convenience and enough insight that makes a client's experience advantageous.

Author -Doganis,R.

The point of this proposal was to clarify the system of online ticketing utilized via carriers by clarifying the component and exhibiting an example application. The proposal portrays the advancement and working of carrier reservation system. Different viewpoints identified with online flight booking are clarified in the theory. The principal focal point of the theory was building up a working application. A fundamental application like the models utilized via carrier's organizations today was produced with the utilization of different programming and projects. Research in sources, for example, ebooks, web articles, documentation and instructional exercise was finished for the advancement. The postulation depicts how the online ticket booking functions with the assistance of various charts and representations. The proposal inferred that with the advance of regularly evolving technology, the pattern of booking online is probably going to create with more highlights. While there are a couple of impediments, the accommodation of booking tickets online and the conceivable upgrades will prompt an even propelled type of booking tickets online.

Author -P.N.Seth,S.S.BHat

As the technology advancements are immediately created including portable technology, versatile application for reservation administrations can upgrade people's life, make it less complex. This investigate presents a portable reservation system for carrier organizations to improve the way toward booking a flight. The users generally purchase their ticket physically and possibly hold up in a line to check the required flight. The proposed system actualized to beat manual system issue by making booking from home or somewhere else and spare time and exertion.

III.   ALGORITHM

Main menu will be displayed where you need to select from options
Enter 1 for local booking
Enter 2 for international booking.
Enter 3 for search of flights.

If 1 is selected. They will get the local places available. Select the local city where you want to go. Enter the first name of the passenger. Enter the last name of the passenger. Enter the address of the passenger. Enter registration number of the ticket. Enter the current city of the passenger information capital letters. Enter the destination city of the passenger information in capital letters. Enter your choice for selection of class Press 1 for business class and 2 for economic class .select time for the selected flight. then if seats are available it displays "confirmation of tickets" .you will your ticket on the display. Else if you go to main menu press b..Enter your choice .

If a person chooses 2 then it is for international booking. we will get international places. Which are available..Select the current city which may be a local city .Enter the first name of the passenger. Enter the last name of the passenger. Enter the address of the passenger. Enter registration number of the ticket. Enter the current time location of the passenger information capital letters. Enter the destination of the passenger information in capital letters..Enter your choice. press 1 for business class and 2 for economic class. select time in which selected flight is available: then if seats are available it displays "confirmation of tickets" .your ticket display will be displayed on screen. .To go to main menu press b..
If a person Press 3 for search of flights, you get the combinations of flight available. Press b to go to main menu.

IV.   ADVANTAGES AND DISADVANTAGES OF AIRWAYS RESERVATION SYSTEM

4.1.Advantages
The airways industry is completely dependent on Internet and flight reservation system. The primary advantages of flight reservation system are it can be used for every type of Airline Company such as small, medium, large. It basically provides an online platform for travelers to book their tickets online.
It's primary advantages are
* It is easy to book tickets
* It saves time and money
* This provides each and every informational out flights
* 24/7 customer support through chat and calls
* Mobile availability
* It sends automated tickets to the customer by mail
* It has easy refund policies
* It is easy to book both domestic and international airlines

Flight booking software has completely transformed the system of booking the tickets. Earlier people has to visit the airports to take their tickets but now with this software it is easy to book tickets from home. Easy cancellations and refund policies are there for travellers with just a single click on cancellation button in airways reservation system. The tickets are cancelled and the travelers get their refunded amount in their bank account directly. All these features have facilities travelers to book their tickets online. Travellers can book their flights for domestic and overseas location easily from anywhere at any time. Airways reservation system is a major contributor to the growth of airways and travel industry.

Convenience
Being able to book a flight online means you can do it any time of the day, wherever you are. You can book a flight at home, while you are in the office and even when you are on your way somewhere, through a laptop or a smartphone.

Prices

When you book a flight ticket online, you Have a freedom to shop on low prices and best prices so purchasing a ticket online means customer can check out many airlines of your choice.

Early check-Ins

Changing or cancelling a ticket is very easy when you have booked it in online. In this case what we need to do is go directly to the airlines website and login with your booking get information. now from here you can easily change the flight to a later date, upgrade to a different cabin class or you can cancel your reservation.

The airways online reservation system is quick to do. No need to travel anywhere to book the tickets. It's a real time process that is if you book a seat, it will automatically update that so no one else can take the seat. and it will be cheaper. You can access more information and know more about the flights it gives you need number of options so that you can select as per your convenience. We can purchase tickets in advance also. It is easy to learn and adjust to the system this system does not require the staff to be Highly educated the requirements to tackle this job will be limited and willing to work more hours and the data is not easily lost. It is easy to manage the system due to the high number of staff working .

The airways reservation is very best way to execute between us and the airways provides the facility the journey becomes easy because that we can book or reserve of ticket online with the help of Internet it is reduce the physical and mental stress to go to airports standing in lines for booking ticket we can go book tickets from home and Rome whole world. In our project we used file handling features provided by c++ language. This program shows you an insight into the management process of reservation system in airline reservation system the whole process of airways reservation system is shown with the help of this project it provides facilitates to add/modify/delete/search. Airline management details provide a facility to view the list of teams. it facilities to view list of teams. This airways management system is a basically a menu driven program . This is the most kind of format is designed considering the user requirements. This is to provide an easy and faster method of operation to the user the first advantage is the user enters his details and the second is this is implemented is the menu where the user chooses from a list of options to process his request to process his requests. Since this is a input driven program ,we expect from the user to input correct options. But for some reason user is unable to enter it correctly, then it false a message that he is entering his information wrong which can be useful to the person to give the correct input. and the third point is all the user information is kept confidential no one knows his details everything is kept confidential. In this system this works to minimise the human errors, take less time, easy interaction with user bug free. Technical feasibility centre around the existing computer system and also it can support the modification but in manual process there are more chances of the errors are there, creating lot of errors, lot of complications, less technical or logic but through this airways reservation system we can set this process in a very systematic pattern, which is more technical, full proof ,authentic, safe and reliable. Operational feasibility analysis is the most frequently used method for evaluation of effectiveness of authentic system. More commonly known authentic cost/benefit analysis, the procedure is to determine the benefits and savings that authentic see expected from the system and compare them with cost. Earlier in computers craft the work has been done manually which takes lot of time as well as man power which is more economical . Now the same work is computerized which is more effective and efficient, less time consuming ,reduces man power which in turn proves to be less economical.

4.2.Disadvantages

Need stable Internet access for the guest to book, we need to do all the technical setups to offer online booking systems it may be anything. Through downtime and security breach instances are rare, they are for real. Many precautions must be taken by the service providers like see urea socket connection.

Transaction drops in some instances the booker is being charged for the services but transaction will drop at the last moment resulting failure in the allocation of the services .this can be taken care by the auto payment reversal mechanism but it takes time to get the amount credited. The system is very time consuming . This system is more prone to errors and sometimes the approach to various problems is structured. If the old data or information is to be

fetched then it is a great problem for user to get the information in short span of time to get the information from files is not an easy task this is the big disadvantage

There are many advantages on airways reservation system then the disadvantages.

V.   CONCLUSION

We hereby conclude that the system effectively automated the functions involved in the processes being handled manually before. The system is secure and scalable. The program design has been done keeping user-friendliness and efficiency in mind. The cost and benefit analysis shows that the Program was quite successful in saving costs for the bank and generate equivalently huge benefits. In the existing system there is no provision for senior citizens and there is no facility for viewing single passenger record. The purpose of developing the specified software is to describe the analysis involved in the reservation of air ticket. You can also customize this program by taking the passenger information, providing a confirmation number, booking tickets in waiting list etc. In various airline reservation counters this program can be used for the systematic storing records. This program provides instant access of record of passengers details, availability of different flights, record of business class, record of economy class, record of local booking and international booking. It maintains the list of number of international places available.

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