

# Flight Reservation System

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**Abstract:** Flight reservation System is a computerized system used to store and retrieve information and conduct transactions related to air travel. The project is aimed at exposing the relevance and importance of Flight Reservation Systems. It is projected towards enhancing the relationship between customers and Flight agencies through the use of ARSs, and thereby making it convenient for the customers to book the flights as when they require such that they can utilize this software to make reservations. This software has two parts. First is user part and the administrator part. User part is used as a front end and administrator is the back end. Administrator is used by Flight authority. It will allow the customers to access database and allow new customers to sign up for online access. The system allows the Flight passenger to search for flights that are available between the two travel cities, namely the "Departure city" and "Arrival city" for a particular departure and arrival dates. The system displays all the flight's details such as flight no, name, price, and duration of journey etc. After search the system display list of available flights and allows customer to choose a particular flight. Then the system checks for the availability of seats on the flight. If the seats are available, then the system allows the passenger to book a seat. Otherwise, it asks the user to choose another flight. To book a flight the system asks the customer to enter his details such as name, address, city, state, credit card number and contact number. Then it checks the validity of the card, books the flight and updates the Flight database and user database. The system also allows the customer to cancel his/her reservation if any problem occurs. The main purpose of this software is to reduce the manual errors involved in the Flight reservation process and make it convenient for the customers to book the flights as when they require such that they can utilize this software to make reservations, modify reservations or cancel a particular reservation.

**Background:** The Airline Reservation System project is an implementation of a general Airline Ticketing website like Orbitz, which helps the customers to search the availability of flights, book and cancel the flight tickets. This project also covers adding, deleting, or modifying the customer details and flights. In general, this website would be designed to perform like any other airline ticketing website available online. The purpose of this project is to implement or to design a database for an airline reservation system to check the flight details, book and cancel flight tickets. It makes the process of booking and cancelling flight tickets simple and easy for the passengers. Normally a person wants to reserve his ticket and he must contact the nearest Overseas Travels branch. The Airline Reservation System provides an interface to schedule flights and reservations for an airline through the internet. Its responsibility is to keep track of system users, customers, Airbus information, flight information and cancellation, The Airline Reservation System is one of the modifications that were carried out in the Passenger Service System so that the working and availability of Service area can be broadened. On one hand, it helps the customers and on the other, it also makes the life of the airline service companies easier by keeping all the records of the passengers and if there is any change in the flight due to some reason, the passengers are promptly informed. This system is also used by companies to keep track of user preferences of regular travelers so that they can provide better service and give offers to customers.

**Materials and Methods:** An airline's inventory contains all flights with their available seats. The inventory of an airline is generally divided into service classes (e.g. First, Business or Economy class) and up to 26 booking classes, for which different prices and booking conditions apply. Inventory data is imported and maintained through a Schedule Distribution System over standardized interfaces. One of the core functions of the inventory management is the inventory control. Inventory control steers how many seats are

available in the different booking classes, by opening and closing individual booking classes for sale. In combination with the fares and booking conditions stored in the Fare Quote System the price for each sold seat is determined. Users access an airline's inventory through an availability display. It contains all offered flights for a particular city-pair with their available seats in the different booking classes. This display contains flights which are operated by the airline itself as well as code share flights which are operated in co-operation with another airline. If the city pair is not one on which the airline offers service it may display a connection using its' own flights or display the flights of other airlines. The availability of seats of other airlines is updated through standard industry interfaces. Depending on the type of co-operation it supports access to the last seat (Last Seat Availability) in real-time. Reservations for individual passengers or groups are stored in a so-called Passenger Name Record (PNR). Among other data, the PNR contains personal information such as name, contact information or special services requests (SSRs).

**Proposed System of Flight Ticket Booking System:** The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work. The UCU population is growing steadily every semester so there is an urgent need to automate the booking process to handle the data of this growing population. Online booking system will help UCU to avoid more expenses and remain competitive. To thrive, organizations must increase the quality of services they deliver to clients while lowering their operating costs, maintain privacy, and comply with regulatory compliance standards (O' Brain, 2011). The new technological education environment lowers operating costs by integrating computer applications using real time information to reduce cycle times and to increase customer satisfaction. Besides, they provide a means for management to respond to the increasing business needs in the more effective and efficient ways. According to Lucey, (2012), all organizations operations are ever changing. Management and information systems that support them have to deal with that change and adapt to their operations, systems and organizations themselves in order to survive and prosper. Therefore UCU community needs a residential online booking system to solve this problem. The following chapter of methodology gives the steps of how the system is going to be developed.

**Conclusion:** Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manager to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses. Here we can maintain the records of Flight and Ticket. Also, as it can be seen that now-a-days the players are versatile, i.e. so there is a scope for introducing a method to maintain the Flight Ticket Booking System. Enhancements can be done to maintain all the Flight, Ticket, Booking, Passenger, Payment. We have left all the options open so that if there is any other future requirement in the system by the user for the enhancement of the system then it is possible to implement them. In the last we would like to thanks all the persons involved in the development of the system directly or indirectly. We hope that the project will serve its purpose for which it is develop there by underlining success of process.

**Keywords:** Flight Reservation System , Login, Reservation, Admin, User, SQL Connection, Operations, Flights, Domestic and International Flights, Reservation, Ticket Review, Tickets Cancellation, Add Flight, Reports. Delete Flight , Modify

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