**AIRLINE RESERVATION SYSTEM**

**PROBLEM STATEMENT:**

The objective of this project is to implement the airline reservation system to the best satisfaction of the customer. The normal process which was followed until recently was to manually fill the data and then process the data which used to cause a lot of inconvenience to both the administrator and the customer as well. Now, we would like to use databases to facilitate this process of smooth reservation of airline tickets with minimal work on the part of both the customer and the administrators involved. It helps the customers to search the availability and prices of various airline tickets, along with the different packages available with the reservations. In general, this website would be designed to perform the task of airline ticketing website available online. Our aim is to develop a computerized reservation system, meeting the rising interest of customers in online air travel reservations. The system should be convenient, user friendly and available on internet. The system shall allow the users to view required flight information ,book tickets online, view or cancel current reservations, and create member login for standalone users as well as agents and create discounts as per frequent flier mileage program .We are trying to give a live reporting which is updated by airline companies so that customer gets a live flights checking availability of seats, pricing and also planning to provide seats as per their choice so that they can travel very comfortably their journey in which the way they want. We will be trying to provide refreshments and more amenities at the customer’s comfort. The website can be accessed from anywhere so that the users can book their tickets without the need of visiting airport or any travel agencies. This system not only provides online booking, it also allows the user to cancel the booking (charges applicable).

* CANCELLATION POLICY

According to the current situation of the passenger cancellation of the ticket is also made available by charging them accordingly. The cancellation fares are :

1. 70% of the amount Is refunded if cancelled.
2. No refund is provided if cancelled on the last day.

The data is stored by creating entities. The types of data stored here are:

* Login
* Ticket(inherited:(booked), (cancelled))
* Plane
* Scheduled date

**ENTITY DETAILS:**

**1.LOGIN**

This is used to store the login details of the users. The user can easily access the information by logging in using login id and password. Login ID attribute is used to uniquely identify a user. Password attribute stores the password of each user.

**2.TICKET**

A ticket should be generated for a passenger if he makes a reservation. The entries in the ticket store the passenger information, seat number and details of the boarding flight. Ticket\_ID is used to identify a ticket uniquely. We obtained two more entity sets through inheritance from the set ticket : BOOKED ,CANCELLED. The booked entity set has payment\_id as the extra attribute it is used to store the details of payment for a booking. Payment\_id is unique for each booking. The set cancelled has refund amount and date of cancellation as extra attributes.

**3.PLANE**

It stores the information of flights available which includes departure time, arrival time, fare , seat capacity , origin and destination.

**4.SCHEDULED DATE**

It stores the information regarding the date of travel and number of seats still available in a particular flight

ATTRIBUTES FOR THE ENTITIES

**1.LOGIN**

a. Login\_ID

b. Password

c. email

d. phone number

e. Date of birth

f. Name

**2.TICKET**

a. Ticket\_ID

b. Name of the passenger

c. Gender of the passenger

d. contact email

e. contact number

f. booking date

*Inherited sets:*

BOOKED (payment\_id), CANCELLED(cancelled date ,refund amount).

**3.PLANE**

a. Flight\_ID

b. Seat\_capacity

c. Arrival time

d. Departure time

h. Journey time

h. Origin

i. Destination

j. Fare

**4.SCHEDULED DATE**

a. Date of travel

b. Available seats

c. occupied

**RELATION SETS**

1. **Filled**

Between the sets plane and scheduled date

**2.BOOKED**

Between the sets plane, scheduled date and ticket.