**Software Requirement Specifications**

**for**

**AIR RESERVATION**

**Team Members**

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Introduction :

The basic idea behind this software is to reduce the manual error in the airline reservation process and make it convenient for the users to book the flights as when they require such that they can utilize this software to “make reservations” or “cancel a particular reservation”.

The name of the software is “AIRLINE RESERVATION SYSTEM”. This software provides options for viewing different flights available with different timings for a particular date and provides user with the facility to book a ticket or cancel a particular reservation. Not only this but it too does provide the user with details of cost of the ticket depending upon the class opted by the user i.e Economic or Business class . It does not allow the user to modify a particular part of his reservation.

Problem Definition :

“Kingfisher Airways” are one of the private airlines in India, which caters large number of people. It has about 12 planes in which 6 serves for domestic and 6 for international. The plane details, their departure and arrival time, source and destination are as follows.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | Plane | Source | Destination |  |  |

**DOMESTIC**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | DOM\_01 | Delhi | Mumbai |  |  |
| 2 | DOM\_02 | Kolkata | Chennai |  |  |
| 3 | DOM\_03 | Bangalore | Delhi |  |  |
| 4 | DOM\_04 | Mumbai | Bangalore |  |  |
| 5 | DOM\_05 | Chennai | Delhi |  |  |

**INTERNATIONAL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | INT\_01 | Delhi | Spain |  |  |
| 2 | INT\_02 | Kolkata | Los angles |  |  |
| 3 | INT\_03 | Bangalore | Zurich |  |  |
| 4 | INT\_04 | Mumbai | United Kingdom |  |  |
| 5 | INT\_05 | Chennai | Paris |  |  |

The system will get the user details such as name, age, address, gender which plane user wants to travel and the destination point. If the user will be asked to choose from the provided list of source and destination points.

The software will have an option for checking availability of the tickets. If the ticket is not available, a short message will displayed as “ticket unavailable” to the user. It too will have the facility to cancel the reservation of the ticket.

A small statement regarding cancellation should be displayed to passenger after cancellation of their tickets. The ticket which is cancelled is then added up to the available ticket column. The airline software will have the facility to print the ticket with all the details such as data, name of the plane, destination with timings and the class along with the passenger details.

Product Function :

The major functions include

* Providing flight details
* Flight bookings for a particular destination.
* Personal Information Block to be filled by the user comprises of Name of the passenger, Age, Gender etc.
* Displaying Personal Information Block along with the reservation details like Flight Name, Flight Date, Flight Time, No of tickets booked by the user and ticket number.
* Allowing the customer to cancel his reservation provided the correct ID is inputted.

Details Class :

The elements of the class Details include:

* business\_tickets: Number of business tickets
* economic\_tickets: Number of economic tickets
* Airplane\_name: Name of Airplane
* starting: Name of the source of the flight
* destination: Name of the destination of the flight
* function func(int,int): Function with integer parameters for source and destination
* function book(char): Function for booking tickets
* function availability(char): Function for checking the availability

Passenger Class :

The elements of the class passenger include:

* pname: Name of the passenger.
* paddress: Address of the passenger.
* pgender: Sex of the passenger.
* page: Age of the passenger.

Function Reserve :

This function writes the details of the passenger who is booking tickets in an external file. This includes name, address, gender and age of the passenger.

Function Enquiry :

This includes the database of the sources and destinations. It reads in data of the sources and destinations from an external file and prints them on the console/terminal.