



AIRLINE RESERVATION SYSTEM



CERTIFICATE

This is to certify that **Mr. Sagar H. Raisinghani** is a regular student of 12th Patanjali in Vivekanand Prathistan's Kashinath Palod Public School, for academic 2014-15. He has satisfactorily performed the project and practical as per syllabus of Informatics Practices and has completed his journals and records, in all respects.

Subject Teacher

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A Project Report on

AIRLINE RESERVATION SYSTEM

In Subject of

INFORMATION PRACTICES

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ACKNOWLEDGEMENT

Inspiration and guidance are invaluable in every aspect of life, especially in the fields of academics, which I have received from my respected teacher **Mr. Deepak Ahuja**. I would like to thank him for his endless contributions of time, effort, valuable guidance and encouragement he has given me.

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SAGAR H. RAISINGHANI

ABSTRACT

Reservation System by manual way is tedious process, since it involves work load and time consumption. In this system, we can easily manage the Flight booking, Staff details, Flight details, Sector details, travelling expenditure, calculation of travelling expenses and easy way of reserving flights.

The objective of the Airline Reservation System is to develop a project which maintain booking of flights and handle account of Airline Reservations. The main feature of this project is to minimize the complexity faced in reserving the flights and to calculate the expenses.

This project is carried out using NetBeans IDE as front end and MySQL as back end.

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INTRODUCTION

TO THE PROBLEM

Reservation System gives an idea about how the flight details, flight booking, travelling expenses are maintained in the particular concern. The Airline Reservation system also includes some special features. The program provides authentication so that unauthorized person can't access the system. The modules of this project are flight details, flight booking, and travelling expenditure.

NetBeans Java IDE 8.0 is used as the front end tool and MySQL RDBMS is used as a backend tool. NetBeans IDE is one of the most popular RAD's used for Java programming. The application wizards, menu editor and ready tool pallets etc. are very much useful for creating very good professional software.

TO THE SOFTWARE TOOLS

The 'IDE' part refers to the method used to create the graphical user interface (GUI). Rather than writing numerous lines of code to describe the appearance and location of interface elements, you simply drag and drop pre-built objects into place on screen. If you've ever used a drawing program such as paint, you already have most of the skills necessary to create an effective user interface.

It revolves around ready-made objects and it is event-driven that is all the activities in a program are triggered by one event or another. Each object has its own properties, determining its position, size, color, appearance and nature of its text and much more. Each object also has its own event-handling procedures.

NetBeans IDE knows what a button is and how it works? It also works how to handle images, menus, dialog boxes, drive and directory list and much else. The programmer does not have to write code to trap these events the system does that automatically because the program code runs in response to events. The flow of execution is not as fixed in a traditional program.

Operations do not have to follow a set of sequence and can be easily interrupted, suspended or abandoned. The process of program design reflects the nature of the system. You begin by the screen layout events and then any necessary code to co-ordinate the whole program.

The 'RDBMS' part refers to database management systems that stores a huge amount of data in form of tables. If needed, data is stored in encrypted format for security of data. If you've ever used a command line interface, such as in cmd prompt in windows or C programming using Turbo C, then creating database and inserting data in MySQL is quite an easy task. MySQL stores enormous amount of data that can be used to keep all necessary requirements in daily routine. It stores data in UTF-8 or Latin character set. This lets user store a large amount of data in standards and maintained form in comparatively small size on disk space.

APPLICATION SPECIFICATIONS

Hardware Specifications (Used):

Processor	:	Intel(R) Core(TM) i5
Process speed	:	3.5 GHz
Installed Memory	:	8.00 GB
Hard drive	:	1024 GB

Software Specifications (Used):

Operating system	:	Windows 7 Professional 64-Bit
Development	:	NetBeans IDE 8.0
Front End	:	Java(TM) SE (build 1.7.0)
Back End	:	MySQL RDBMS Server 5.5

APPLICATION ARCHETECTURE

Project Files:

Forms

- Admin.java
- Booking_Frame.java
- Checkout_Frame.java
- Operators.java
- Search_Frame.java
- Login.java
- search_flight.java

Images

- Splash.gif
- MAIN.jpg
- checkin1.jpg
- logo1.jpg

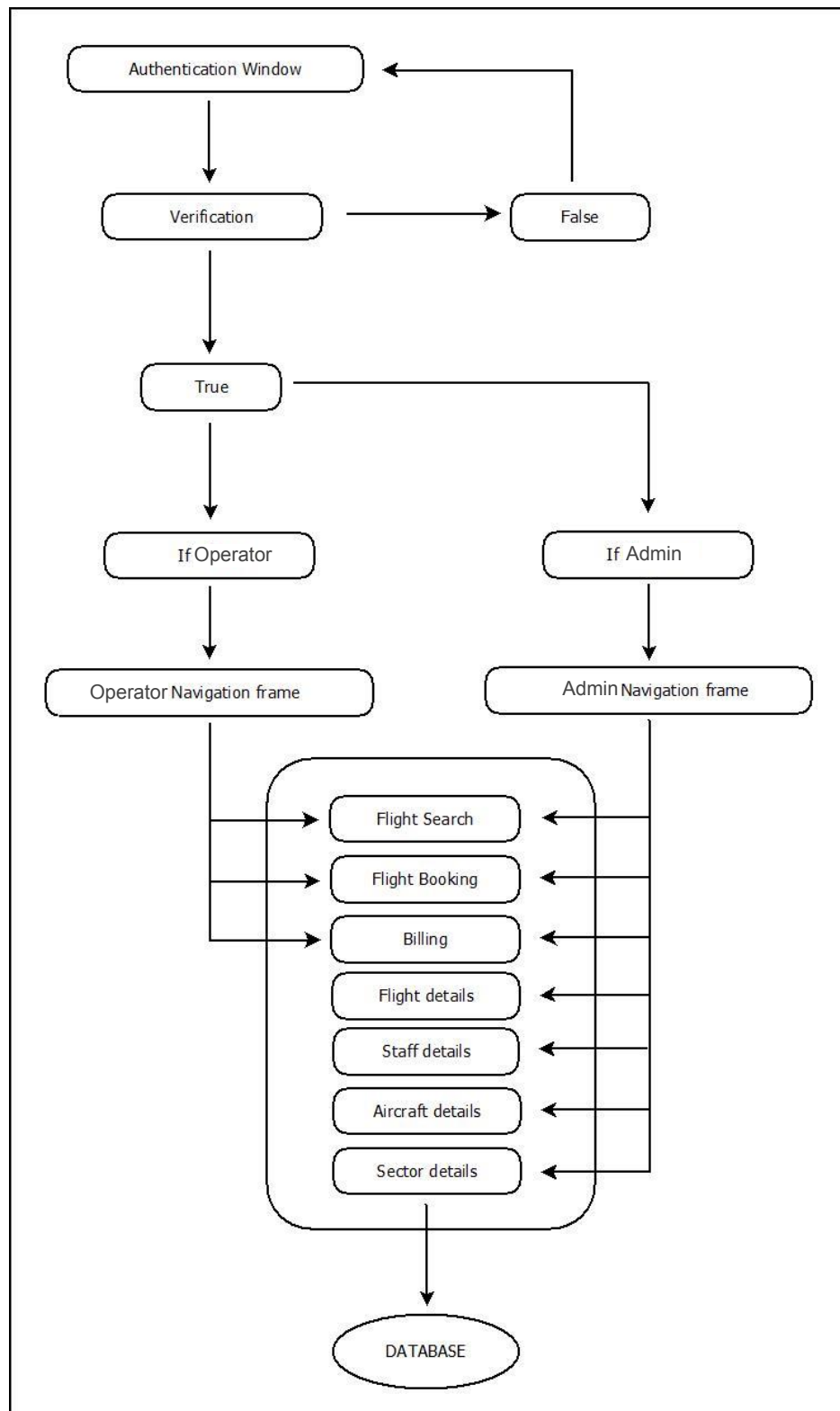
Project Tables (in MySQL):

Airline Reservation System:

- aircraft
- flights1
- scheduledflights
- sector
- staff
- user_profile

Project Workflow Chart:

Program Implementation:



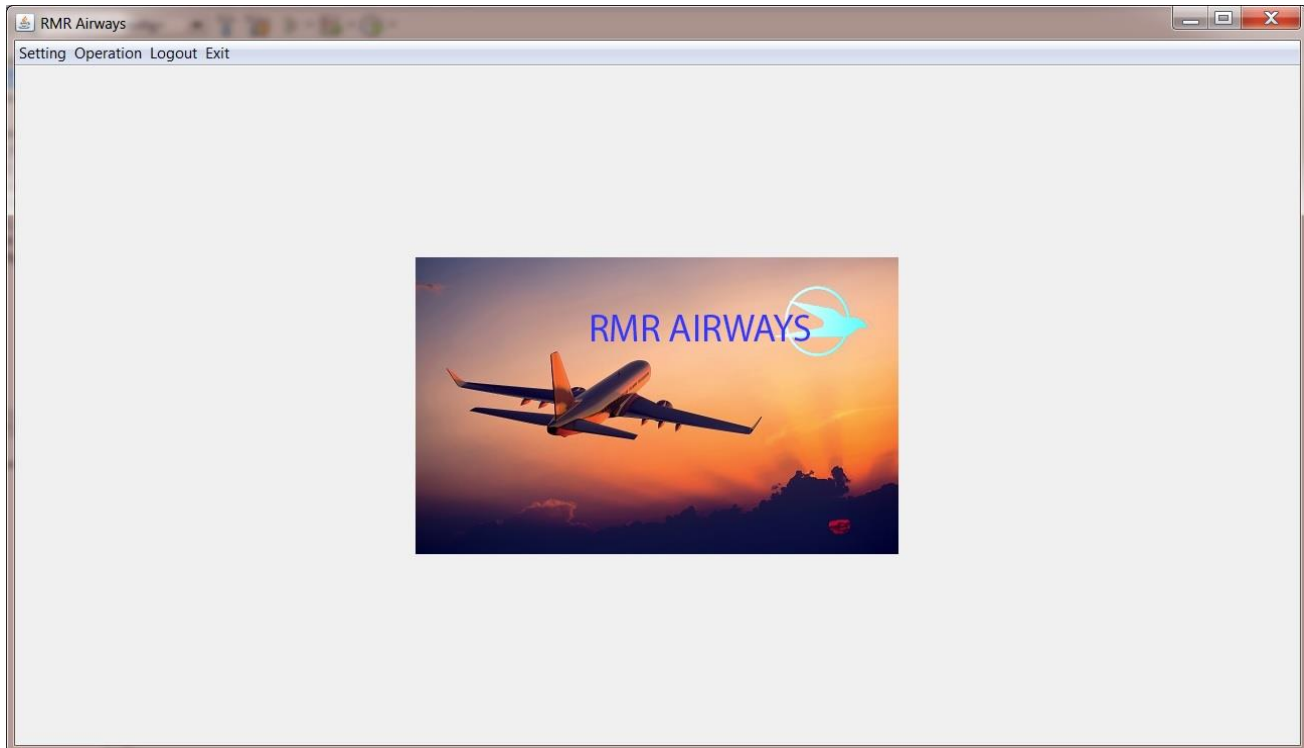
APPLICATION DESIGN

Login Form: This is the first form shown in application for user login



The screenshot displays a Java Swing window titled "JAVA AIRWAYS Ticket Reservation System". The window features a header with the text "Airline Reservation System" in red. Below the header is a large image of an airplane flying over a sunset sky, with the text "RMR AIRWAYS" and a blue arrow logo overlaid. The main content area is titled "Authentication window" in red. It contains three input fields: "You are" with a dropdown menu showing "ADMIN", "Your ID" with a text box, and "Your Password" with a text box. A "Done" button is located to the right of the password field. Below the input fields is a button labeled "Search flights (Login NOT Required)". In the bottom right corner, a status bar displays the date and time "23-1-2015 21:28:36".

Operator Navigation Frame: Operator's frame used to navigate to other frames



Flight Availability: This form checks for availability of flights in between given cities and proceeds to booking for selected flight

Search Form Fields:

- Origin: Mumbai
- Destination: Chennai
- Journey Date: Jan 30, 2015
- Class: Business

☐ Also show next 7 days schedule

Select Flight from search list for booking process

Date	Flight Name	Departure Time	BC Seats Available
30-01-2015	FR59	14:23	50
30-01-2015	FR71	15:03	50

BC - Business Clas; XC - Executive Class; EC - Economy Class

Flight Booking: This form takes all the passenger information and books selected flight for selected date

RMR AIRWAYS **Airline Reservation System**

Flight Detail

Journey Date: Jan 30, 2015

Departure Time: 14:23

Flight No.: FR59

From: Mumbai

To: Chennai

Class: Business

Charge: 7990

Change Confirm

Passenger Detail

No. of Adult* No. of Child* Meal* Veg. Non Veg.

First Name Last Name Age Gender

Reset Proceed

Instructions

1. Booking is allowed for maximum 6 (six) passengers including children per Ticket.
2. Full charges will be applicable for children more than 2 years age.
3. Present the age proof for children less than or equal to 2 years age.

Flight Ticket Generation: This form generates the ticket of the passenger and calculates the total fare required for the journey

RMR AIRWAYS **Airline Reservation System**

PNR No. 100253469 Flight No. FR59 Journey Date 30-01-2015

Destination Mumbai Source Chennai Departure time 14:23

Passenger No.	First Name	Last Name	Age	Gender
1	Sagar	Raisinghani	17	M
2	Yash	Mandhwani	17	M
3	Bhagyesh	Rane	17	M
4				
5				
6				

Fare 7990

Service Tax (12.36%) 988

Fuel Charge 200

Meal Cost 400

Total Fare 26757.564

Checkout and Pay Cancel

APPLICATION EVALUATIONS

Overview:

Airline Reservation system works fine in all manners with provided functionalities with quite good results. All the basic functions required by an airline company to work daily can be registered and recorded using this application. User friendliness of application is quite good. It is much easy to handle and operate in fast routine. It also doesn't require user to be good at computers.

This application is made for satisfying all the basic functions required by an airline company such as providing authentication, checks for flight availability, booking of flight, generating ticket and total fare, etc. and stands on what it is made for. All these works can be achieved quickly and accurately using Airline reservation system.

Limitations:

The Airline reservation system works well with provided Functionalities, but is not a perfect application. Definition of a perfect application depends on working conditions and differs person to person. Hence, some basic functionalities are provided in this application.

This application does not offer cancelation of tickets and Baggage fee is also not considered. This system serves reservation for domestic cities only. International tickets cannot be booked using this application.

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