Software Requirements Analysis

Airline Reservation System

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1. Introduction

This Project is a desktop application where the airline reservation system is coded with C# programming language. The application starts with a login form that leads to a login form. The login form will be given an authentication mechanism, if the user id and password match the condition, the user will login to the main form. The user can navigate to the Trains form from the main form. Can add, edit, delete and view trains. User can manage different Passengers, add, edit or update Passenger. The user can manage different Trips that allocate a particular train to them. User can add, edit and delete Trips. The User can Book a Ticket for a particular Trip. Finally, the user can cancel a reservation.

1.1. Purpose of the system

The airline reservation system includes details about flight schedules, passenger reservations and ticket registrations.

1.2. Scope of the system

The users of the system consist of the system administrator and registrar. The aircraft, passengers, travel and reservation information in the system are under the control of the system users.

2. Current System

In several countries, if someone wants to book a flight ticket, they follow one of these things: Elle goes to the airport and book the ticket. Downloading the ticket as a paper document. Fill out the ticket from the System and print it out and deliver it to the airport. Booking the ticket online at some registered ticket offices. Even the above approaches are

booking tickets online, not completely online. The traveler may not have much freedom over this approach. Therefore, the Passenger may or may not be satisfied with this approach as it involves manual intervention such as traveling to the airport to book their ticket.

3. Proposed System

The proposed system provides complete freedom for the user, where the user can log in to this application and book her ticket on her own system.

3.1. Functional requirements

3.1.1. Flights

In the Flights module, we can enter flight code, date, number of seats, source and destination information, as well as view registered flights. We can update and delete saved flights on the flight logs view screen.

3.1.2. Passangers

To register a passenger in the Passengers module, we must enter the passenger code, name, number, address, nation, telephone number and gender. We can update or delete registered passengers from the passenger records display screen.

3.1.3. Tickets

In order to reserve a ticket in the ticket reservation module, we need to enter the ticket and flight code, passenger code, name, nationality, passport number and ticket price information.

3.1.4. Cancellation

In the ticket cancellation module, we need to enter the cancellation, ticket and flight code and date information for ticket cancellation.

3.2. Nonfunctional requirements

3.2.1.Usability

Airline Reservation System serves a variety of people, including those who are not inclined to use computers. Therefore, My Wallet must be clear and easy to use.

3.2.2. Security

The system contains a lot of information such as flight, passenger and reservation. The data is kept in a database. Database security protects data against data theft.

3.2.3. Interface

The system offers multiple tools to the user. It is important that the interface has been developed for the most efficient and easiest use of these tools for the user.

4. System models

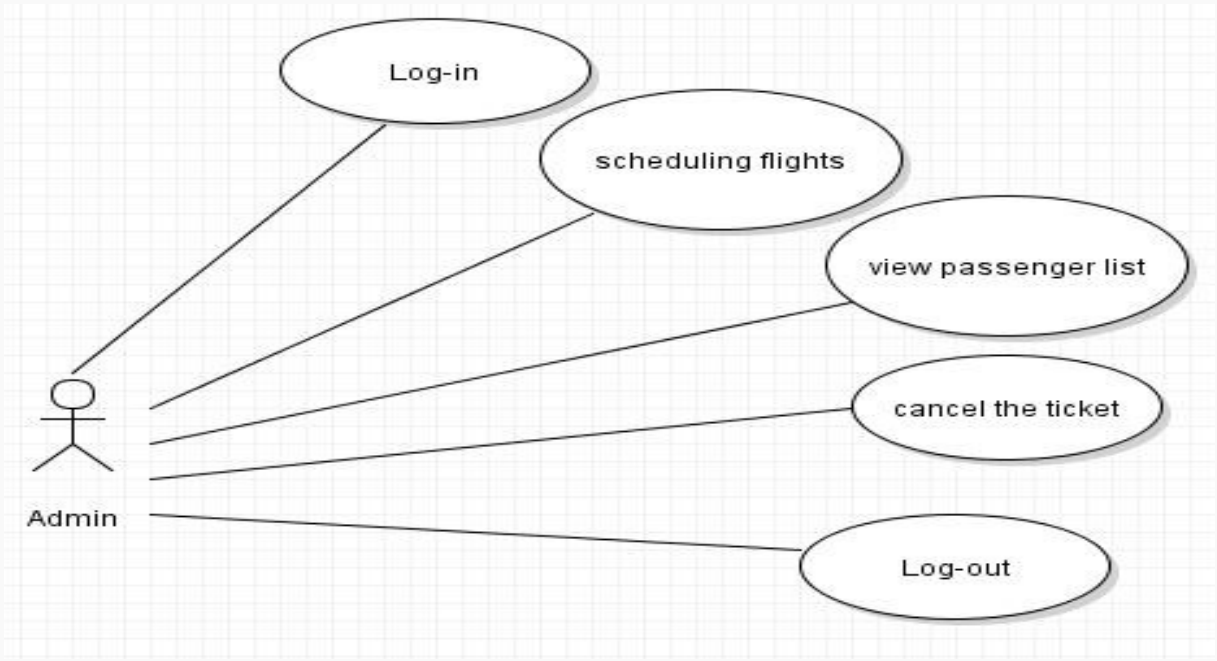
4.1. Scenarios

Use case Scenario	Record New Flights
Primary Actor	The system administrator
Relevant and Expectations	The system administrator wants to enter the system and enter the new flight information and add the flight record to the system.
Prerequisites	The system administrator must be authenticated.
Final Conditions	Flight information is entered into the system without error and completely.
Main Scenario	1. The system administrator determines the flight code of the new flight. 2. The system administrator determines the source and destination address of the new flight. 3. The system administrator selects the date of the flight. 4. The system administrator determines the capacity of the flight. 5. The system saves information.
Alternative Scenario	1. There is a flight in the same cod. a. The system issues an administrator warning message and requests a new flight code. 4. The seat limit has been reached. a. The system gives an error when trying to add more than a certain number of passengers.

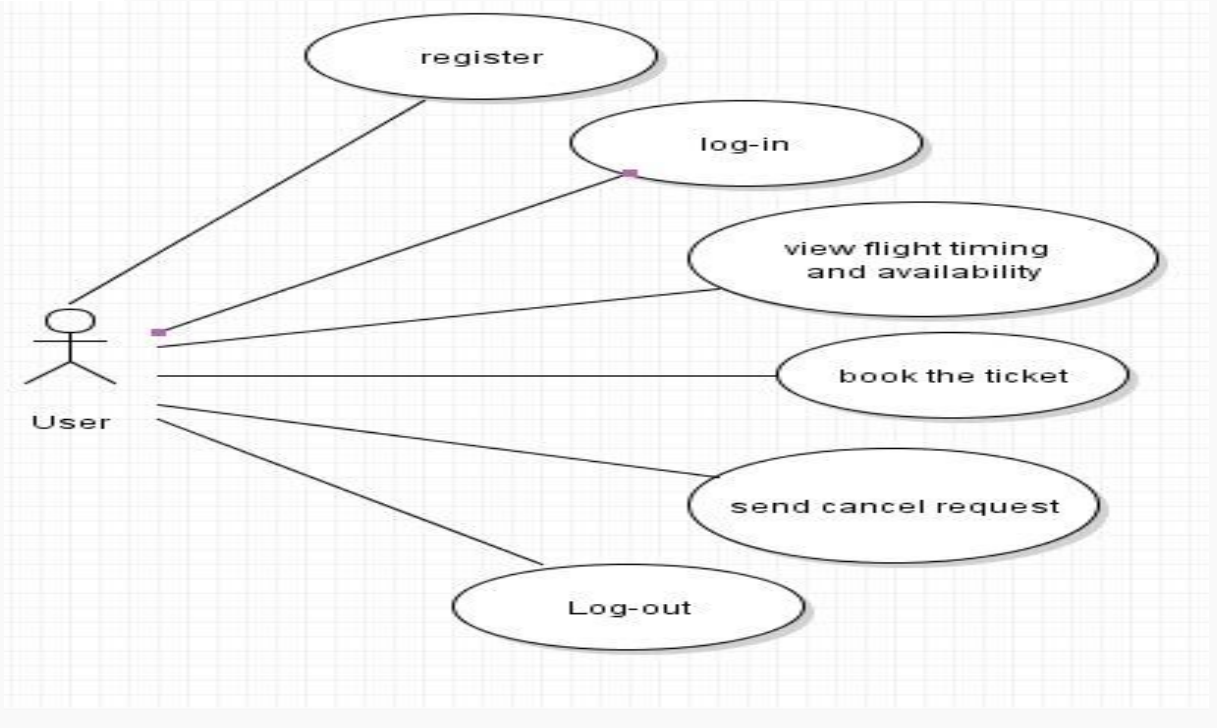
Use case Scenario	Passenger Registration
Primary Actor	Passenger
Relevant and Expectations	Passenger asks to enter the system, enter the passenger information correctly into the system and list the registered passengers properly.
Prerequisites	Passenger identity must be verified.
Final Conditions	Passenger information is entered into the system without error and completely.
Main Scenario	1. The passenger enters the application. 2. Logs into the Passengers module. 3. Passenger code, name, phone number, address, gender and nationality information are entered into the system. 4. Registration is complete.
Alternative Scenario	4. Passenger may want to view registered passengers. a. It can easily look from where the registered passengers are listed.

4.2. Use Case Model

- Admin Use Case Model

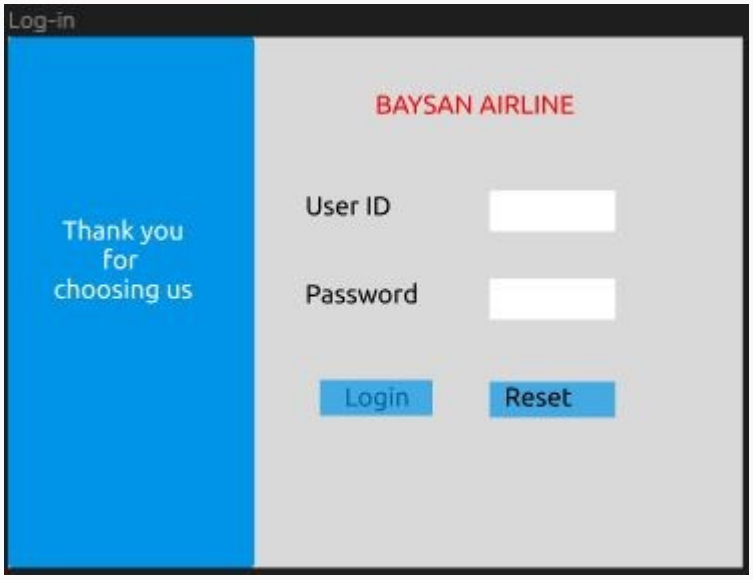


- User Use Case Model

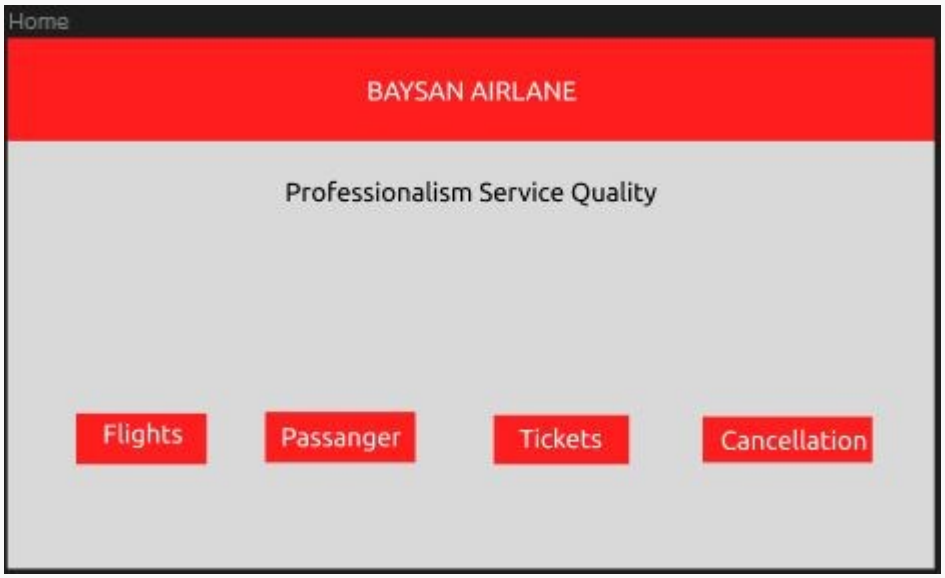


4.3. Screen Mock-ups

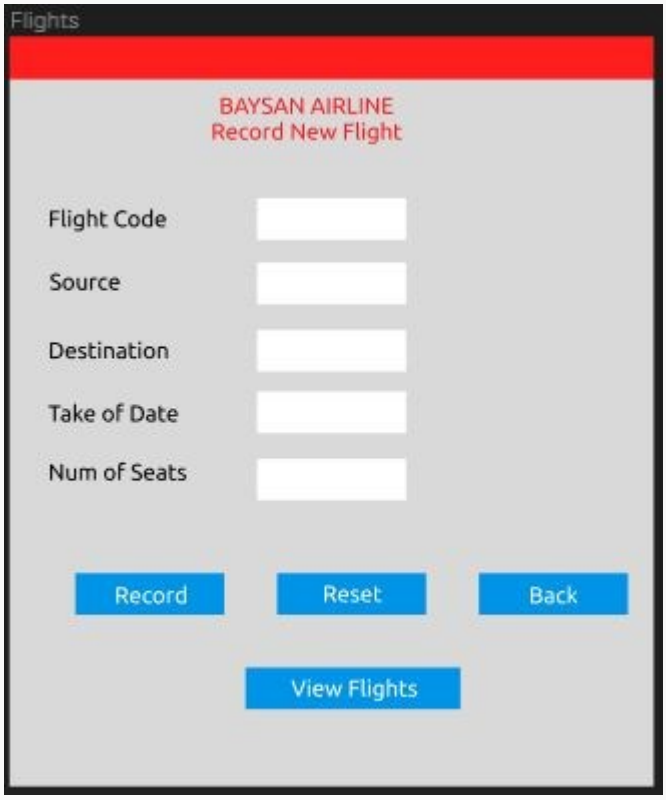
- Log-in



- Home

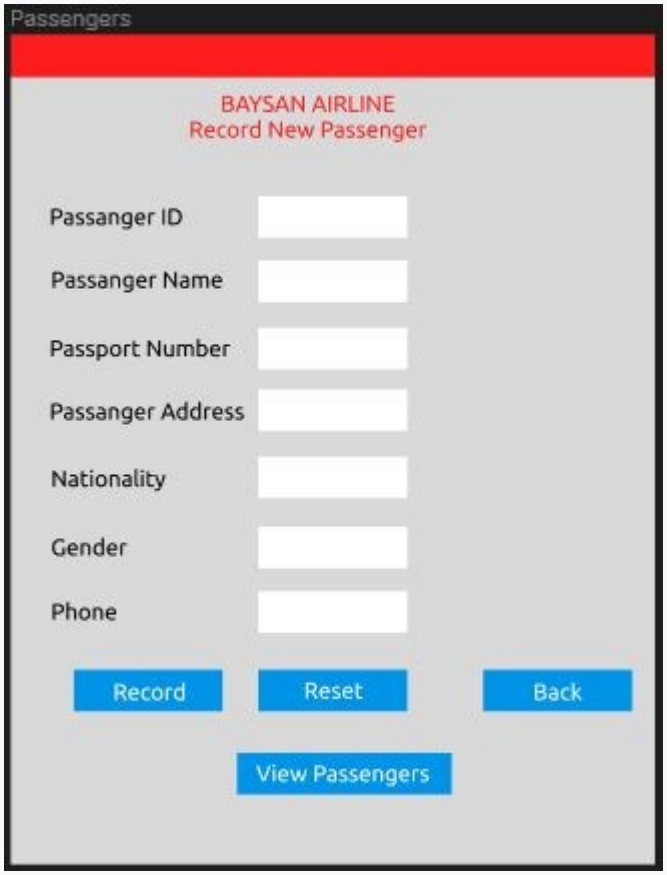


- Flights

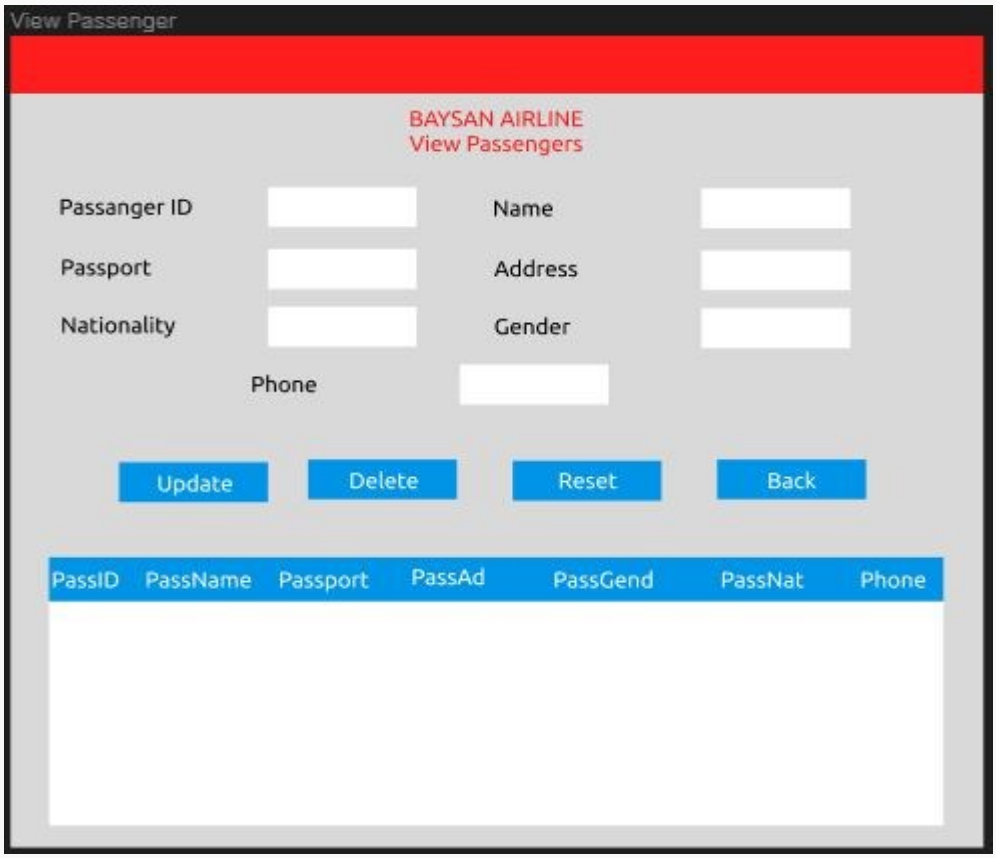


- View Schdule Flights

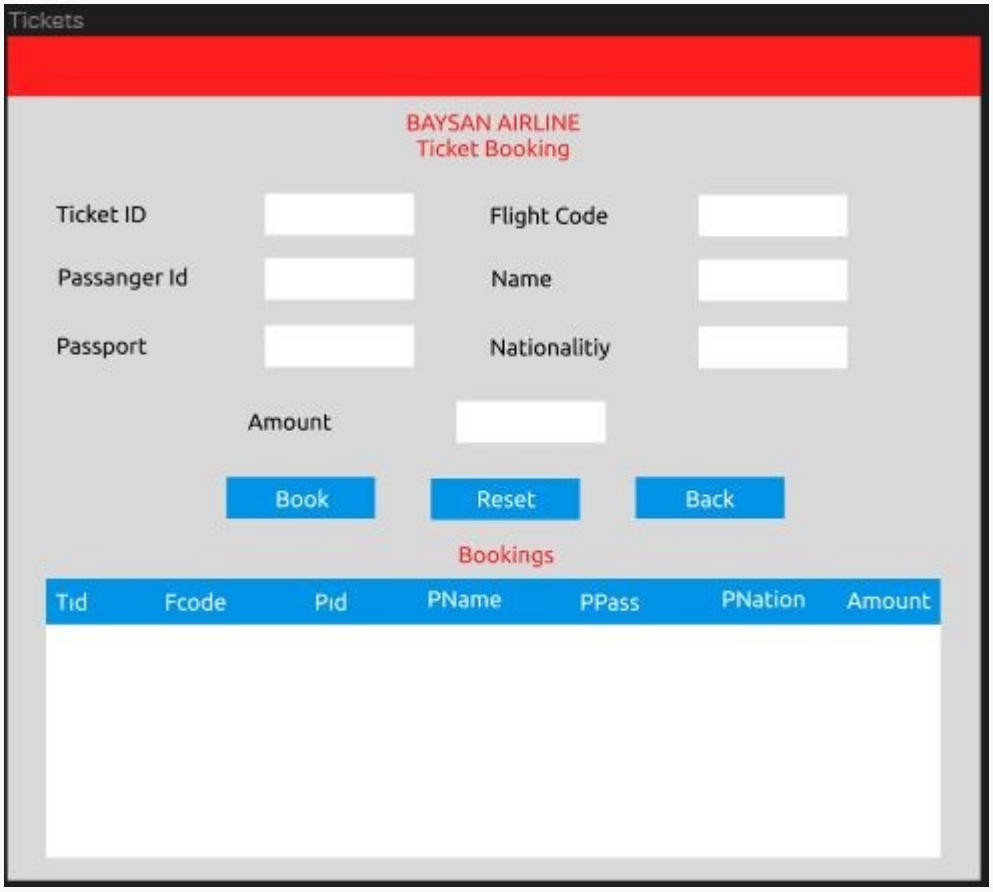
- Passengers



- View Passengers



- Tickets



- Cancellation