



PES University, Bengaluru

(Established under Karnataka Act 16 of 2013)

Department of Computer Science & Engineering

Session: Jan - May 2022

UE19CS353 – Object Oriented Analysis and Design with Java

Theory ISA (Mini Project)

Report on

AIRLINE RESERVATION SYSTEM

By:

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6th Semester D

1. Project Description

This project aims to create an airline ticket reservation system. The system will include two variations, one for seat reservation for passengers and other for admin of the system.

Features of the passenger implementation:

- They can mainly book flights based on different dates and times via reservation details and they can reserve any seat by looking at the seat reservation chart.
- After the reservation, they fill in their personal details and proceed to the payment interface.
- Once the payment is completed the customer will receive an online message and ticket through the email with all the information required regarding the flight.

Features of the Admin implementation:

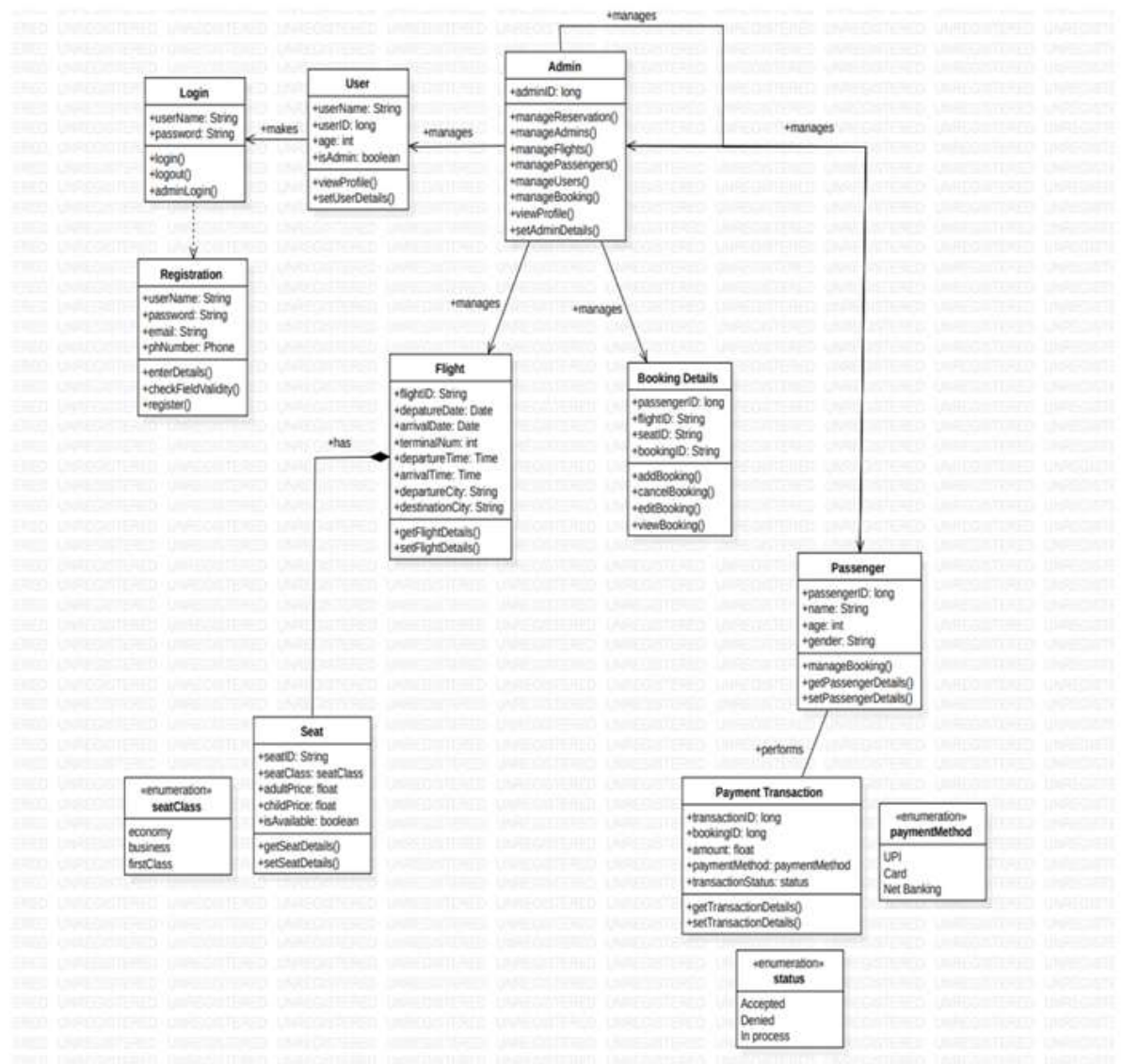
- They can manage all the flights by adding new flight plans, managing the seats in the plane,
- Any changes they want to the system database through their interfaces

a. Link to Github repository

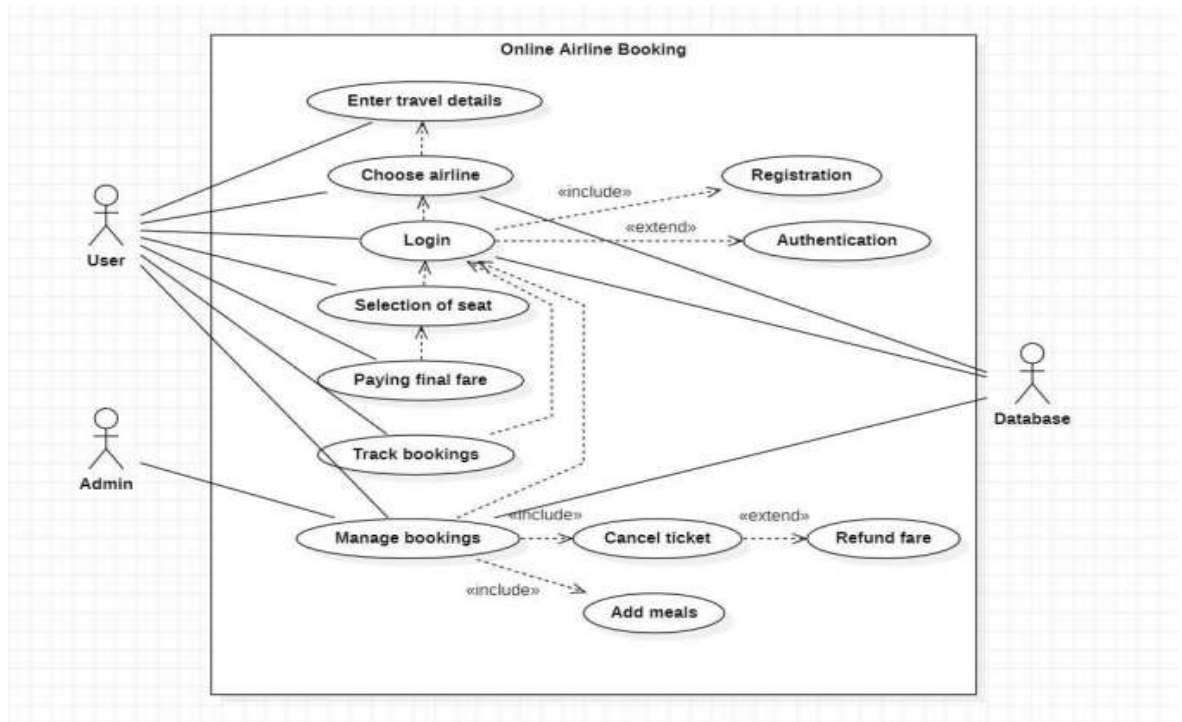
https://github.com/manaswinirathore/OOADProject_Airline-Reservation-System

2. Analysis and Design Models

Overall Class Diagram:



Overall use case diagram:



3. Tools and Frameworks Used

- Spring Framework
- MySQL database

4. Design Principles and Design Patterns Applied

Design principles:

- Open close principle:
Software entities are open for extension, but closed for modification.

Design pattern:

- DTO pattern: Data Transfer object- patterns which we call when we need to use such objects that encapsulate and aggregate data for transfer. They are objects that carry data between processes in order to reduce the number of methods calls. It is implemented in UserDto.java, PassengerDTO.java and FlightDto.java

5. Application Screenshots (3-4 important pages)

Welcome to Airline Reservation System



Ticket in Hand
No more long queues! Book online and You will enjoy your journey and we look forward to your next hassle-free journey with us! ...

Signup

Firstname

Lastname

Email

Password


Password Check

Mobile Number

Signup


[Already register?](#)

Welcome to Airline Reservation System



Ticket in Hand
No more long queues! Book online and You will enjoy your journey and we look forward to your next hassle-free journey with us! ...

Signin



Email address

Password

Signin


[Don't have account?](#)

Welcome Samhitha

[Home](#) [Services](#) [Contacts](#) [Profile](#) +


SERVICES

This platform provides a service of user friendly with high range maintenance. Provides security for the user effectively.




We're Free

No reservation fees. We do not charge you any booking fees or add any administrative charges. And in many cases, your booking can be cancelled free of charge.



Secure booking

We facilitate hundreds of thousands of transactions every day through our secure platform, and work to the highest standards to guarantee your privacy.



24/7 support

Whether you have just booked or are already enjoying your trip, our customer experience team are on hand around the clock to answer your questions and advocate on your behalf in more than 40 languages.

Welcome Samhitha
Home
Services
Contacts
Profile

From

To

Date

Search Airplanes

Welcome moon
Home
Profile

Bangalore- Jaipur 3				
Date	No.Of.Tickets	Departure time	Amount	
	1	18:00	380 ✓	
view passengers				
Delhi- Chennai 2				
Date	No.Of.Tickets	Departure time	Amount	
	3	14:00	11300 ✓	
view passengers				
Delhi- Chennai 2				
Date	No.Of.Tickets	Departure time	Amount	
	3	14:00	9100 ✓	
view passengers				

Payment Details



CARD NUMBER

3456543234565432

EXPIRATIONEXP DATE

12/22

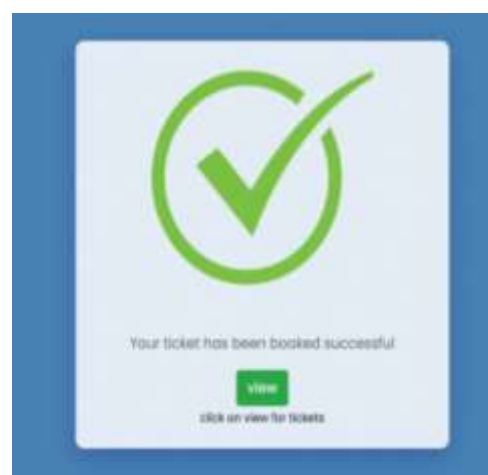
CV CODE

234

CARD OWNER

Manaswini Rathore

Process payment



6. Team member contributions

Team member	Major features	Minor features
Malavika	Booking tickets	Selection of source and destination cities, seat selection, timings, payment methods
	Managing bookings	Cancellation of tickets, refund, addition of meals
Samhitha	Home page: Site browsing	Enter travel details, choose airlines, price estimation
	Tracking bookings	Flight schedules
Manaswini	Admin level accessibility	Managing users and passengers
	User level accessibility	Login and registration