Airline Management System

Term Project
on
Object Oriented Programming

Group Members

210041258   Ahmed M. S. Albreem

210041272   Abdulmajeed Magahed Hussein Al Qadami

210041270   Shuaibu mustapha musa

Date of Submission: 06-11-2023
Course Teacher Name:
MD. SAKIBUL ISLAM Lecturer, CSE
FARZANA TABASSUM Lecturer, CSE

Introduction

The Airline Management System is a sophisticated and user-friendly software application developed to streamline and enhance the operations of an airline. It aims to provide a centralized platform for airline staff to manage various aspects of the airline business, such as flight scheduling, ticket reservations, passenger detail , and financial transactions. This system offers a range of features and functionalities to ensure that airline operations run smoothly and efficiently.

Proposal

We will have a classes of each group of these , each group will have his sub-class
As this format "class"->["sub-class 1","sub-class 2"]
{"users"->["customers","admins"],"tickets"->["ticket_one_way","ticket_two_way"],"transaction_op eration","bank_system",} , i means i will have in my uml desgine as three as temp and i will build on it my project after that we will see , if there is enough time and power to do more the our time will change the plan to achieve the all features , but until this moment we will just do the main the main idea in my project to let the code of cpp of my project by using object oriented programming (for our group) to be understandable for any analysis operation in the future and to make the project more able to be developed and organized and efficiency , all of this must be increased with time , the main point of the project for the people to make the benefits accessible more faster with less capacity of the computer requirement which will help the user to manage it faster

Description

The program will divide its user as the structure of oop to two parts : customer and admin
The user operation can be as sign in and out and up , after that the program will let the customer buy ticket and return ticket and view his information , when he will buy a ticket he will be minus the price of that ticket if he want to return it he will check the date after that it's will be returned , view information (it's will be as temp session means the access for who login which it's will who enter the password who can log in in that state the security will be more , also i can let the program organized to let the user automatically login in by saving his info in file which his data as the desktop-info from cmd commends as request , and his information-network(if he is connected) all of this will not take a second by the system) in this last session i will show his all information in the class of the customer (sub-user), the admin when he will sgin in he will have a

behavior as both of the user and admin example as if he will buy he can or if he want to do anything he want it as user behavior , about the admin behavior he is spacial operation which it's as control panel of all the system , his behavior as editing , deleting , adding , view info of the tickets inside his system , for the class of the customer he can see their information and block their access , all of these information i can't store it static method as programmer inside the code , i need the file of these information which it's will read and store it again thats why i used here the operation with files which it's not included yet inside the syllabus but it's okay i will search my and my group to find all the solution possible to reach the main goal and achieve it as usual
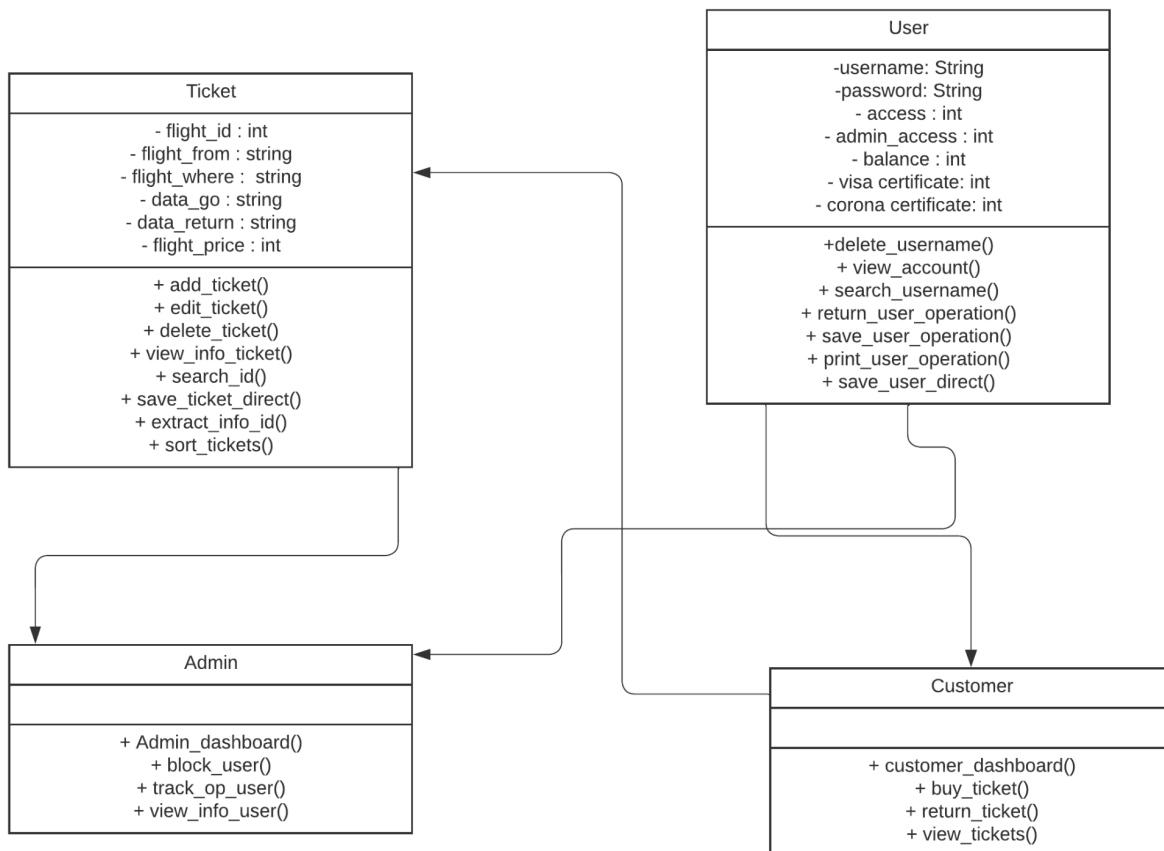
Features

i hope i will do these features which it's will help the user to be more accessible to my program and also more faster to reach their goals ,

1 - I can make the user login automatically from his information from the third time when he will sign in after checking his information in same time in-series , otherwise he will not be able sign automatically , it's will return to the first time

2-I can also information class inside the system as cabin crew and Airplane type , Airplane type , Airports (as the each airports it's will start and it's will end each time if it's has state of the stopping temporary for some hours)

3- this is the last one and the last one inside this project and the biggest part of my Features section which it's the i can use this structure as main structure with different system which it's allows the huge numbers of the users to interact with the same structure , with different systems of the devices as desktop and android and web application like this i will increase my possibility to rank up and to have more better performance

UML Diagram (updated)

Ticket
- flight_id : int
- flight_from : string
- flight_where : string
- data_go : string
- data_return : string
- flight_price : int

+ add_ticket()
+ edit_ticket()
+ delete_ticket()
+ view_info_ticket()
+ search_id()
+ save_ticket_direct()
+ extract_info_id()
+ sort_tickets()

User
-username: String
-password: String
- access : int
- admin_access : int
- balance : int
- visa certificate: int
- corona certificate: int

+delete_username()
+ view_account()
+ search_username()
+ return_user_operation()
+ save_user_operation()
+ print_user_operation()
+ save_user_direct()

Admin

+ Admin_dashboard()
+ block_user()
+ track_op_user()
+ view_info_user()

Customer

+ customer_dashboard()
+ buy_ticket()
+ return_ticket()
+ view_tickets()

Conclusion

Our Conclusion in "God is powerful over everything" , then we will continue our way as usual with all of this information to be able to achieve our own goals and our own structure to able to do more benefits for our people in our country , our system here it's idea just to let the user reach the goal of his business and when he want , which time he prefer and where he is , all of this for my course and from our group to achieve more goals in personal life and practical life as IUT foreign student life