

Requirements and specification

- Log in screen to prompt user to sign in or sign up
- User's username and password are saved in the database
- User needs to be able to view, remove, and add flights
- User needs to be able to sort through flights
- Admin can create new flights

Customer

firstName: String
lastName: String
userName: String
password: String
myFlights: String[]

+customer (firstName: String, lastName: String,
 userName: String, password: String):
+getFirstName():
+setFirstName(firstName: String): void
+getLastName():
+setLastName(lastName: String): void
+getUserName():
+setUserName:(userName: String) void
+getPassword():
+setPassword(password: String): void
+getFlight():

Flights

flightID: Int
airlineName: String
destination: String
departure: String
price: String
departureTime: String
arrivalTime: String

+Flight()
+Flight(airlineName: String)
+Flight(airlineName: String, price: int,
destination: String, departure: String,
departureTime: String, arrivalTime: String)
+getAirlineName():
+setAirlineName(newAirlineName: String):
+getFlightID():
+setFlightID(newFlightID: String):
+getPrice():
+setPrice(newPrice: String):
+getDeparture():
+setDeparture(newDeparture: String):
+getDestination():
+setDestination(newDestination: String):
+getDepartureTime():
+setDepartureTime(newDepartureTime: String):
+getArrivalTime():
+setArrivalTime(newArrivalTime: String):

Flight Table

	123 flightID	ABC airlines	ABC destination	ABC departure	123 price	ABC DepartureTime	ABC ArrivalTime	ABC FlightDate
1	1	American	Miami	Atlanta	75	7:15PM	9:20PM	2021-12-08
2	2	United	Los Angles	Miami	200	10:00AM	4:05PM	2021-12-11
3	3	JetBlue	Portland	New York	130	12:00AM	6:30PM	2021-12-10
4	4	Air Canada	New York	Toronto	150	3:30PM	4:30PM	2021-12-15
5	5	Delta	Portland	New york	145	8:00AM	2:30PM	2021-12-20
6	6	Frontier	Washington D.C	Portland	50	10:00AM	6:30PM	2021-12-18
7	7	Southwest	Miami	Atlanta	75	6:30PM	8:30PM	2021-12-23
8	8	Spirit	New York	Nashville	60	8:00AM	10:20AM	2021-12-07
9	9	Air Canada	Los Angles	Toronto	220	11:00PM	7:22PM	2021-12-10
10	10	American	Nashville	Washington D.C	80	6:00PM	8:00PM	2021-12-13
11	11	Delta	Miami	Nashville	55	2:00PM	4:14PM	2021-12-09
12	12	Spirit	New York	Atlanta	70	9:30AM	11:45AM	2021-12-07
13	13	United	Washington D.C	Miami	100	12:45AM	3:15AM	2021-12-19
14	14	Air Canada	Los Angles	Toronto	220	10:30PM	4:00PM	2021-12-08
15	15	Frontier	Portland	Atlanta	220	8:15AM	2:00pm	2021-12-07

PrimaryKey is flightID

Customer Table

[illegible]

The customer table will be full of customers once people sign up. CustomerID is PrimaryKey.

Customer Flights table

[illegible]

This table has two primary keys making a composite key. That way when this table is shown in my GUI it only shows a single customer's current flights not everyone else as well.

Functionality:

The Flight app is able to provide the basic functions of booking a flight from airlines. The program opens up to the log-in page. Here the user is able to sign in only if they already have an account if not the user will have to press the sign up button. Once the sign-in button is clicked the user will be prompted to fill out all the new user information. Only once all of these fields are filled the user is able to press sign up and a new user is created in the database. The user then is greeted with a menu page. There are three main options here Flights, MyFlights, and Logout. If the user picks "Flights" they will be brought to the page listing all available flights. The user can sort the flights by pressing on the column they want to sort and the table will automatically sort from either A-Z or Z-A and for numbers it will sort either least-greatest or greatest-least. Once a flight is found the user wants they simply need to click on the flight and then press book. This will add the flight to the user's account in the database. After all needed flights are added the user can press the menu button to go back to the main menu. Then once the "My Flights" button is clicked the user can see all flights in their account. If the user clicks on a flight and presses the cancel flight button the flight will be removed from their account. Lastly, once the user is back in the menu in the top left there is a button for admin. In the admin page users are able to create flights and submit them to the database. All text fields must be full before being able to create the flight. This is the extent of the functionality of the app.