

AdminDashboardView <<boundary>>

Attributes

- currentUser
- selectedAdminOption

Operations

- openManageFlights()
- openManageAircraft()
- openManageAirlines()
- openManageAirports()
- openManageRoutes()
- openReports()
- logout()

AdminService <<control>>

Attributes

- flightDAO
- aircraftDAO
- airlineDAO
- airportDAO
- routeDAO
- userDAO
- reservationDAO
- paymentDAO

Operations

- addFlight(flight)
- updateFlight(flight)
- removeFlight(flightNumber)
- getAllFlights()
- addAircraft(aircraft)
- updateAircraft(aircraft)
- removeAircraft(aircraftId)
- getAllAircraft()
- addAirline(airline)
- updateAirline(airline)
- removeAirline(airlineId)
- getAllAirlines()
- addAirport(airport)
- updateAirport(airport)
- removeAirport(airportCode)
- getAllAirports()
- addRoute(route)
- updateRoute(route)
- removeRoute(routeId)
- getAllRoutes()
- getAllUsers()
- deleteUser(userId)

Aircraft <<entity>>

Attributes

- aircraftId
- model
- manufacturer
- totalSeats
- seatConfiguration
- status

Operations

(No business operations)

AgentDashboardView <<boundary>>

Attributes

- currentAgent
- agentOptions

Operations

- openManageCustomers()
- openManageReservations()
- backToMainDashboard()

Airline <<entity>>

Attributes

- airlineId
- name
- code
- country

Operations

(No business operations)

Airport <<entity>>

Attributes

- airportCode
- name
- city
- country
- timezone

Operations

(No business operations)

Customer <<entity>>

Attributes

- userId
- username
- password
- email
- firstName
- lastName
- phone
- address
- dateOfBirth
- membershipStatus

Operations

(No business operations)

CustomerDashboardView <<boundary>>

Attributes

- currentUser
- recentReservations

Operations

- openFlightSearch()
- openMyReservations()
- openProfile()
- logout()

CustomerService <<control>>

Attributes

- userDAO
- reservationDAO

Operations

- createCustomer(customerData)
- getCustomerById(customerId)
- getAllCustomers()
- updateCustomer(customer)
- deleteCustomer(customerId)
- authenticate(username, password)
- getCustomerReservations(customerId)

Flight <<entity>>

Attributes

- flightNumber
- departureTime
- arrivalTime
- status
- availableSeats

- price
- aircraft
- route

Operations
(No business operations)

FlightAgent <<entity>>

Attributes

- userId
- username
- password
- email
- employeeId
- hireDate
- department

Operations
(No business operations)

FlightResultsView <<boundary>>

Attributes

- searchCriteria
- flights
- selectedFlight

Operations
- displayResults(flights)
- handleBookFlight(flight)

FlightSearchView <<boundary>>

Attributes

- selectedOrigin
- selectedDestination
- selectedDate
- availableAirports

Operations
- displaySearchForm()
- performSearch()
- showError(message)

FlightService <<control>>

Attributes

- flightDAO

- airportDAO

Operations

- searchFlights(origin, destination, date)
- getFlightsByDate(date)
- getFlightByNumber(flightNumber)
- updateFlight(flight)
- updateFlightStatus(flightNumber, status)
- getAllAirports()

LoginView <<boundary>>

Attributes

- enteredUsername
- enteredPassword

Operations

- submitLogin()
- showLoginError(message)

ManageAircraftView <<boundary>>

Attributes

- aircraftList
- selectedAircraft

Operations

- displayAircraftList()
- openAddAircraftDialog()
- openEditAircraftDialog()
- deleteSelectedAircraft()

ManageAirlinesView <<boundary>>

Attributes

- airlineList
- selectedAirline

Operations

- displayAirlineList()
- openAddAirlineDialog()
- openEditAirlineDialog()
- deleteSelectedAirline()

ManageAirportsView <<boundary>>

Attributes

- airportList
- selectedAirport

Operations

- displayAirportList()
- openAddAirportDialog()
- openEditAirportDialog()
- deleteSelectedAirport()

ManageCustomersView <<boundary>>

Attributes

- customers
- selectedCustomer

Operations

- displayCustomerList()
- openAddCustomerDialog()
- openEditCustomerDialog()
- deleteSelectedCustomer()

ManageFlightsView <<boundary>>

Attributes

- flights
- selectedFlight

Operations

- displayFlightList()
- openAddFlightDialog()
- openEditFlightDialog()
- deleteSelectedFlight()

ManageReservationsView <<boundary>>

Attributes

- reservations
- selectedReservation

Operations

- displayReservationList()
- searchReservations(criteria)
- showReservationDetails(reservation)
- cancelSelectedReservation()

ManageRoutesView <<boundary>>

Attributes

- routes
- selectedRoute

Operations

- displayRouteList()
- openAddRouteDialog()
- openEditRouteDialog()
- deleteSelectedRoute()

MyReservationsView <<boundary>>

Attributes

- currentUser
- reservations

Operations

- displayReservations()
- backToDashboard()

Passenger <<entity>>

Attributes

- passengerId
- firstName
- lastName
- dateOfBirth
- passportNumber
- nationality

Operations

(No business operations)

Payment <<entity>>

Attributes

- paymentId
- amount
- paymentDate
- paymentMethod
- transactionId
- status

Operations

- setStatus(status)

PaymentService <<control>>

Attributes

- paymentDAO

Operations

- processPayment(amount, method)

- refundPayment(paymentId)
- getPaymentById(paymentId)

Promotion <<entity>>

Attributes

- promotionId
- title
- description
- discountPercent
- validFrom
- validTo

Operations

(No business operations)

ReportsView <<boundary>>

Attributes

- operationalStatistics
- revenueStatistics
- customerStatistics

Operations

- generateReports()
- displayReports()

Reservation <<entity>>

Attributes

- reservationId
- bookingDate
- status
- totalPrice
- customer
- flight
- payment
- seats

Operations

- setStatus(status)
- setPayment(payment)

ReservationService <<control>>

Attributes

- reservationDAO
- seatDAO
- flightService

Operations

- createReservation(customer, flight, seats)
- cancelReservation(reservationId)
- getCustomerReservations(customer)
- getReservationById(reservationId)

Seat <<entity>>

Attributes

- seatId
- seatNumber
- seatClass
- isAvailable

Operations

(No business operations)

SeatSelectionView <<boundary>>

Attributes

- flight
- allSeats
- selectedSeats
- totalPrice

Operations

- displaySeatMap()
- toggleSeatSelection(seat)
- proceedToPayment()

SignupView <<boundary>>

Attributes

- username
- email
- firstName
- lastName
- password
- confirmPassword

Operations

- submitSignup()
- showSignupError(message)

SystemAdmin <<entity>>

Attributes

- userId

- username
- password
- email
- adminLevel
- permissions

Operations

- addPermission(permission)
- removePermission(permission)

Ticket <<entity>>

Attributes

- ticketNumber
- issueDate
- passengerName
- reservation
- seat
- barcode

Operations

(No business operations)

User <<entity>>

Attributes

- userId
- username
- password
- email
- role

Operations

(No business operations)