Mehreen:

- 1. Flight Management (Flight Manager)
 - a. Schedule a flight
- a. Remove a flight
- b. Update a flight
- c. Check flight status
- d. Reroute a flight
 - 2. Booking (Passenger)
 - 1. Book a flight
 - 2. Cancel a booking
 - 3. Check available flights status (Fare, Capacity, Route (departure, destination, stops)
 - 4. Check booking status

Ayesha

- 0. Route Management
 - Adding a route
 - 2. Updating a route
 - 3. Removing a route
- O. Payment Management
 - 1. Payment with cash
 - 2. Payment with external Microfinance system (T.B.D)
- O. Baggage Management
 - 1. Calculate fare of extra Baggage

Daniyal

- 0. Airplane Management
 - 1. Update Airplane Status
 - 2. Add Airplane to fleet
- 0. Inquiry Management
 - 1. Add an inquiry
 - 2. Delete an inquiry
 - 3. View Inquiries
 - 4. View Inquiry status
 - Update Inquiries
 - 6. Redirect Inquiries
- 0. Airport Management
 - 1. Add an Airport
 - 2. Remove an Airport

Sr. No	Section	Content / Explanation
1	Designation	UC-01
2	Name	Redirect an Inquiry
3	Authors	Daniyal
4	Priority	Important for system's success: Medium Technological Risk: Medium
5	Scope	This use case deals with how the user's (Admin, Flight manager, accounts manager, passenger) Inquiry is redirected to the Inquiry manager. Then that inquiry manager solves the user's inquiry.
6	Criticality	Medium
7	Stakeholders and interests	 Admin: Wants to get his inquiries solved about any administration related issues (TBD) Flight manager: Wants to get his inquiries solved about any flight scheduling related issues (TBD) Accounts manager: Wants to get his inquiries solved about any accounts and finance scheduling related issues (TBD) Passenger: Wants to get his inquiries solved about any flight booking and luggage related issues (TBD) Inquiry Manager: Wants to solve the inquiry of the user(Admin, Flight manager, accounts manager, passenger)
8	Description	The FRS redirects the user's (Admin, Flight manager, accounts manager, passenger) inquiries to a case manager to get the user's inquiry resolved.
9	Trigger Event	The user (Admin, Flight manager, accounts manager, passenger) adds an inquiry.
10	Actors	Admin, Flight manager, accounts manager, passenger, Inquiry Manager
11	Pre-Conditions	The user must be registered in the FRS.
12	Post-Conditions	A Inquiry Manager is assigned to the User.
13	Result	Inquiry redirected.

Sr. No	Section	Content / Explanation
14	Main Scenario	The FRS redirects the inquiry to an Inquiry manager after the User(Admin, Flight manager, accounts manager, passenger) adds an Inquiry. The FRS then assign that inquiry manager to solve the User's Inquiry.
15	Alternative Scenario	If there is No Inquiry Manager available, then the user should navigate to the FAQ page shown by the FRS UI.
16	Exception Scenario	The user is not registered. The FRS is unable to fetch Inquiry data.

Sr. No	Section	Content / Explanation
1	Designation	UC-01
2	Name	View/Update/Delete an Inquiry
3	Authors	Daniyal
4	Priority	Important for system's success: low Technological Risk: Medium
5	Scope	This use case deals with how the user (Admin, Flight manager, accounts manager, passenger) views/update/Delete an Inquiry.
6	Criticality	Medium
7	Stakeholders and interests	 Admin: Wants to manage inquiries about any administration related issues (TBD) Flight manager: Wants to manage inquiries about any flight scheduling related issues (TBD) Accounts manager: Wants to manage inquiries about any accounts and finance scheduling related issues (TBD) Passenger: Wants to manage inquiries about any flight booking and luggage related issues (TBD)
8	Description	The FRS allows the user (Admin, Flight manager, accounts manager, passenger) to manage inquiries about what issue they want to inquire about.
9	Trigger Event	The user (Admin, Flight manager, accounts manager, passenger) wants to manage inquiries.

Sr. No	Section	Content / Explanation
10	Actors	Admin, Flight manager, accounts manager, passenger
11	Pre-Conditions	The user must be registered in the FRS
12	Post-Conditions	The inquiry is added managed
13	Result	Inquiry managed.
14	Main Scenario	The user (Admin, Flight manager, accounts manager, passenger) logs in to the FRS. The FRS displays a UI. The user navigates through FRS Interface to Inquiry Management. Here, all the users (Admin, Flight manager, accounts manager, passenger) can view/delete/update their own inquiries. Admin and Flight Manager can also view inquiries of other user.
15	Alternative Scenario	If the inquiry is already added but not shown by the FRS, then the user should refresh the FRS.
16	Exception Scenario	The user is not registered. The FRS is unable to fetch Inquiry data.

Sr. No	Section	Content / Explanation
1	Designation	UC-01
2	Name	Add an Inquiry
3	Authors	Daniyal
4	Priority	Important for system's success: low Technological Risk: Medium
5	Scope	This use case deals with how the user (Admin, Flight manager, accounts manager, passenger) adds an Inquiry.
6	Criticality	Medium
7	Stakeholders and interests	 Admin: Wants to inquire about any administration related issues (TBD) Flight manager: Wants to inquire about any flight scheduling related issues (TBD) Accounts manager: Wants to inquire about any accounts and finance scheduling related issues (TBD) Passenger: Wants to inquire about any flight booking and luggage related issues (TBD)
8	Description	The FRS allows the user (Admin, Flight manager, accounts manager, passenger) to add an Inquiry about what issue they want to inquire about.
9	Trigger Event	The user (Admin, Flight manager, accounts manager, passenger) wants to add an Inquiry.
10	Actors	Admin, Flight manager, accounts manager, passenger
11	Pre-Conditions	The user must be registered in the FRS
12	Post-Conditions	The inquiry is added successfully.
13	Result	Inquiry added.
14	Main Scenario	The user (Admin, Flight manager, accounts manager, passenger) logs in to the FRS. The FRS displays a UI. The user navigates through FRS Interface to Inquiry management and then adds an inquiry.

Sr. No	Section	Content / Explanation
15	Alternative Scenario	If the inquiry is already listed, then FRS does not add a duplicate inquiry.
16	Exception Scenario	The user is not registered.
	Coonano	The inquiry does not have a category.

b. Updating a route

Section	Content / Explanation
Designation	UC-12
Name	Updating a route
Priority	Important for system's success: Medium Technical Risk: Medium
Scope	This use case deals with how the Admin updates a route in the FRS.
Criticality	Medium
Level	User-goal
Description	The admin select the route to change and enter the entries (departure, destinations, stop) he want to change in the route
Trigger Event	The admin wishes to update route information.
Primary actor	Admin
Stakeholders and interests	Passenger: He wants to check the routes of flight. Admin: he wants to keep checking every route. He wants to manage the route.
Pre-Conditions	The Amin must be logged in. The admin must be in the route management portal.
Post-Conditions	Route is updated. Route records are updated.
Result	Route updated.

Main Scenario

- 1. The Admin selects and updates a route option.
- 2. The FRS will fetch the routes from the database and display routes to the admin.
- 3. The admin selects the route he wants to update.
- 4. The FRS displays details of route and asks the admin if he wants to change the departure or not.
- 5. The admin selects the change the departure option and enters the new departure.
- 6. This gives the admin option if he wants to change the destination or not.
- 7. The admin selects to change destination and enters new destination.
- 8. The systems check if routes contain the stops and ask if the admin wants to change the stops or not.
- 9. The admin changes the stops.
- 10. FRS display the update route gives admin the option to
- 10.1Confirm the route.
- 10.2 Cancel the route.
- 10.3Change the route.
- 0. The admin confirms the route.
- 0. The FRS checks the database if the route is already present in the database and updates the route if it is not found in the database.

Alternative Scenario

5a. The admin selects to not change the departure option.

5a.1 Go to step 6.

7a. The admin selects to not change the destination.

7a.1 Go to step 8.

8a. The route does not contain any stops, cancel the route option.

8a.1 Go to 10

8b. The admin does not want to change the stop.

8b.1 Go to step 10.

10a. The admin select cancel the route option.

6a.1 The FRS brings the admin back to the route management portal.

10b. The admin selects a change route option.

10b.1 Go to step 4.

12a. The route is already present.

10a.1 The FRS will display message that route is already stored and give admin the option:

- 1. Add another route
- 2. Cancel the route.

10a.2 the admin select add another route.

10a.3 got to step 4.

10a.2.1 The admin cancels the route.

10a.2.1.1 The FRS takes admin to route management portal.

Exception Scenario	The FRS server is down. (1) Refresh and update the route again.

c. Removing a route

Section	Content / Explanation
Designation	UC-01
Name	Remove a route
Priority	Important for system's success: Medium Technical Risk: Medium
Scope	This use case deals with how the Admin removes a route in the FRS .
Criticality	medium
Level	User-goal
Description	The admin selects the route to remove and the route is removed from the database and information is updated.
Trigger Event	The admin wishes to remove the route.
Primary actor	Admin
Stakeholders and interests	Passenger: He wants to check the routes of flight. Admin: he wants to keep checking every route. He wants to manage the route.
Pre-Conditions	The Admin must be logged in. The admin must be in the route management portal.
Post-Conditions	Route is removed. Route records are updated.
Result	Route removed.

Main Scenario	 The Admin selects a route option. The FRS will fetch the routes from the database and display routes to the admin. The admin selects the route he wants to remove. The FRS displays details of the route and asks the admin for the confirmation. The admin confirms the deletion. The FRS deletes the route from the database.
Alternative Scenario	2a. The FRS database is empty. 2a.1 The FRS gives the admin the message that the database is empty and navigates the Passenger to the route management portal. 5a. The admin select cancel the route option. 5a.1 The FRS brings the admin back to the route management portal.
Exception Scenario	The FRS server is down. (1) Refresh and remove the route again.

Payment Management Payment with cash 0.

a.

Section	Content / Explanation
Designation	UC-02
Name	Payment with cash
Priority	Important for system's success: High Technical Risk: High
Scope	This use case deals with how the Passenger processes payment.
Criticality	High
Level	User-goal
Description	The Passenger selects to pay through cash and the FRS tells the Passenger to pay 3 hours before the flight departure and if the Passenger pays before the time then the seat is reserved else it is set free to be booked.
Trigger Event	The Passenger wishes to pay through cash.
Primary actor	Admin
Stakeholders and interests	Passenger: He wants to pay for the booked flight. Admin: he wants to keep a check of every Passenger who has reserved and paid for the flight. He wants to manage flight reservations.
Pre-Conditions	The Passenger must be logged in. The Passenger must have booked a flight.
Post-Conditions	Payment is done. Flight Records are updated. Seating records are updated.
Result	Payment received.

Main Scenario	 The Passenger clicks on the payment option after booking a flight. The FRS will display calculated fare, Passenger information and flight details with two options pay through cash/ or pay through easy paisa. The Passenger selects pay with cash. The FRS then reserved the flight seat and Passengers were required to pay 3 hours before the flight departure. The Passenger pays 3 hours before the flight. The FRS updates the payment information in the database.
Alternative Scenario	3a. The Passenger chooses to pay through easy paisa. 3a.1 Go to UC-03 5a. The Passenger does not pay before 3 hours of flight. 5a.1 The FRS cancels the Passenger flight reservation and the seat is set free for booking. 5a.2 The FRS sends the Passenger flight reservation canceled message.
Exception Scenario	The FRS server is down. (1) Refresh and remove the route again.

b. Payment with external Microfinance FRS (T.B.D)

Section	Content / Explanation
Designation	UC-03
Name	Payment through Easy Paisa
Priority	Important for system's success: High Technical Risk: High
Scope	This use case deals with how the Passenger processes payment through easy paisa.
Criticality	High
Level	User-goal
Description	The Passenger enters account number .The token is sent on the Passenger easy paisa account, Passenger confirms and the transition takes place.
Trigger Event	The Passenger wishes to pay through easy paisa.
Primary actor	Passenger
Stakeholders and interests	Passenger: He wants to pay for the booked flight. Admin: he wants to keep a check of every Passenger who has reserved and paid for the flight. He wants to manage flight reservations.
Pre-Conditions	The Passenger must be logged in. The Passenger must have booked a flight.
Post-Conditions	Payment is done. Flight Records are updated. Seating records are updated.
Result	Payment received.

Main Scenario	 The Passenger clicks on the payment option after booking a flight. The FRS will display ticket details with two options: pay through cash/ or pay through easy paisa. The Passenger selects to pay through easy paisa. The FRS asks for an easy paisa account of the Passenger. The Passenger enters the easy paisa account number. The FRS verifies and then sends a token on the easy paisa account of the Passenger. The Passenger gets the message and approves the transaction.
	 8. The amount is deducted from the easy paisa account and sent to the FRS bank. 9. As soon as the payment is received the confirmation message is shown to the Passenger. 10. The FRS updates the flight information in the database.
Alternative Scenario	3a The Passenger select to pay through cash 3a.1 go to UC-02. 5a. The Passenger enters the wrong account number. 5a.1 The FRS then asks the Passenger to re-enter the account number. 7a. The Passenger does not get a token message. 7a.1 The FRS resends the message. 8a. The amount is deducted but the payment is not done. 8a.1 The FRS again asked Passengers to pay. 8a.2 the Passenger pays again. 8a.3 the FRS bank then reverse the transaction (send money back of double payment).
Exception Scenario	The FRS server is down. (1) Refresh and pay again. The easy paisa server was down.

- 0.
- LuggageManagement Calculate fare of extra Luggage a.

Sr.N o	Section	Content / Explanation
1	Designation	UC-01
2	Name	luggage Management
3	Authors	Daniyal
4	Priority	Important for system's success: Medium Technological Risk: Low
5	Scope	This use case deals with the Management of Luggage/luggage.
6	Criticality	Medium
7	Stakeholders and interests	 Passenger: Wants to store and retrieve his luggage safely. Company: Wants to make sure the luggage of a Passenger is not damaged.
8	Description	The Passenger who has booked a flight will deliver his luggage to the Airport staff on the airport before his departure. The Airport staff will give an identification number of his luggage. The Airport staff will collect any charges if the luggage exceeds the quantity mentioned in the flight instructions. The Passenger will collect the luggage after the flight using his luggage identification tag.
9	Trigger Event	The luggage is collected by the Airport staff from the passenger who is about to depart.
10	Actors	Passenger, Airport Staff.
11	Pre-Condition s	The passenger must enter the departure area with luggage.
12	Post-Conditio ns	 Luggage is successfully collected from the passenger and loaded on the Airplane with a luggage identification tag. Passenger is successfully given his luggage identification tag by the luggage management team. As the flight arrives on destination, the luggage is successfully collected by the passenger with the help of his luggage identification tag.

Sr.N o	Section	Content / Explanation
13	Result	Luggage is successfully collected
14	Main Scenario	 The Passenger comes in the the area of departure The Luggage management team collect his luggage(if any) The Luggage management team gives the passenger his luggage identification tag. The luggage management team then charge the passenger if the luggage exceeds the amount defined in the flight Instructions The luggage is successfully loaded onto the Airplane After the flight is completed, the luggage is safely returned to the passenger using his luggage identification tag.
15	Alternative Scenario	 If the passenger loses his luggage identification tag, then the passenger has to wait for everyone to collect their luggage. Then the luggage management team tries to identify the passenger's luggage using the passenger flight's data.
16	Exception Scenario	O. The luggage is left at the departing Airport. O. The luggage identification tag is lost from both luggage and the passenger.

- Daniyal
 0. Airplane Management
 a. Update Airplane Status

Sr.N o	Section	Content / Explanation
1	Designation	UC-01

Sr.N o	Section	Content / Explanation
2	Name	Update Airplane's Flight Status
3	Authors	Daniyal
4	Priority	Important for system's success: High Technological Risk: High
5	Scope	This use case deals with how the FRS updates Airplane Status when a flight lands.
6	Criticality	Medium
7	Stakeholders and interests	Flight Manager: Responsible for the entire scheduling of a flight. He wants correct retrieval of data to avoid any hazard.
8	Description	When the flight lands on any Airport 'X', the FRS automatically updates the status of the flight from "In Air" to "Flight to X completed".
9	Trigger Event	The Airplane completes it's flight from destination A to Destination B and lands on Airport X successfully.
10	Actors	Flight Manager, Pilot, Flight crew, Navigation system, FRS.
11	Pre-Conditions	The airplane must successfully land the flight on Airport X.
12	Post-Conditions	 0. Flight is successfully Landed on Airport X. 0. Flight records are updated. 0. The status of the Flight is successfully changed from "In Air" To "Flight to X completed".
13	Result	Airplane's Status successfully updated.
14	Main Scenario	 The Airplane Y lands on Airport X. The FRS updates the Flight status from "In Air" to "completed". The FRS updates the Airplane status from "In Air" to "Flight completed and landed successfully on Airport X".

Sr.N o	Section	Content / Explanation
15	Alternative Scenario	0. If the Flight that is about to land on Airport X is rerouted to any at other Airport Y, then the Flight manager manually overrides
16	Exception Scenario	O. The FRS is unable to fetch flight data. The FRS is unable to fetch airport details.

b. Add Airplane to fleet

Sr.N o	Section	Content / Explanation
1	Designation	UC-01
2	Name	Add Airplane To Fleet
3	Authors	Daniyal
4	Priority	Important for system's success: High Technological Risk: High
5	Scope	This use case deals with how the FRS adds an Airplane to fleet.
6	Criticality	Medium
7	Stakeholders and interests	Flight Manager: Responsible for the entire scheduling of a flight. He wants correct retrieval of data to avoid any hazard.
8	Description	When the flight lands on any Airport 'X', the FRS automatically updates the status of the flight from "In Air" to "Flight to X completed".

Sr.N o	Section	Content / Explanation
9	Trigger Event	The Airplane completes it's flight from destination A to Destination B and lands on Airport X successfully.
10	Actors	Flight Manager, Pilot, Flight crew, Navigation system, FRS.
11	Pre-Conditions	The airplane must successfully land the flight on Airport X.
12	Post-Conditions	 0. Flight is successfully Landed on Airport X. 0. Flight records are updated. 0. The status of the Flight is successfully changed from "In Air" To "Flight to X completed".
13	Result	Airplane's Status successfully updated.
14	Main Scenario	O. The Airplane Y lands on Airport X. O. The FRS updates the Flight status from "In Air" to "completed". O. The FRS updates the Airplane status from "In Air" to "Flight completed and landed successfully on Airport X".
15	Alternative Scenario	0. If the Flight that is about to land on Airport X is rerouted to any at other Airport Y, then the Flight manager manually overrides
16	Exception Scenario	O. The FRS is unable to fetch flight data. The FRS is unable to fetch airport details.

Sr. No	Section	Content / Explanation
1	Designation	UC-01

Sr. No	Section	Content / Explanation
2	Name	Add Airplane to Fleet
3	Authors	Daniyal
4	Priority	Important for system's success: Medium Technological Risk: Medium
5	Scope	This use case deals with how the FRS adds an Airplane to fleet.
6	Criticality	Medium
7	Stakeholders and interests	Flight Manager: Responsible for the entire scheduling of a flight. He wants correct retrieval of data to avoid any hazard.
8	Description	When a flight is scheduled by the flight manager of any Airplane, it is added to the fleet by the FRS.
9	Trigger Event	Flight manager schedules a flight to an airplane which is not in any fleet.
10	Actors	Flight Manager, FRS
11	Pre-Conditions	 The airplane must exist in the FRS. The flight must be scheduled of the airplane.
12	Post-Conditions	The Airplane is successfully added to the fleet.
13	Result	Airplane is successfully added to the fleet.
14	Main Scenario	The flight manager schedules a flight. The FRS automatically adds the Airplane in the fleet.
15	Alternative Scenario	If the Airplane is already in the fleet, then the FRS won't perform related action.
16	Exception Scenario	 The FRS is unable to fetch flight data. TBD The FRS is unable to fetch airport details. TBD

- Inquiry Management Add an inquiry 0.
- a.
- a.
- b. Delete an inquiry View Inquiries View Inquiry status Update Inquiries Redirect Inquiries a.
- a.
- a.

- Airport Management Add an Airport 0.
- a.

Sr.No	Section	Content / Explanation
1	Designation	UC-01
2	Name	Add Airport
4	Priority	Important for system's success: High Technological Risk: High
5	Scope	This use case deals with how the Admin adds an airport.
6	Criticality	High
7	Stakeholders and interests	Company: The company wants to provide as many airports as possible for Passengers to book a flight • Passenger: Wants to travel faster and with minimum headaches. Passengers want to book a flight at the airport suitable for them.
8	Description	The admin enters the airport name, the no. of planes on the airport, the flight manager responsible for the flight management, the system asks for confirmation and then stores the airport in the database.
9	Trigger Event	The admin wishes to add a new airport.
10	Actors	Admin, FRS(Flight reservation system).
11	Pre-Conditions	Admin must be logged in.
12	Post-Condition s	Airport is added to the FRS database.
13	Result	Airport added

Sr.No	Section	Content / Explanation	
14	Main Scenario		
		Admin	Flight Scheduling system
		The admin clicks on adding the airport option.	2. The FRS asks the Passenger to enter the name of the airport, number of the plane in the airport.
		3. The Admin enters the name of the airport and numbers of the airplanes in the airport.	4. The FRS asks the admin to assign a flight manager for this airport.6. The FRS system displays the
		O. The admin assigns a flight manager to the airport and clicks on the save button. 7. The admin select	airport details and give admin option: 6.1 Confirm 6.2 Change the details 6.3 cancel.
		confirm	8. The FRS system checks if the airport is already present in the database or not. And saves the airport in the database of FRS if it is not present.
15	Alternative Scenario	7a. The admin chose to change the details. 7a.1 Go to the 2 step. 7b. The admin chose to cancel the airport. 7b.1 The system navigates the Passenger toward the main screen. 8a. The airport is already present in the database. 8a.1 The system shows the message to the Passenger that the airport is already present and redirects the admin to enter the airport information again.	
16	Exception Scenario	The FRS server is down. The FRS will ask Passengers to refresh and enter the airport again.	

b. Remove an Airport

Sr. No	Section	Content / Explanation	
1	Designation	UC-01	
2	Name	Remove a route	
3	Priority	Important for system's success: Medium Technical Risk: Medium	
4	Scope	This use case deals with how the Admin removes an airport in the FRS.	
5	Criticality	medium	
6	Level	User-goal	
7	Description	The admin selects the airport to remove and the airport is removed from the database and information is updated.	
8	Trigger Event	The admin wishes to remove the airport.	
9	Primary actor	Admin	
10	Stakeholders and interests	Admin: he wants to keep checking every detail. He wants to manage airports in the FRS.	
11	Pre-Conditions	The Admin must be logged in.	

12	Post-Conditions Result	Airport is removed. Database is updated. The FRS will add an inquiry to shift the airplane to another airport in FRS. Airport removed.	
14	Main Scenario	 The Admin selects to remove an airport. The system will fetch the airports from the database and display airports to the admin. The admin selects the airport he wants to remove. The system displays details of the airport and asks the admin for the confirmation. The admin confirms the deletion. The system deletes the airport from the database. 	
15	Alternative Scenario	2a. The system database is empty. 2a.1 The system gives the admin the message that the database is empty and navigates the Passenger to the management portal. 5a. The admin select cancel the airport deletion option. 5a.1 The system brings the admin back to the management portal.	
16	Exception Scenario	The FRS server is down. (1) Refresh and remove the airport again.	