

Name:	UC1: Login
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The user logs inside the system.	
Actors: Controller, Passenger, Airline.	
Preconditions: The user needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. User inserts username. 2. User inserts password. 3. User logs in the system. 4. Extends use case CU2 - Airplanes monitoring by map. 5. Extends use case CU3 - Flights visualization. 6. Extends use case CU4 - Airplanes monitoring in airport terminals. 7. Extends use case CU5 - Gate information visualization. 8. Extends use case CU6 - Flight information visualization. 9. Extends use case CU7 - View information about routes. 10. Extends use case CU8 - Create new routes. 11. Extends use case CU9 - Manage airplanes. 12. Extends use case CU10 - View statistic result information. 13. Extends use case CU13 - Manage employees. 14. Extends use case CU17 - View airplane incidences. 15. Extends use case CU18 - Repair airplane incidence and check it. 16. Extends use case CU19 - Airplanes information visualization. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If user inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If user inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If user does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC2: Airplanes monitoring by map
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The controller view all the flights or airplanes location in real time, displayed in a map.	
Actors: Controller	
Preconditions: The controller needs to be logged in the system successfully.	
Normal flow: <ol style="list-style-type: none"> 1. Controller inserts username. 2. Controller inserts password. 3. Controller logs in the system. 4. Controller selects airplanes monitoring by map option from dashboard. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If controller inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If controller inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If controller does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC3: Flights Visualization
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The controller visualize the information about one certain flight (passengers information and real time location information).	
Actors: Controller	
Preconditions: The controller needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Controller inserts username. 2. Controller inserts password. 3. Controller logs in the system. 4. Controller selects flights visualization option from dashboard. 5. Controller selects a certain flight to visualize from a select box. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If controller inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If controller inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If controller does not fill any of the gaps (username and password) the system will notify with an error message. 5. <ol style="list-style-type: none"> 5.1. If there is not any flight at the moment the system will notify to the controller with a message. 	
Postconditions: -	

Name:	UC4: Gate information visualization
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The controller monitors all the airplanes that are in the airport terminals, lines and parking, displayed in a map.	
Actors: Controller	
Preconditions: The controller needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Controller inserts username. 2. Controller inserts password. 3. Controller logs in the system. 4. Controller selects gate information visualization option from the dashboard. 5. Controller selects a certain gate from a select box. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If controller inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If controller inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If controller does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC5: Airplanes monitoring in airport terminals
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The controller visualize all the information (flights, airplane state, passengers, etc.) of a certain gate number.	
Actors: Controller	
Preconditions: The controller needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Controller inserts username. 2. Controller inserts password. 3. Controller logs in the system. 4. Controller selects airplanes monitoring in airport terminals from the dashboard. 	
Alternative flow: <ol style="list-style-type: none"> 4. <ol style="list-style-type: none"> 4.1. If controller inserts a bad username the system will notify with an error message. 5. <ol style="list-style-type: none"> 5.1. If controller inserts a bad password the system will notify with an error message. 6. <ol style="list-style-type: none"> 6.1. If controller does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC6: Flight information visualization
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/22
Description: The passenger visualizes all the information about a flight it has bought.	
Actors: Passenger	
Preconditions: The passenger needs access to the system, needs to have an username and a password assigned. The passenger needs to have bought a flight ticket.	
Normal flow: <ol style="list-style-type: none"> 1. Passenger inserts username. 2. Passenger inserts password. 3. Passenger logs in the system. 4. Passenger selects the flight ticket he wants visualize. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If passenger inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If passenger inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If passenger does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If passenger has not any flight ticket bought the system will notify with a message. 	
Postconditions: -	

Name:	UC7: View information about routes
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline visualize all the information about the routes displayed in a map.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the information about routes option from dashboard. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If the airline has not any route the routes map will be displayed empty and the system will notify with a message. 	
Postconditions: -	

Name:	UC8: Create new routes
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline creates a new route.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the option for creating a new route from the dashboard. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC9: Manage airplanes
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline manages all the airplanes of the company.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the option for managing airplanes from the dashboard. 5. Extends use case CU11 - Add airplane to new route 6. Extends use case CU12 - Add new airplane 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If there are not airplanes designed to the airline or company the system will notify with a message. 	
Postconditions: -	

Name:	UC10: View statistic result information
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline visualizes all the statistic results information.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> Airline inserts username. Airline inserts password. Airline logs in the system. Airline selects the option for visualizing statistic information from the dashboard. 	
Alternative flow: <ol style="list-style-type: none"> <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC11: Add airplane to new route
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline adds a airplane to flight between a new route.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned. The airline needs to have minimum an airplane.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the option for managing airplanes from the dashboard. 5. Airline selects an airplane and assigns to a created route. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If there are not airplanes designed to the airline or company the system will notify with a message. 5. <ol style="list-style-type: none"> 5.1. If there is not any route created the system will notify with a message. 	
Postconditions: -	

Name:	UC12: Add new airplane.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline adds or creates a new airplane.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the option for managing airplanes from the dashboard. 5. Airline selects the option to create a new airplane. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC13: Manage employees.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline manages the employees of the company.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> Airline inserts username. Airline inserts password. Airline logs in the system. Airline selects the option for managing employees from the dashboard. Extends use case CU14 - View employees information 	
Alternative flow: <ol style="list-style-type: none"> <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. <ol style="list-style-type: none"> 4.1. If there is not any employee the system will notify with a message. 	
Postconditions: -	

Name:	UC14: View employees information.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airline visualizes one employee information.	
Actors: Airline	
Preconditions: The airline needs access to the system, needs to have an username and a password assigned. The airline needs to have minimum one employee assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Airline inserts username. 2. Airline inserts password. 3. Airline logs in the system. 4. Airline selects the option for managing employees from the dashboard. 5. Airline selects one employee to visualize the information. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If airline inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If airline inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If airline does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If there is not any employee the system will notify with a message. 	
Postconditions: -	

Name:	UC15: Visualize flights information.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airport visualizes all flights information.	
Actors: Airport	
Preconditions: -	
Normal flow: 1. All flights information is displayed in the airport panel.	
Alternative flow: 1. 1.1. If there are not any flights during the day the system displays a message in the panel.	
Postconditions: -	

Name:	UC16: Buy a flight or ticket.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The airport user buys a ticket for a flight.	
Actors: Airport	
Preconditions: -	
Normal flow: <ol style="list-style-type: none"> 1. The user selects the option for buying a ticket in the airport. 2. The user inserts all the needed data. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If there are not any flights during the day the system displays a message in the panel. 2. <ol style="list-style-type: none"> 2.1. If the user does not fill all the gaps the system will notify with an error message. 	
Postconditions: -	

Name:	UC17: View airplane incidences.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The technician visualizes an airplane incidences.	
Actors: Technician	
Preconditions: The technician needs access to the system, needs to have an username and a password assigned.	
Normal flow: <ol style="list-style-type: none"> 1. Technician inserts username. 2. Technician inserts password. 3. Technician logs in the system. 4. Technician selects an airplane and visualizes incidences. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If technician inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If technician inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If technician does not fill any of the gaps (username and password) the system will notify with an error message. 4. <ol style="list-style-type: none"> 4.1. If there are not airplanes the system will notify with a message. 	
Postconditions: -	

Name:	UC18: Repair airplane incidence and check it.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The technician repairs an airplane incidence.	
Actors: Technician	
Preconditions: The technician needs access to the system, needs to have an username and a password assigned. The technician needs to have assigned minimum one airplane.	
Normal flow: <ol style="list-style-type: none"> 1. Technician inserts username. 2. Technician inserts password. 3. Technician logs in the system. 4. Technician selects an airplane. 5. Technician selects an incidence to repair. 	
Alternative flow: <ol style="list-style-type: none"> 5. <ol style="list-style-type: none"> 5.1. If technician inserts a bad username the system will notify with an error message. 6. <ol style="list-style-type: none"> 6.1. If technician inserts a bad password the system will notify with an error message. 7. <ol style="list-style-type: none"> 7.1. If technician does not fill any of the gaps (username and password) the system will notify with an error message. 8. <ol style="list-style-type: none"> 8.1. If there are not airplanes the system will notify with a message. 9. <ol style="list-style-type: none"> 9.1. If there are not any incidences in the selected airplane the system will notify with a message. 	
Postconditions: -	

Name:	UC19: Airplanes information visualization.
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The technician selects an airplane and visualizes its information.	
Actors: Technician	
Preconditions: The technician needs access to the system, needs to have an username and a password assigned. The technician needs to have assigned minimum one airplane.	
Normal flow: <ol style="list-style-type: none"> 1. Manager inserts username. 2. Manager inserts password. 3. Manager logs in the system. 4. Manager can manage the gates, terminals, and lanes. 	
Alternative flow: <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1.1. If manager inserts a bad username the system will notify with an error message. 2. <ol style="list-style-type: none"> 2.1. If manager inserts a bad password the system will notify with an error message. 3. <ol style="list-style-type: none"> 3.1. If manager does not fill any of the gaps (username and password) the system will notify with an error message. 	
Postconditions: -	

Name:	UC20: Manage gates terminals and lanes
Author:	NAM ("NaranAir Airport Managing")
Date:	2016/11/23
Description: The manager of the airport can manage the gates, terminals and lanes (register new, update them or even delete from the database)	
Actors: Manager	
Preconditions: The manager needs access to the system, needs to have an username and a password assigned.	
Normal flow: Technician inserts username. Technician inserts password. Technician logs in the system. Technician selects an airplane and visualizes the information.	
Alternative flow: 4. 4.1. If technician inserts a bad username the system will notify with an error message. 5. 5.1. If technician inserts a bad password the system will notify with an error message. 6. 6.1. If technician does not fill any of the gaps (username and password) the system will notify with an error message. 7. 7.1. If there are not airplanes the system will notify with a message.	
Postconditions: -	