

Flight Booking System - USER Requirements

A Flight Booking System (FBS) that serves different functionalities for reservation agents and reservation managers shall be designed and developed. The system shall be a simple, stand-alone application. "Stand-alone" means that it shall not be developed as a web-based on-line application, but a one which runs as an application on a single computer.

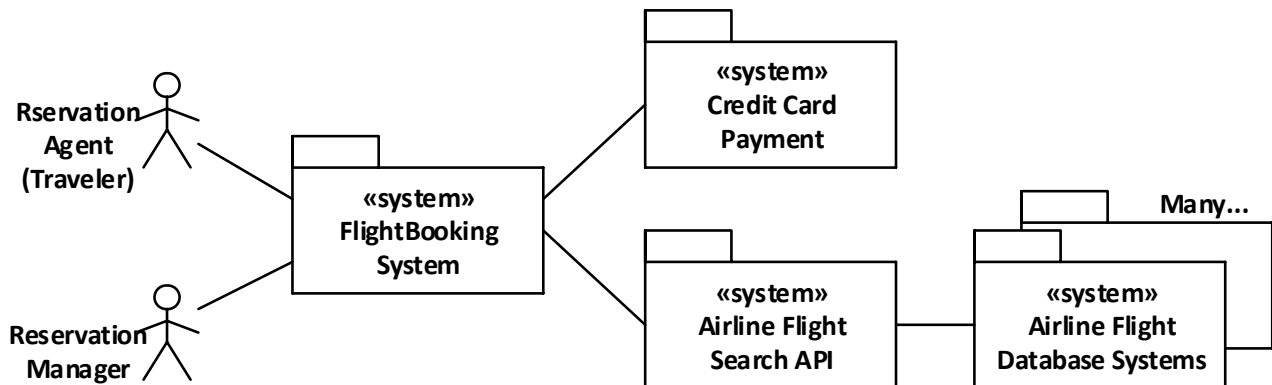
A reservation manager shall be able to use the system to create accounts for reservation agents. The system shall enable a reservation manager to log in with his/her username and password. The reservation manager shall be able to manipulate flights (enter new ones, update existing flight information, delete flights, etc.), and generate inventory reports of flights. When a flight is canceled by the reservation manager, all itineraries that are reserved or booked and include that flight shall be canceled as well. The reservation manager shall be able to view information of a reservation agent and confirm a ticket for him/her. The reservation manager shall be able to log out at any stage during his/her session.

A reservation agent (traveler) shall be able to buy a ticket by using the system. An agent shall be able to register himself/herself with the reservation site by entering personal profile information. The system shall enable a reservation agent to log in with his/her username and password. Once the agent is logged in, he/she shall be shown with a list of travel itineraries along with the status of each itinerary (reserved, booked, confirmed, or canceled). A travel itinerary is a travel arrangement with one or more flights, e.g., an example travel itinerary might consist of the following three flights: Calgary-Vancouver, Vancouver-Los Angeles and Los Angeles-New York. The reservation agent shall create a reservation and pay for it to book the flight. The agent shall cancel a previously created reservation in his/her itinerary list, but the cancellation of an itinerary cannot be rolled back.

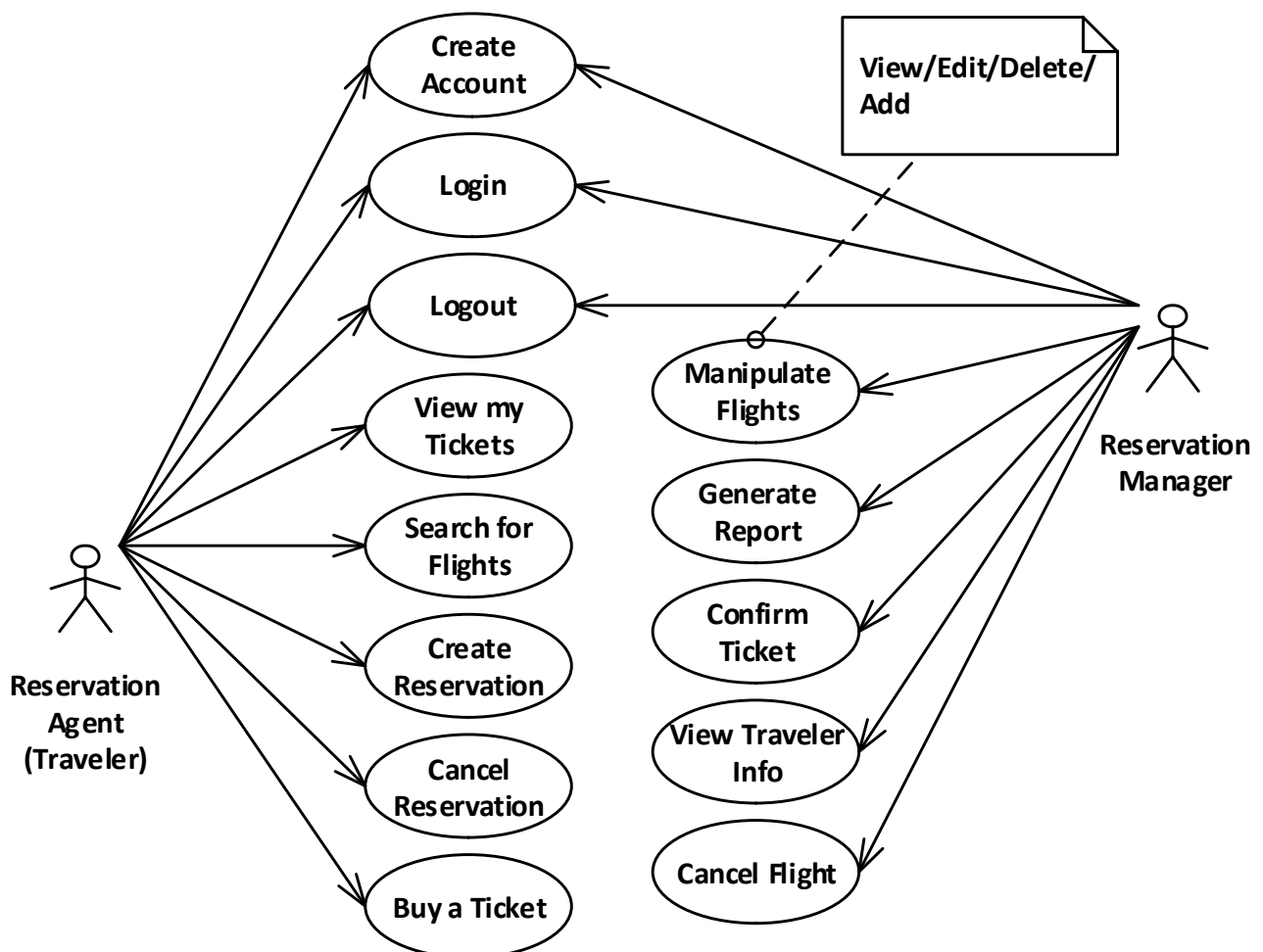
When a reservation agent wants to create and book a travel itinerary, he/she first shall search for flight information. A list of available flight options shall be shown with departure/arrival and cost information. Once the agent selected an itinerary from the list, he/she shall have the option to reserve it. Once the reservation agent reserved an itinerary, he/she shall have the option to book it by providing payment information via credit card. If the credit card information is not on-file for the agent, he/she shall be prompted to enter the credit card information. Once the credit card is validated, the reservation agent shall be shown with the actual ticket information. The ticket number shall be unique for each agent in each flight. If the credit card number is invalid, an error message shall be displayed to the agent and the agent shall be asked to re-enter the credit card information or cancel the booking process. If a reserved itinerary is not paid for by 5 minutes from the time of reservation, it cannot be booked anymore and it shall be canceled by the system. Cancellation after payment shall not be permitted. The reservation agent shall be able to log out at any stage during his/her session. If the agent is logged out during the preparation of an itinerary, the next time when he/she is logged in again, the reservation agent shall be able to continue with the previous itinerary-preparation process.

Flight Booking System - USER Requirements Modeling by Use-Cases

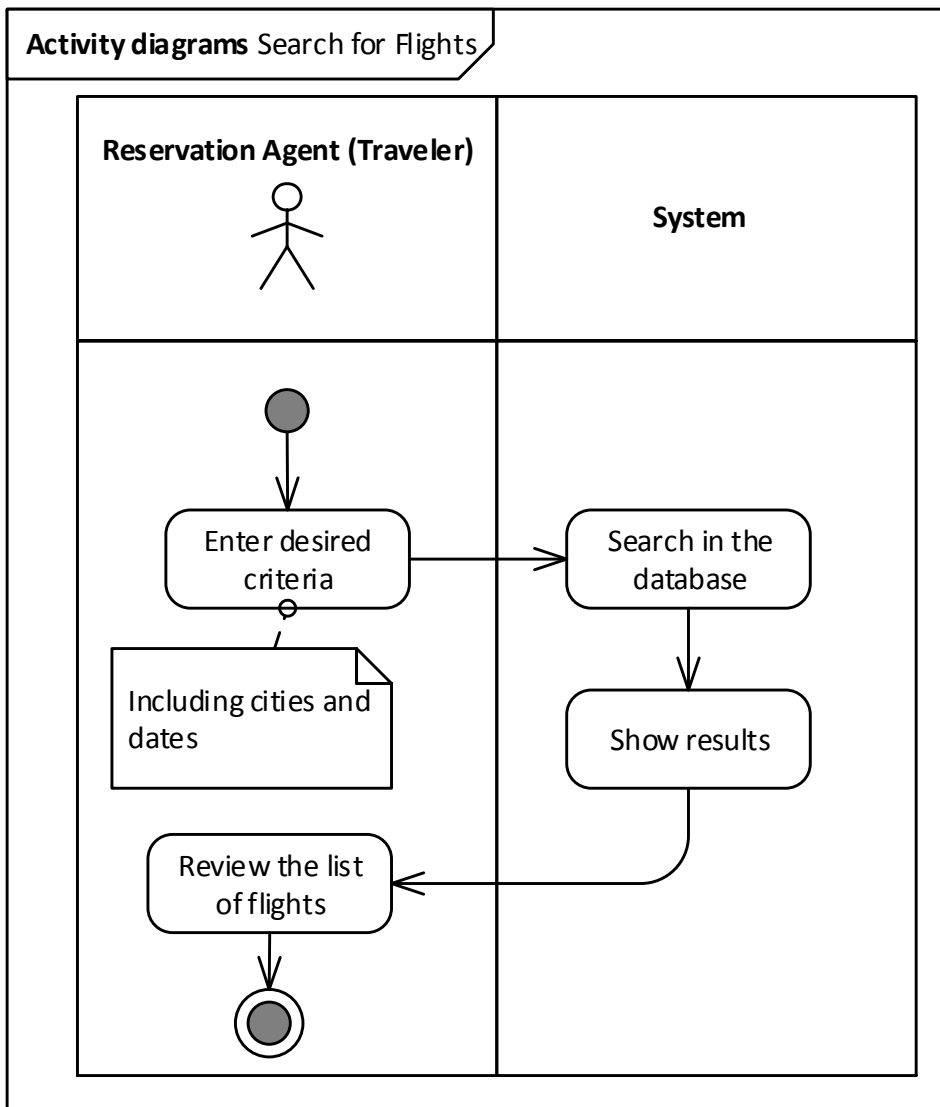
Context Diagram:



Use-Case Diagram:



Details of "Search for Flights" use-case description by Activity Diagram:



Details of "Buy a Ticket" use-case description by Activity Diagram:

