Airline Project

Group Assignment

The aim of this project is to build an airline reservation system. The system should provide two basic sets of services to an airline:

1. The first set of services allows the airline to "provision" its system. For example, allowing planes to be added to the airline's fleet, classes of flight to be added, and flights to be scheduled.
2. The second set of services allows the airline to service customers. For example, allowing a passenger to query the flight schedule for flights that satisfy an arbitrary condition, and to book, confirm, or cancel tickets. There are three kinds of tickets: first class, economy, and coach.

The different kinds of tickets vary in a couple of ways: cost and refund ability. The cost of a particular fare varies in the following ways:

Type of Ticket	Percentage of Full Fare
First Class	100%
Coach	85%
Economy	70%

If a first class or coach ticket is canceled, there is always a full refund. However, economy tickets are only refunded if they are canceled at least two weeks before the flight.

When a booked reservation is paid for, it is said to be "confirmed". The seat associated with a reservation which is booked but not confirmed may be reallocated when seats become scarce, thus effectively canceling the reservation.

Evaluation Objectives

- Ability to identify use cases and record them in a use case diagram using the UML notation.
- Ability to identify outstanding associations and attributes and record them in a conceptual model using the UML notation.
- Ability to identify system events and record them in a system sequence diagram using the UML notation.

Evaluation: Use Cases

1. Identify 4 use cases and related actors. Draw the results in a UML use case diagram.
2. Make a fully dressed use case description of one of the 4 use cases and write brief use case descriptions of the rest.

Evaluation: Conceptual Modeling

3. Bounded by the use cases, create a Domain model (conceptual classes) and illustrate it in UML notation. Show associations and attributes.

Evaluation: System Events

4. Create a system sequence diagram for one of the use cases in the UML notation. Show actors and system events.

Documentation

5. In brief (max 1/2 page) write a report of the process

Group size: 3-4 students

Note that for each work product you must make clear which group member has the main responsibility for that specific work product.

Hand-in:

Deadline for hand-in is **November 3** before 14:00 in the hand-in folder at Fronter.

Your report is to be delivered in the **.pdf** format (all in one file)

The name of the **.pdf** file must abide by the following format:

SWD_Mandatory1_Your GroupName.pdf