Technical Training – Requirement for software

Sun Travels is a travel agency which handles accommodation bookings on behalf of their customers. They get paper contracts from hoteliers with room types, number of rooms and rates. Sun Travels keeps a markup (15% at the moment) and sells those hotel rooms to travelers. Sun Travels has its own call center, in which all the rate calculations are done looking at paper contracts.

Sun Travels is now in the need of software to automate the above mentioned process. I.e. they want to implement a software system to load paper based contracts in to the system and define their markups. In addition they expect the system to provide a user interface for call center agents to search contracts in the system. That search, should handle all the calculations and show the call center agent how much customer should be charged for his/her booking.

Following is a sample paper contract

Hilton Colombo

==========

This contract is valid from 2012-01-01 to 2012-12-31

Room Types

	Price	No of rooms	Max Adults
Standard	$ 35.00	15	2
Sea View	$ 55.00	8	3

All above rates are per person, per night

Following should be available in the new system user interface for reservation agent

An interface to enter customer's search criteria

1. Check in date

2. No of nights

3. How many rooms required, with no of adults

coming e.g.

- 1 room with 2 adults

- 1 room with 2 adults and 1 room with 1 adult

Upon submitting the above, system should present the results with pricing. In that screen, following should be available at least

1. Hotel name

2. Room Type

3. Price (Marked up)

4. Room availability status (I.e. if no of rooms available are enough to accommodate the request (Available) or not (Not available))

Rules

- Customers can stay only within contract valid period
- If all the rooms requested by the customer can be accommodated, we call that room type as Available. Otherwise, Unavailable.
- Price shown to customer = price given by hotelier for the room type*markup*number of nights*number of adults

Notes

- You are expected to develop one java application

- It should have at least two separate user interface to Load/View contracts in to/from the system and the other for call center agents to enter search criteria and view results. You can add any number of other UIs as you need.

- It's required to use java swing technology to implement Load/View contracts interfaces and searching interfaces.

- It is preferred to have a user interface to search contracts also.

- You should use CodeGen in house components

- You must adhere to coding practices

- At any given point (Data loading, data saving and searching), your user interface should not be unresponsive

Assignment Submissions and Evaluation

- You are required to design and submit ER Diagram of the program within two days from the start of the assigned time period for the assignment.

- You are required to complete development of your software solution within 2 weeks from the start of the assigned time period for the assignment.

- You will be provided a Subversion (SVN) versioning space to manage your source code. You are required to commit your source code daily.

- At the end of assigned development period, you are required to demonstrate your software solution in front of panel of expert and defend your solution in a viva session. (both application UI and source code will be evaluated)