Alexandria University
Faculty of Engineering
Comp. & Comm. Engineering
CC471: Database Systems
Fall 2018

جامعة الاسكندرية
كلية الهندسة
برنامج هندسة الحاسب والاتصالات
مادة قواعد البيانات
خريف ٢٠١٨

Lab5
Project: Hotel Reservation System

Policies:

- *Deadline: December 21st, 2018.*
- *Group size: 5.*
- *Group registration deadline: December 5th, 2018 at 5pm.*
- *Group registration link: https://goo.gl/forms/cLnEB4vGhwhKiqFV2*
- *One registration per group.*
- *Student without registration would be assigned randomly to groups. If your group is less than 5, write 0 in the ID and N/A in the name and you will get someone assigned to your group.*
- *No late submission is allowed.*
- *Submit your project report containing the implemented features, your ERD and a description of the logic of each screen along with the URL of your system. Your report should specify the role of each group member in the project.*

Project:

A broker asked you to implement a system for hotel reservation that has the following features:

- For testing purposes, create an interface through which you may advance the clock by a variable number of hours (or days). The simulated timestamp should appear on any page returned from the server.
- Hotel owners register to the system. Each owner describes his hotel rooms (type, count, facilities, current price, images, …). When the broker approves the hotel registration, this hotel starts to appear in the hotel searches.
- A customer who wants to book a hotel room would search by specifying any of the following (price, stars, location, ratings, room type) within a certain time period. Upon reservation, notification of confirmation or cancelation would arrive within 30 seconds. A customer should be able to browse his current and previous reservations.
- Upon receiving a notification of reservation, the hotel should be able to approve or cancel it within 30 seconds (for testing purposes). Otherwise, it is automatically confirmed. The hotel should be able to browse the current and previous reservations in any time period. The hotel should be able to view who is checking in or out in any day.
- If a customer appears for his reservation, the hotel owes 9% of the accommodation price to the broker. In the case of no show, the hotel does not owe anything and the customer gets blacklisted and would not be able to make reservations for a week. The broker should be able to get a monthly report of the amounts each hotel owes him. The broker may suspend a hotel (in case of non payment for instance) so it does not appear on searches. The broker should be able to reactivate a suspended hotel (when it pays its dues).

- A customer may ask to extend his current stay. In case of approval by the hotel, the customer would be notified by the system. A customer may also rate the hotel when he stays in it. The averate ratings should appear in the search.
- Customers who stay more than 5 reservations are classified as class A customers. They receive 5% discount on the current price. Some hotels may select an option upon registration (in exchange for a premium) in order to appear first in searches.

Host your system on any free hosting. For instance, you may create a free AWS EC2 virtual machine to host your system so it can be accessible from the web. Plan wisely for testing the system. Populate the system with data to have a rich demo.
