**BRAC University (Department of Computer Science and Engineering)**

**CSE 470 (Software Engineering) | Summer 2023**

**Quiz 2 (Set A)**

**Student ID:**

**Section: Full Marks: 10**

**Name: Duration: 20 minutes**

1. Compare between functional and non-functional requirements. **[ 3 marks ]**
2. Imagine a hotel management system where the guests can book rooms for a certain amount of time. Before booking a room, the guests can check on its availability and different features (bed number, bed size, window view etc.). There are some managers who look after the whole booking process and prepare bill for the guests upon they check out. There are some discounts on some rooms from time to time. The discount is applied on the bill. There is housekeeping service available for the guests. Housekeepers are assigned to different rooms and they basically serve the duty of cleaning and delivering food from the restaurant attached with the hotel. Guests can see the menu and call the receptionist to place the food order, and the receptionist sends the corresponding housekeeper to the guest’s room.

Design a class diagram that reflects the above system best. Use standard rules and notations.

**[ 7 marks ]**