

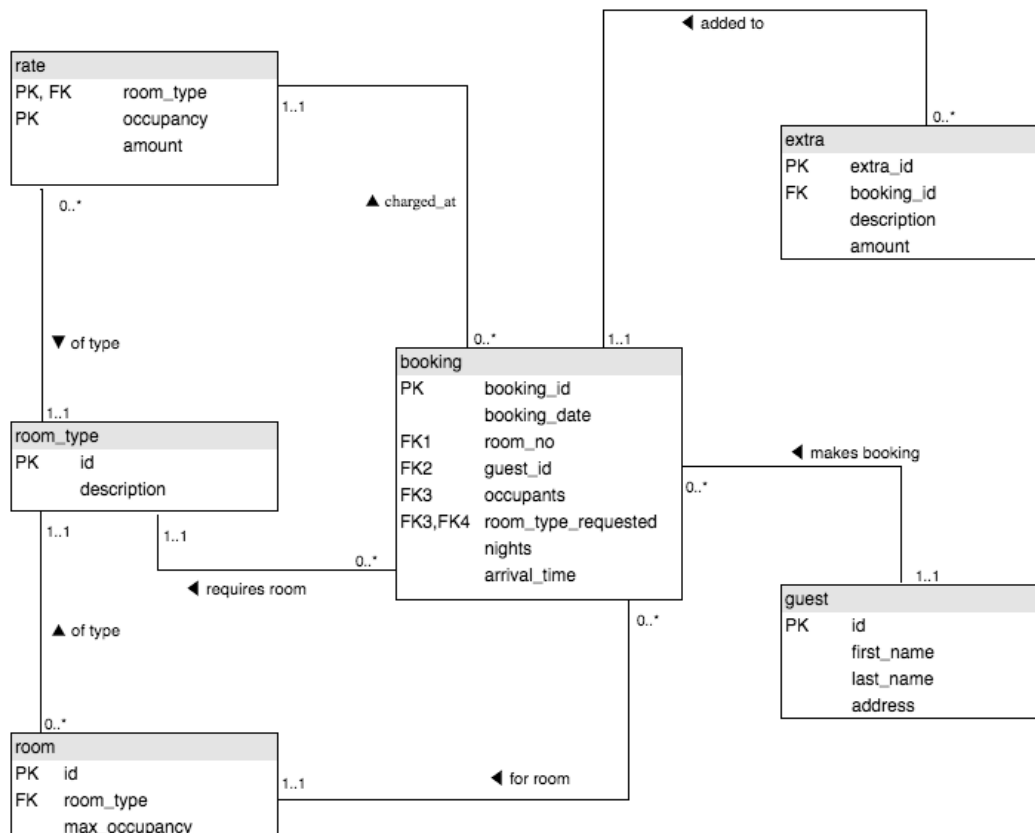
**University of Vavuniya**  
**Faculty of Technological Studies**  
**Department of Information and Communication Technology**  
**Second Semester-2020/2021**

TICT2233- Database Management System (Practical)  
In Course Assessment Exam – I

**Time Allowed:** 90 minutes

26.09.2022

1. Consider the following diagram which provides an overview of the database schema of the hotel management system.



2. Write SQL queries for each of the following questions based on the above database schema.
- Write a query to create database and create tables with appropriate constraints.
  - Guest 1183. Give the booking date and the number of nights for guest 1183.
  - When do they get here? List the arrival time and the first and last no for all guests due to arrive on 2016-11 and -05 and order the output by the time of arrival.

- d. Look up daily rates. Give the daily rate that should be paid for bookings with ids 5152, 5165, 5154 and 5295. Include booking id, room type, number of occupants and the amount.
- e. Who's in 101? Find who is staying in room 101 on 2016-12-03, include first name, last name and address.
- f. How many bookings, how many nights? For guests 1185 and 1270 show the number of bookings made and the total number nights. Your output should include the guest id and the total number of bookings and the total number of nights.
- g. Show the total amount payable by guest Ruth Cadbury for her room bookings. You should JOIN to the rate table using room\_type\_requested and occupants.
- h. Including Extras. Calculate the total bill for booking 5319 including extras.
- i. Edinburgh Residents. For every guest who has the word "Edinburgh" in their address show the total number of nights booked. Be sure to include 0 for those guests who have never had a booking. Show last name, first name, address and number of nights. Order by last name then first name.
- j. Show the number of people arriving. For each day of the week beginning 2016-11-25 show the number of people who are arriving that day.
- k. How many guests? Show the number of guests in the hotel on the night of 2016-11-21. Include all those who checked in that day or before but not those who have check out on that day or before.
- l. Coincidence. Have two guests with the same surname ever stayed in the hotel on the evening? Show the last name and both first names. Do not include duplicates.
- m. Check out per floor. The first digit of the room number indicates the floor – e.g. room 201 is on the 2nd floor. For each day of the week beginning 2016-11-14 show how many guests are checking out that day by floor number. Columns should be day (Monday, Tuesday ...), floor 1, floor 2, floor 3.
- n. Who is in 207? Who is in room 207 during the week beginning 21st Nov. Be sure to list those days when the room is empty. Show the date and the last name. You may find the table calendar useful for this query.
- o. Double room for seven nights required. A customer wants a double room for 7 consecutive nights as sometime between 2016-11-03 and 2016-12-19. Show the date and room number for the first such availabilities.
- p. Gross income by week. Money is collected from guests when they leave. For each Thursday in November show the total amount of money collected from the previous Friday to that day, inclusive.