Databases 2021/22

Case Study for CA Project

*Burger Shack* is a franchise with a chain of restaurants around Ireland. Due to COVID-19 protocols for contract tracing, the company needs to create a database that can store relevant details on customers, waiting staff and managers at every restaurant branch around the country.

Each *Burger Shack* restaurant has a unique numeric restaurant identifier, address and a phone number. Customers who wish to book a table can either make a booking online, by phone or walk into one of the restaurants and talk to a manager who can complete the table booking with them in person.

When a customer books a table at any *Burger Shack* restaurant, they must provide the following information: their name, address, and email address each of which will be stored and cannot be missing. The customer must also provide their age which must be over 18. The customer is assigned a unique identifier, customer number.

The main customer making the booking is also assigned a booking receipt which includes a booking ID number and details of the time of the table booking and number of people at the table. Due to COVID restrictions, there cannot be more than 6 people at a table and the table cannot be booked for more than 2 hours. A customer can have many bookings with *Burger Shack* but each booking is for one customer.

Each table in every restaurant has a unique number and details of the type table and its location in the restaurant. There are four types of table (2, 4, 6 and 8 seater) and 2 locations (window or interior).

When the party arrive at the restaurant, they are shown to their table and details of each person at the table must be recorded and stored in the database for contact tracing. The table number, name, email address, phone number of every other guest (apart from the main customer who has already given this information) must be provided.

The details of the waiter and manager who served the table must also be recorded. Burger Shack Staff are assigned to a particular restaurant branch, their location is stored as part of their employment record. All restaurant staff have a unique identifier. Their name, address, phone number, email address, date of birth and start date of employment Burger Shack are also stored. All staff email addresses must be their company email (ending with @burgershack.com).

In order to ensure compliance with government regulations, customers will be fined if they stay longer than the 2 hour maximum time limit. A penalty bill is sent to the customers which is calculated as 5 euro per minute that they overstayed beyond the time limit.