**TMA 1 Part 2**

**Q2**

**a)**

**Name:** Make Reservation

**Description:** Allow customers to make a table reservation for the restaurant. Where seating is not available, either inform the customer that the party is too large or that they are on a waiting list for the selected slot.

**Actors:** Reservation system, customer, staff member

**Precondition:** The customer wants to reserve a table in the restaurant on a particular date and time

**Basic Flow:**

1. The bookings are recorded into the reservation system
2. The staff member enters the requested reservation date, time and party size into the reservation system.
3. The reservation system displays the smallest table available for the customer for that date and time.
4. The staff member enters the customer’s name and contact details into the reservation system for the given time, date and party size.
5. The reservation system records and displays the new booking with a unique number identifier.
6. The staff member provides the customer with the unique number identifier.

**Alternative Flow:**

1. The staff member enters the requested reservation date, time and party size into the reservation system.
2. The reservation system informs the staff member that there are no available reservations for that date, time and party size.
3. The staff member enters the customer’s name and contact details into the reservation system for the given time, date and party size.
4. The reservation system records this onto the waiting list and displays the potential booking.
5. The staff member informs the customer that they have been placed onto the waiting list.

**Exception Flow:**

1. The staff member enters the requested reservation date, time and party size into the reservation system.
2. The party size is too big so the reservation system informs the staff member that the restaurant will not be able to accommodate the customer.
3. The staff member informs the customer that the restaurant cannot accommodate the party size.

**Post Condition:**

The customer successfully is added to the reservation system on the required date.

b) The two questions I would ask are:

1) At what point would you allow the customer to cancel the reservation.

2) How would you like the waiting list to be checked for potential customers to be booked in for the table

c) .

**Acceptance Test 1:**

Test that when a party

d) The difference between behavioural requirement and constraint is in the approach required to be taken. A constraint is a limitation in the system either due to a pre-existing system requirement like in the example proposed restaurant reservation systems where the format of the summary should be produced in XML.

On the other hand a behavioural requirement is around the functions that are needed to be performed to achieve the outcome, one example would be “where on the restaurant’s intranet site would the forthcoming month of reservations be placed”.

**Q3**

1. The class diagram shows that 1 member can take as many pictures as they want (0-\*) and each photo can belong to only 1 category but a category can have as many pictures as it wants (0-\*). On top of that as many members can be registered for as many categories as they want and a category can have as many members as it wants.

In Diagram 1, member1 is registered in both category 1 and 3 but they have only submitted photo4 into category3.

Member3 has registered into category6 and also submitted photo3 into the category. Photo6 does not belong to the member and is not registered into the category either.

In Diagram 2, member7 and member10 have submitted photo9 and photo12 respectively into category9 where they have both registered for. Photo5 is also entered into category9 but does not show a member that has taken it.

1. .

**Q4**