Detailed Functional Specifications

for

Restaurant Table Booking System

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Need of System

A small restaurant wants a personalized table booking system where customer can book a table for that particular day only. A system that can be used at the reception to book a table for the customer on a phone call or in person.

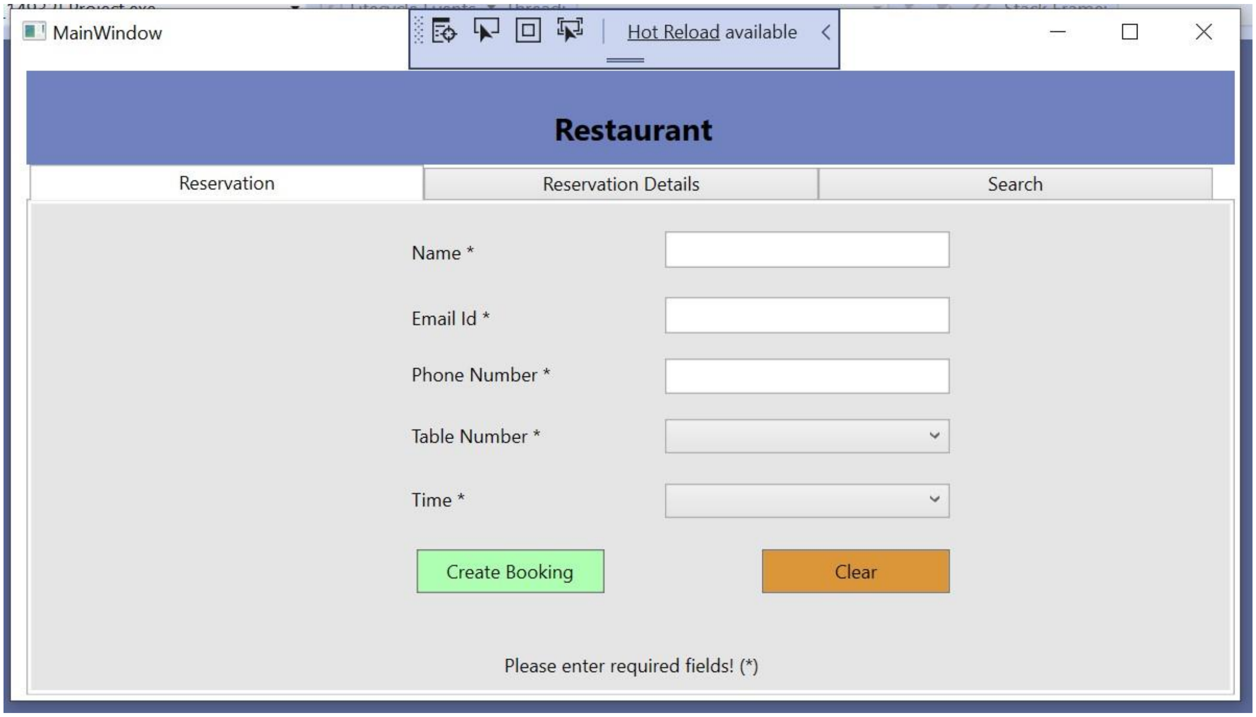
Business Rules

There are many business rules that need to be covered by the system in this iteration of the development –

1. *BR01 – UI of the system – Business needs UI to operate the system*
   a. A system containing tabular window, which consists of 3 tabs as follows –
      i. Booking creation tab, where the user input the details to create the booking
      ii. Lists tab, where 3 lists are displayed showing
         1. Booked table and timing
         2. Name of the customer who booked the table
         3. Phone number of the customer who booked the table iii. Search tab, where 2 search options are provided
         1. Show tables and their respective seats available according to the timing (If customer wants to know whether the restaurant has tables available for that timing)
         2. To look up for the bookings according to the phone number of the customer (If customer wants to know the bookings that have been done for that day from his/her number)

2. *BR02 – Booking tab –Business needs to do the booking for the user*
   a. Booking tab contains 5 elements –
      i. Name of the customer
      ii. Email of the customer
      iii. Phone number of the customer iv. Table number
      v. Time of the booking
   b. User can then click on the Create button to create the booking for the customer.
   c. All fields are mandatory.

d. *Note: Multiple bookings can be done with the same phone number using different names. The different bookings can be distinguished using customer id and booking id.*



Please enter required fields! (*)

3. *BR03 – Booking Details Tab - Business needs to see the total bookings for the day*

   a. In this tab all the bookings, that have been done on that day, are displayed in three lists-

      i. Booked table and time in first list

      ii. Name of the customer who booked, in the second list

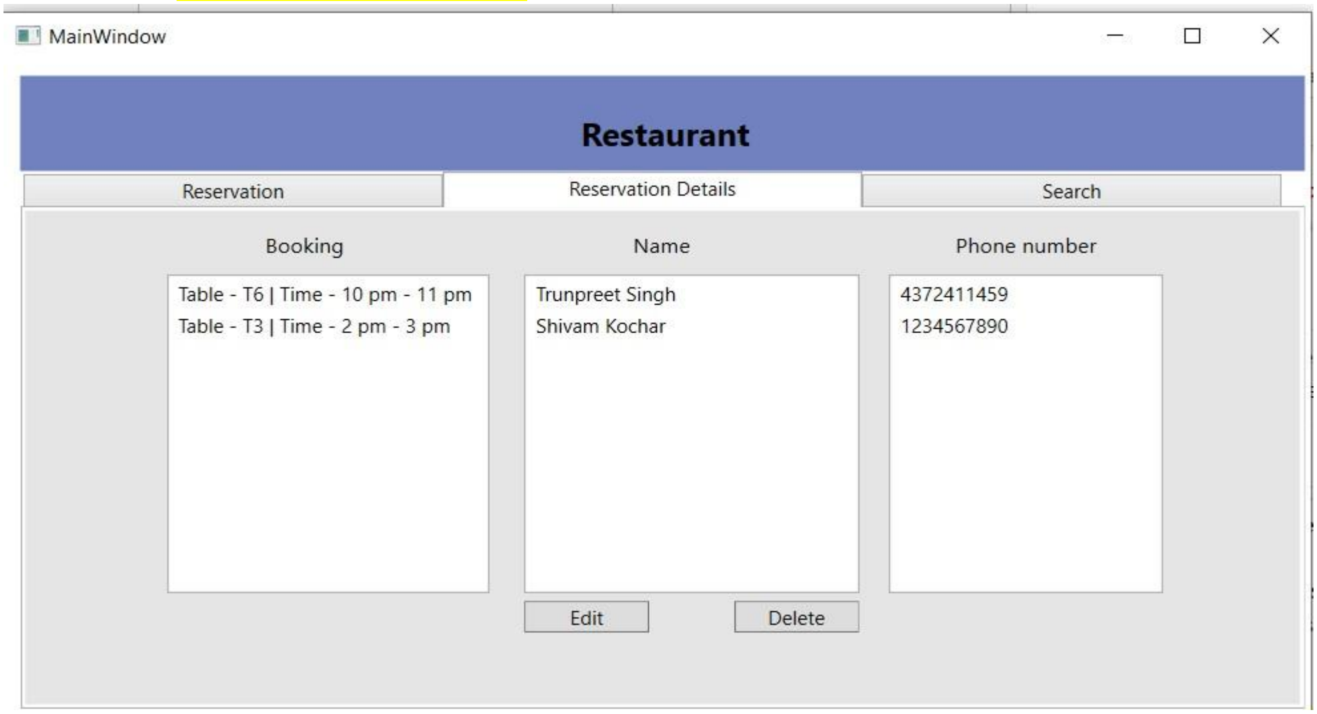
      iii. Phone number of the customer who booked, in third list

   b. User can select on any booking, in the first list, to see who that booked. This can be done by highlighting the name and phone number of that customer in second and third list.

   c. User can delete a booking by selecting one booking from the list and then clicking on delete button. Multiple bookings cannot be deleted at once. User needs to delete bookings one by one.

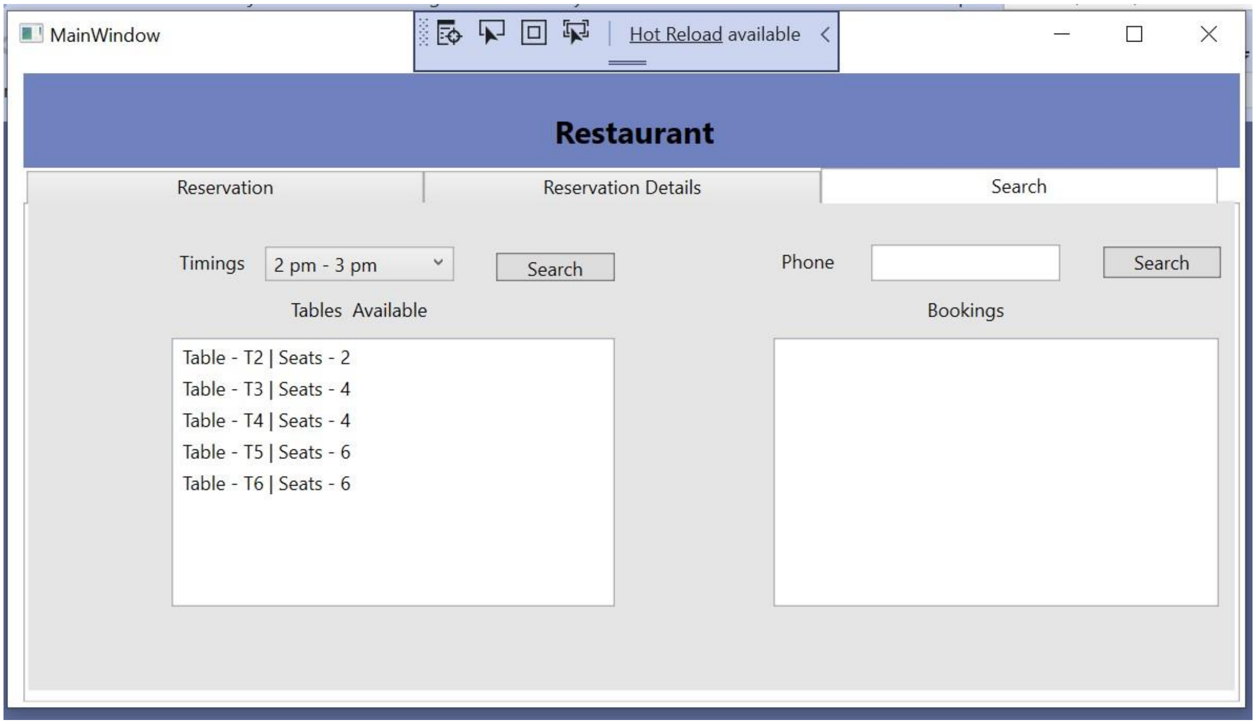
   d. User can also update the timing of the booking. This can be done by selecting a booking and click on edit button. Multiple bookings cannot be edited at once. User needs to edit bookings one by one.

Note: Right now, only timings can be edited for a booking. Updating other details is not needed in this iteration.



Booking	Name	Phone number
Table - T6 | Time - 10 pm - 11 pm	Trunpreet Singh	4372411459
Table - T3 | Time - 2 pm - 3 pm	Shivam Kochar	1234567890

4. *BR04 – Search Tab – Business needs to resolve some queries of the customer*
   a. This window contains two search options that could be done using LINQ –
      i. Search based on the timing
         1. If customer asks whether the restaurant has tables available for some specific time, the user can select that time duration and then search. It will display the results in the list below that search option.
      ii. Search based on the phone number
         1. If user wants to confirm or know the details of the bookings that have been done for that day.
            a. There can be multiple bookings from the same number, but names can be different. So, all the bookings need to be displayed in the list below that search option.
            b. Name, Booking Id, Customer Id, Booking Info (table number, timing), Customer name and Customer email need to be displayed in the list for each booking.



Timings: 2 pm - 3 pm

Tables Available

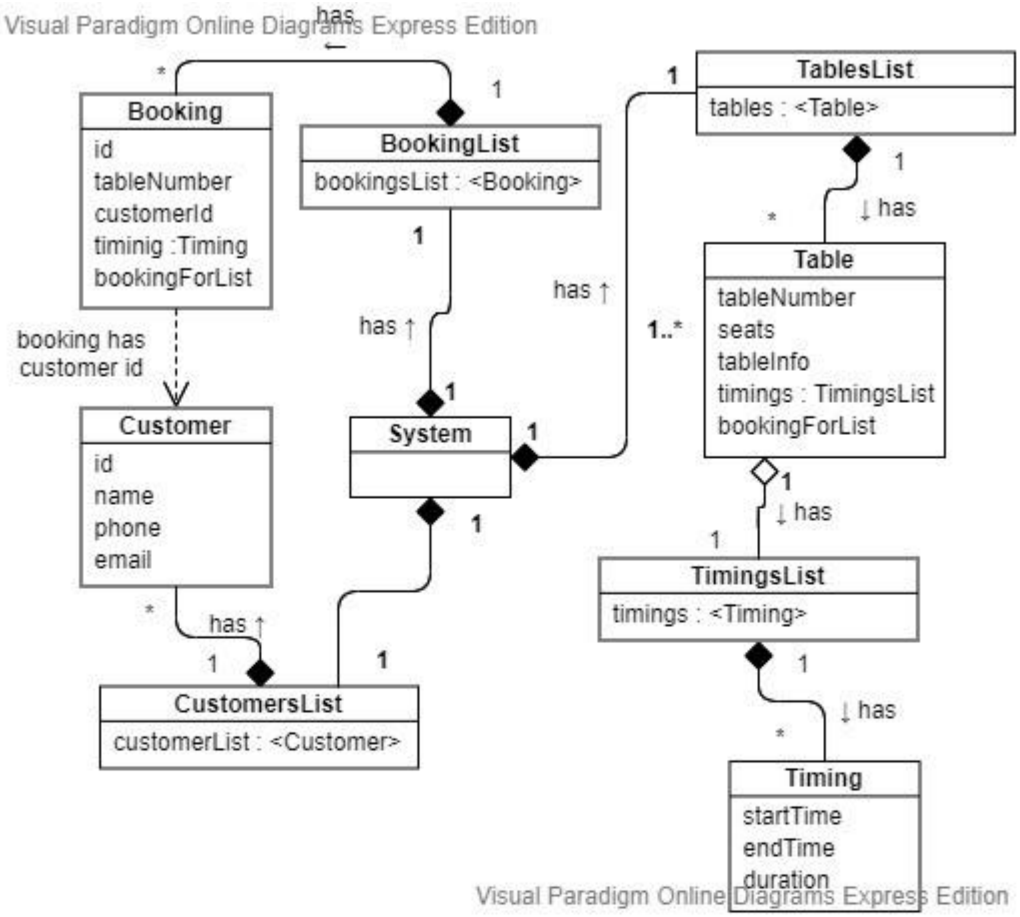
Table - T2 | Seats - 2
Table - T3 | Seats - 4
Table - T4 | Seats - 4
Table - T5 | Seats - 6
Table - T6 | Seats - 6

5. *BR05 - Duration of the booking – Business doesn't want to block other users from booking*
    a. User can only book a table for 1 hour. If a user wants to book a table for more than 1 hour then he/she needs to create new booking for that.

6. *BR06 - Details Storage – Business wants to persist data even if the system crashes*
    a. The bookings that have been done for the customers need to be stored in the XML file on the system. This file will be flushed the next day because only bookings for the same day can be done (if you find the bookings file empty the next day, this would be the reason). After the end of the day the data from the file will be stored in the database (not included in this iteration).

Class Diagram

Below is the domain model showing the overview of the system which is to be developed. Not all classes are included in the diagram because at this time of UML designing, we are not sure that these classes would be enough for the system.



Expected specifications in the next iteration (not included in this one)-

- User can update other information of the booking (only timing can be updated in a booking).
- The system can store the data from the file to the database.