

### Restaurant Reservation and Dining System

For the purposes of this process treat the customers and restaurant staff as members of the same organization, model all messages as activities.

The reservation process starts when a customer decides to dine at the restaurant and books a table either by calling or via an online reservation system. The customer specifies the desired date, time, and the number of guests. Once this information is received, the restaurant staff reviews the table availability. If a table is available, the staff confirms the reservation with the customer and the reservation process ends. However, if the desired time slot is fully booked, the restaurant staff will suggest the next available time slot to the customer.

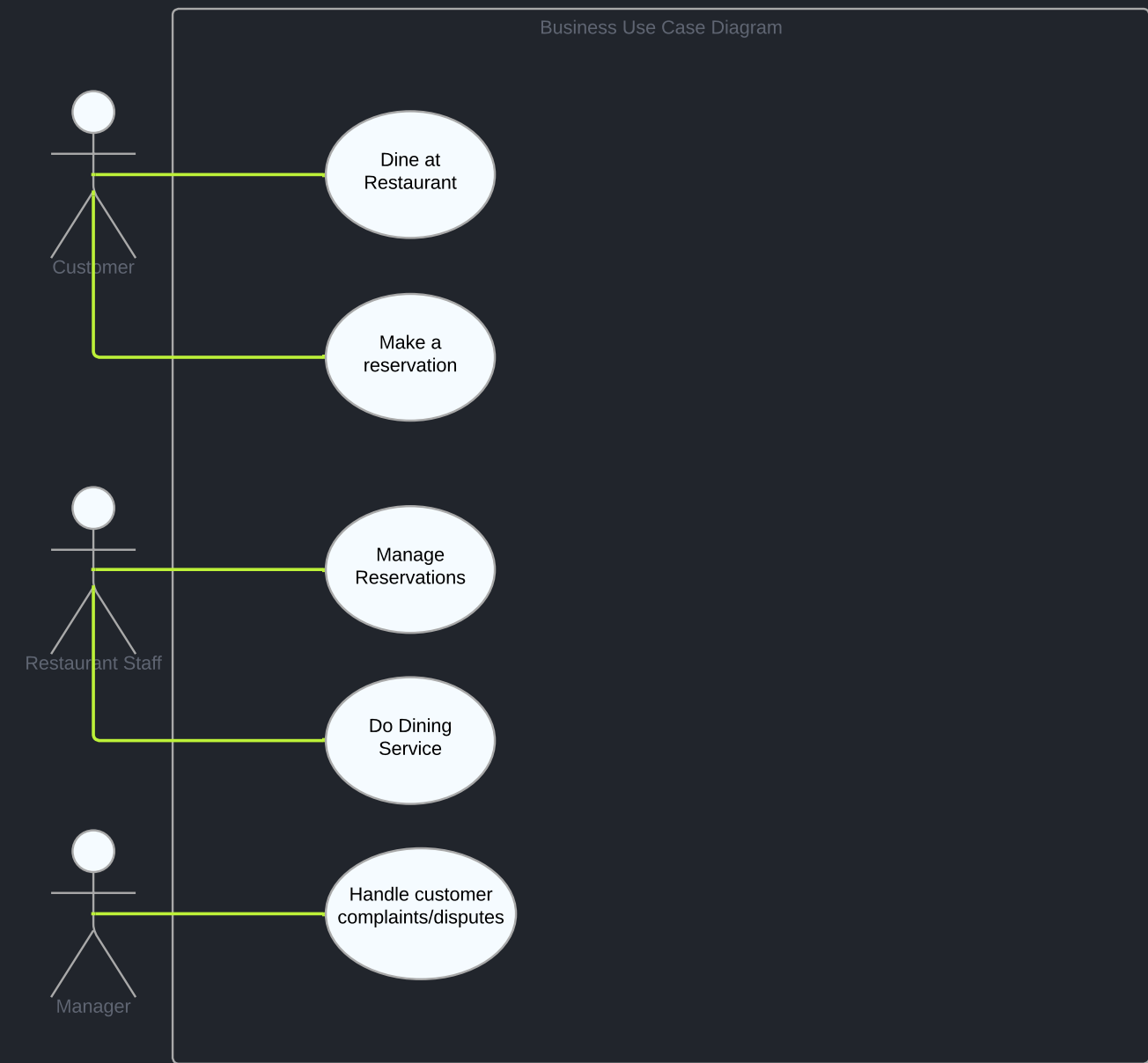
If the customer agrees with the suggested timing, the reservation is made and the customer is informed. If the customer disagrees, they are offered to be placed on a waitlist. In the event of a cancellation, the customer on the waitlist will be contacted and offered the newly available time slot. Then it waits a week for the customer response, if he is not responding a new offered time then the attempts to contact are stopped.

On the day of the reservation, the customer arrives at the restaurant. The host/hostess leads the guests to their table. A server is assigned to the table, who introduces themselves to the customers, presents the menu, and takes the order. If the order contains items not currently available, the server informs the customer and suggests alternatives.

Once the customer has decided, the server communicates the order to the kitchen. If there is no ingredients in for the ordered meal in the kitchen the server inform the customer about it and ask for another order. After the meals are prepared, the server brings the food to the table and ensures everything is as ordered. During the meal, the server periodically each 10 minutes checks on the table for any additional needs or concerns.

When the meal is over, the server presents the bill to the customer. The customer can choose to pay via cash, credit card, or mobile payment apps. If a credit card is used, the transaction is processed immediately. If it's declined, the server informs the customer who can then choose another method of payment.

After the payment is successful, the server prepares the table for the next customer and the process is repeated. At any point, if the customer has complaints or issues, they can speak to the manager who is responsible for resolving any disputes and ensuring customer satisfaction.



### Final project

(individual or 2-person teams)

Choose a business process - it can be a process in any company or organization known to you, it can be a process based on one of the tasks done during the tutorials. Using appropriate tools create:

- a text description of the current business process,
- business use case diagram for this process,
- business analysis diagram for this process,
- BPMN diagram with the current form of this business process. Remember about modelling unusual situations, error handling etc.

Based on this design a new version of the business process, assuming utilization of IT tools to support this process -

automation of activities that can be automated etc. Prepare:

- BPMN diagram showing the new form of the business process,
- Use case diagram (regular, not business) for this business process,
- Class or entity diagram, modeling the data which will be processed in this business process,

Choose one:

- o Prototype of application supporting the business process (you can utilize tools such as Bonita BPM or MS Sharepoint),
- o Prototypes of services used by fully or partially automated activities in this process (they don't have to have full functionality, it is enough if they have the appropriate API and return randomly or based on some condition one of a few prepared results).

o Simulation of the two process with comparison what was improved.

The process in its final form should have at least 15 activities in the case of individual projects, 20 in the case of group projects. Not all activities have to be a part of the "main" scenario of this process - this number includes also alternate activities, handling errors and unusual situations etc.

