Actors:

1. Manager:
   A manager is allowed to modify the system's state, create and view statistical reports. A manager can perform all actions on the system.
2. Waiter:
   A waiter can add a dining group to the DB, take his order and its later modifications, and perform cashier operations.
3. Bartender:
   A bartender receives tasks from the main system and prepares drinks accordingly. He is also required to inform the system when a drink is ready. Responsible of updating the system in case a certain dish can't be prepared at a certain time for any reason.
4. Cook:
   A cook receives tasks from the main system and prepares food accordingly. He is also required to inform the system when a dish is ready. Responsible of updating the system in case a certain drink can't be prepared at a certain time for any reason.
5. Confectioner:
   A confectioner receives tasks from the main system and prepares desserts accordingly. He is also required to inform the system when a dessert is ready. Responsible of updating the system in case a certain dessert can't be prepared at a certain time for any reason.

Use Cases:

1. Accept new diners:
   When a diner group (or single diner) arrives at the restaurant, a waiter accepts the group and records the number of guests in the system (and the time they arrived).
2. Order meal:
   Waiter receives an order and inserts it into the system. Order is then interpreted and relevant tasks are issued and sent to relevant employee.
3. Prepare dish:
   Cook prepares food / bartender prepares a drink / confectioner prepares a dessert and notifies system when done. Also updates availability of a dish if needed.
4. Deliver order:
   Waiter is informed that an order is ready to be served, and delivers it to diner's table.
5. Modify/cancel order:
   Diner changes his mind about an order and updates the system with new/cancelled item, or variation change of menu item. A message is sent to relevant employee to initiate or abandon progress, or make necessary changes.
6. Perform payment:
   Waiter provides diner with the check. Diner pays with cash or credit card, relevant operations on cashiers are performed by waiter.
7. Get statistics report:
   Manager initiates a request for statistics. Relevant information is gathered, formatted and displayed on screen.

8. Update system:
   Manager updates the system with changes made (for example new dish). This use case is the “init” if it is the first use of system.

Use Case 1:

Name: Order meal.

Actors: Waiter.

Goal Description: The diner orders required dishes in meal.

Reference to Requirement Document: 3.2

Preconditions: The relevant group of diners was seated (i.e. tracked in DB), system is initialized.

Description:

1. Waiter receives order from client (food / beverage / dessert), with all their requested specifications.
   (The system is not aware of this action).
2. The waiter creates a new order, which will receive a unique order number, and a table number.
3. The waiter adds all the desired dishes to the newly opened order.
4. The system initializes all dishes:
   4.1. Checks the dish is not marked as “can’t be prepared”.
   4.2. Marks them as “not ready”.
   4.3. Assigns them to the relevant employee (=post).
5. The system sends messages to the relevant employees regarding the new dishes.
6. The system updates the table’s account.
7. The system adds the order to the statistics DB.
8. The system displays a message stating that placing order procedure is done.

Postcondition:

Success - The order was placed and was recorded by the system.
Failure - No orders were placed.

Variations:

1. A certain dish can’t be prepared - success.
   (Displays message stating that the dish “can’t be prepared”, but still accepts all dishes that can be prepared).

Exceptions:

1. An electrical power interruption: failure.
2. A network interruption: failure.

Use Case 2:

Name: Get statistics report.

Actors: Manager.

Goal Description: Create a statistics report as requested by manager.

Reference to Requirement Document: 3.7
Preconditions: System is initialized, Manager is logged in to system.
Description:

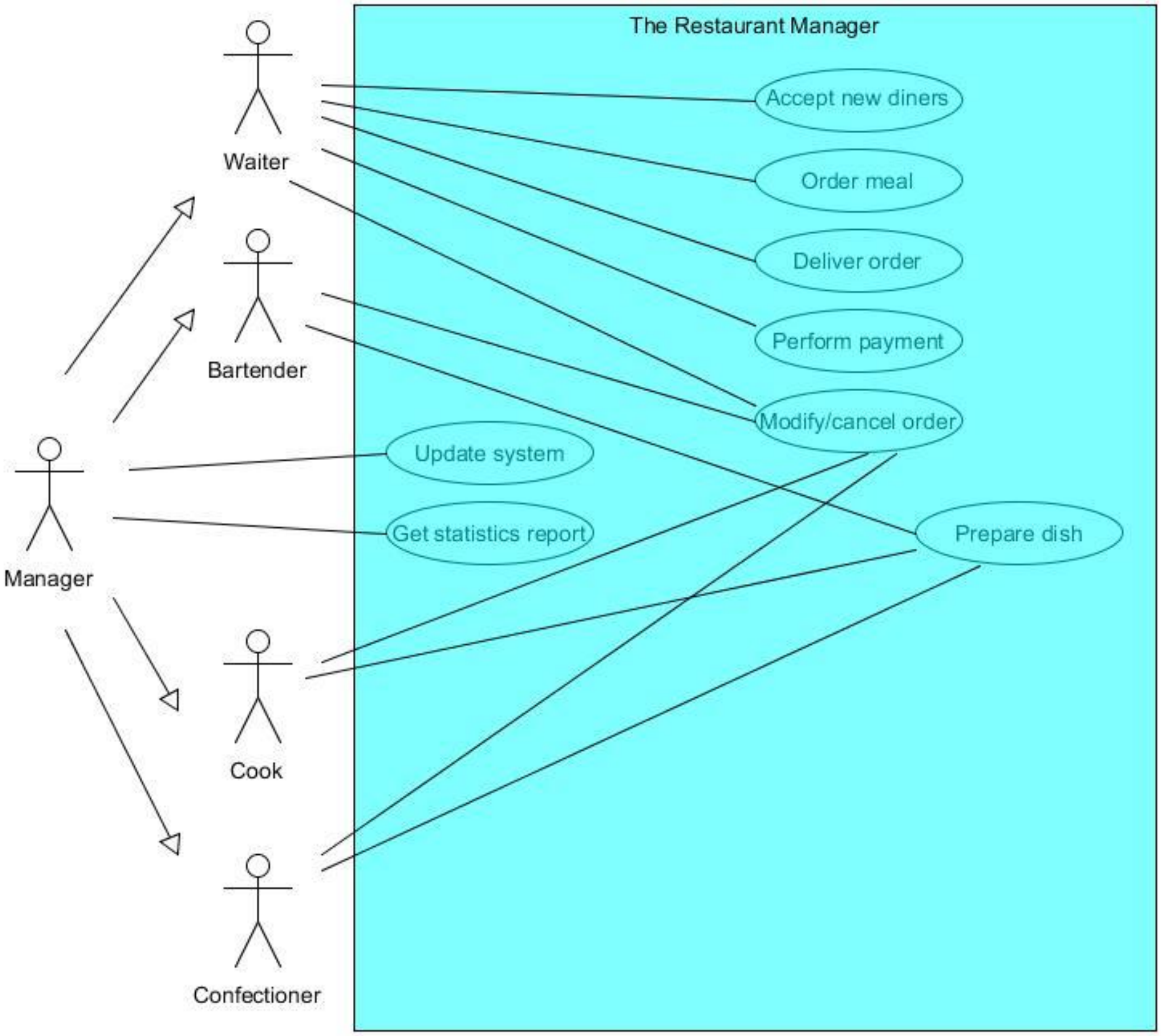
1. The manager requests the list of possible statistics reports.
2. The system displays the list of possible statistics reports.
3. The manager selects the desired report.
4. The system creates and initializes the desired report.
5. The manager adds needed parameters /inputs (for example desired time slice).
6. The system accesses relevant data in the DB, and updates the report.
7. The system displays the requested report on screen.

Postcondition:
Variations:

1. The manager wants one of the “commonly used” reports - success.
   (If so - no need to request the full list of tests, but immediately presses the button for the desired report, and continue from section 5).
2. There is no relevant data for report - success.
   (Report is handed out with empty lines + displays a message stating there is no relevant data).

Exceptions:

1. An electrical power interruption: failure.
2. A network interruption: failure.


The Restaurant Manager
Waiter
Bartender
Manager
Cook
Confectioner
Accept new diners
Order meal
Deliver order
Perform payment
Modify/cancel order
Update system
Get statistics report
Prepare dish