

Restaurant Use Case

Based on the following text:

1. Create the Use Case Diagram.
2. Specify the "Add Dishes to an Open Table" use case.

An important restaurant located in a tourist area of the city of Buenos Aires, facing a large volume of diners at all hours of the day, decided to implement a system that allows them to manage tables more effectively. This way, they no longer need to use "papers" to write down their customers' orders, and the kitchen will be informed of all orders through a screen on the same system.

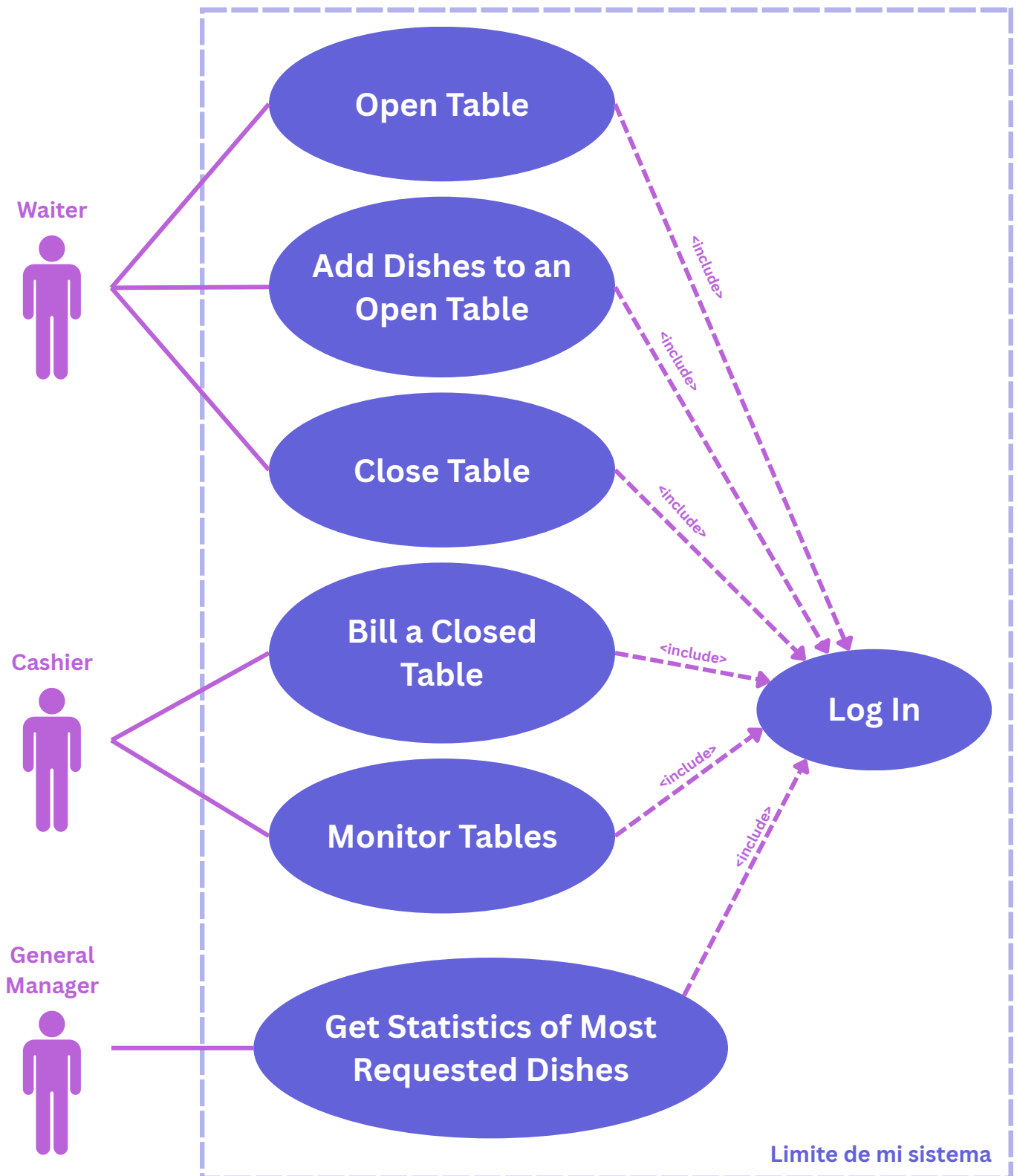
Each waiter at the restaurant, at the beginning of their shift, logs into the system by entering their employee number and password. Once the waiter logs in, the system will show them a menu with the possible actions they can perform. The waiter can open a table, add dishes to an already open table, or close the table. When opening a table, the number of diners must be indicated so that the system can calculate the number of place settings to charge at the time of closing.

If the waiter wishes to add dishes to an already open table, the system will request the table number. The waiter enters the table number. The system verifies that the table is open. If it's not, it shows a message indicating "You must open the table" and exits this menu option. If the table is open, the system will show a list of all available dishes from the restaurant (the same menu given to the customer). When the waiter selects a dish, the system will ask them to enter the requested quantity of the selected dish, along with any comments the customer may have made, such as a request for the dish to be prepared without salt or to be made quickly because they're in a hurry. After entering the dishes, the system shows a message for the waiter to confirm the entered dishes. If the waiter doesn't confirm because they entered some data incorrectly, the system goes back to showing the menu with all the available dishes from the restaurant. If the system verifies that the dishes have been confirmed, it records the order, and the requested dishes automatically appear on the kitchen screen.

The restaurant's cashier can monitor all the tables in the dining area and invoice customers once the tables are closed. To do this, they must be logged into the system (employee number and password).

Once a month, the general manager of the restaurant will log into the system using their employee number and password and obtain statistics on the most requested dishes. This is so they can create promotions for those dishes the following month and thus attract more customers to the establishment.

Use Case Diagram



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| Use Case | | Add Dishes to an Open Table |
| Actor | | Waiter |
| Description | | The waiter enters dishes requested by diners at an open table. |
| Precondition | | --- |
| Functional Requirements: | | <ul style="list-style-type: none"> • The system must allow the addition of dishes to an open table. • The system must be able to verify the status of the table. • The system must be able to verify the confirmation of the dishes being entered. • The system must be able to communicate the list of pending orders to the kitchen. |
| Non-Functional Requirements: (Mentioned in text and suggested) | | <ul style="list-style-type: none"> • <u>The system must be able to communicate the list of pending orders through a screen in the kitchen.</u> • The system must be available and operational at all times during the restaurant's opening hours. • The information on the kitchen screen must be clear and legible for all staff. |
| Normal/Main Flow | | Alternative Flow / Exceptions |
| 1 | The "Log in" Use Case is executed successfully. | |
| 2 | The system requests the table number. | |
| 3 | The waiter enters the table number. | |
| 4 | The system verifies that the table is open. | 4.1 The system verifies that the table is not open. 4.2 The system displays the message "You must open the table". 4.3 End of Use Case. |
| 5 | The system shows a copy of the list of available dishes. | |
| 6 | The waiter selects a dish. | |
| 7 | The system asks to enter the quantity and customer comments. | |
| 8 | The waiter enters the quantity and customer comments. | |
| 9 | The waiter indicates they have finished entering dishes. | 9.1 The waiter has not finished entering dishes. 9.2 Go to step 5. |
| 10 | The system displays a message to confirm the entered dishes. | |
| 11 | The waiter confirms the entered dishes. | 11.1 The waiter does not confirm the entered dishes. 11.2 Go to step 5. |
| 12 | The system saves the dishes, their quantities, and comments, the table number, and the waiter in charge of it in an order. | |
| 13 | The system adds the order to the kitchen's pending list. | |
| Postcondition | | --- |