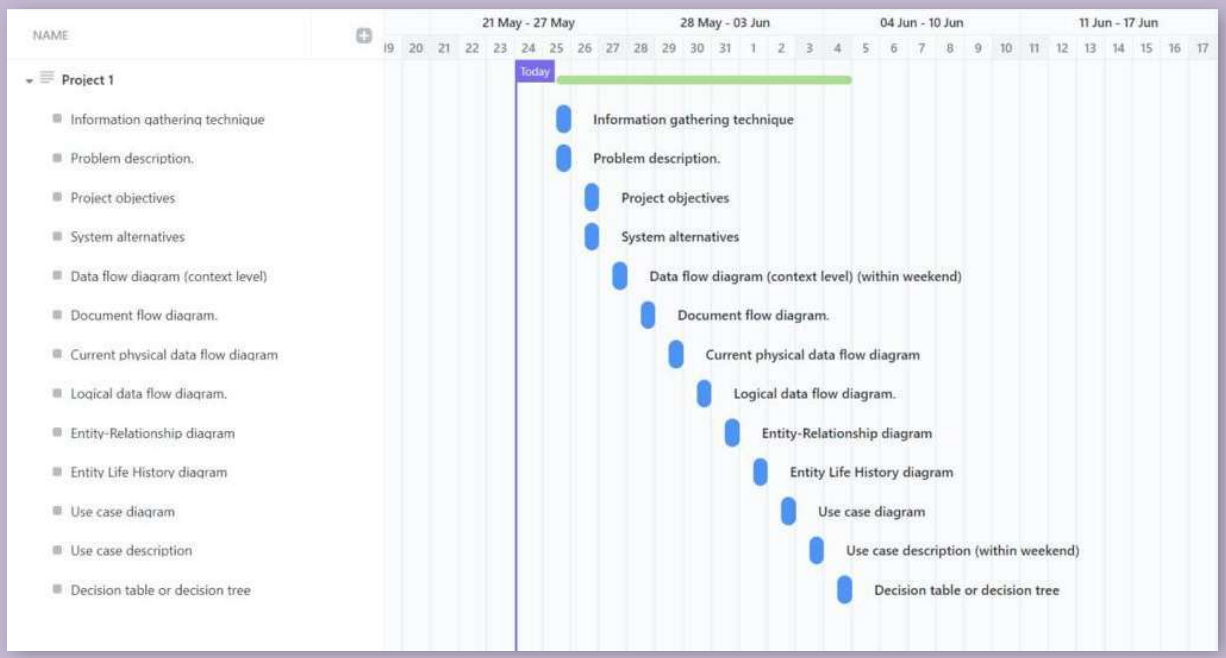
Project Formation

The housekeeping department is the backbone of the hotel and has the biggest impact on the reputation of the hotel, because it deals directly with the guest throughout his stay in the hotel.

Housekeeping management is a system for managing the Housekeeping department in Address hotel, And It is a section that deals with several other sections in the hotel, Like Laundry, restaurant, And of course cleaning the rooms in general (Housekeeping), All these services to meet the requests of the guest and ensure his comfort.

- **Project scheduling plan**



Feasibility Study

- **Information gathering**

So, to collect the information we need about Housekeeping management system, we communicate with one of the department staff, to collect the information we need, and which is outside our previous knowledge, by sending a questionnaire containing 9 questions using the funnel structure.

The questions :

1 - What are the main sections?
2 - What is the name of the procedure or actions taken by each department since receiving the request from the employee who received the request from the guest until the guest's request is fulfilled?
3 - What is the mechanism for registering guest orders?
4 - Is there a specific way to determine who should be contacted to fulfill the order?
5 - What is the mechanism of communication with the authority responsible for the orders?
6 - What are the types of orders that may reach the laundry?
7 - Is there anything you would like to add about the laundry?
8 - Are there orders rejected?
9 - What are the most requested orders?

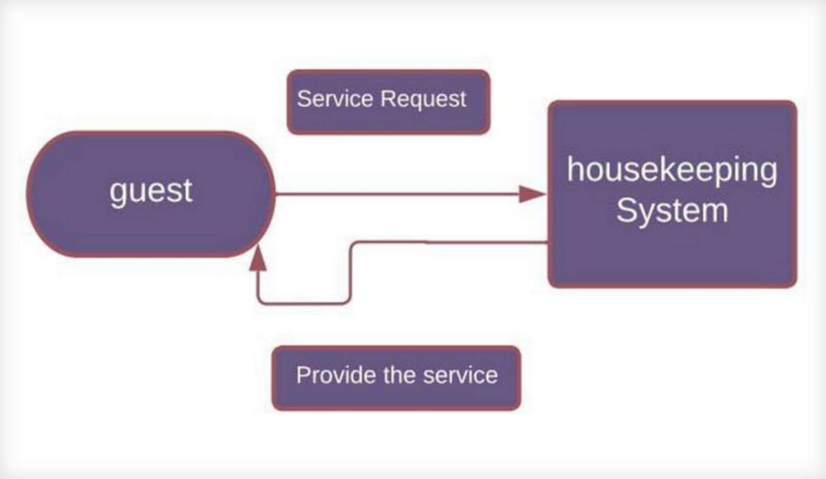
- **Some scenarios describe the system**

First, as long as the guest is in the room, the status of the room is (**OD - occupied and dirty**), and when the room boy cleans the room, it is changed to (**OC - Busy and Clean**), unless the guest puts a Do Not Disturb sign, Then the cleaning is postponed while leaving a note stating that the housekeeping department found the ("**Do Not Disturb**") sign and that the housekeeping department is on duty (of course the late night is an exception), The status recorded in a sheet carried by the room boy, and the room will be check again in the next cleaning round.
The housekeeping department will be reject the cleaning request on the same day of check-out.
And when the guest is Check-out, It turns to (**VD - Vacant and Dirty**), Then room boy will clean it in a deferent way to make it ready for Check-in And turns to (**VR - Vacant and Ready -** Room is Vacant and Ready for Check-in).

When the guest wants to request something such as pasta, for example, he will call the room service, the order taker will respond to him and will record the order on the list of orders information in the system (Opera) on the computer, then the restaurant employee updates the list in the system until the order appears and then sends the order to the cook until the order is processed, then the boy delivers the order to the guest's room.

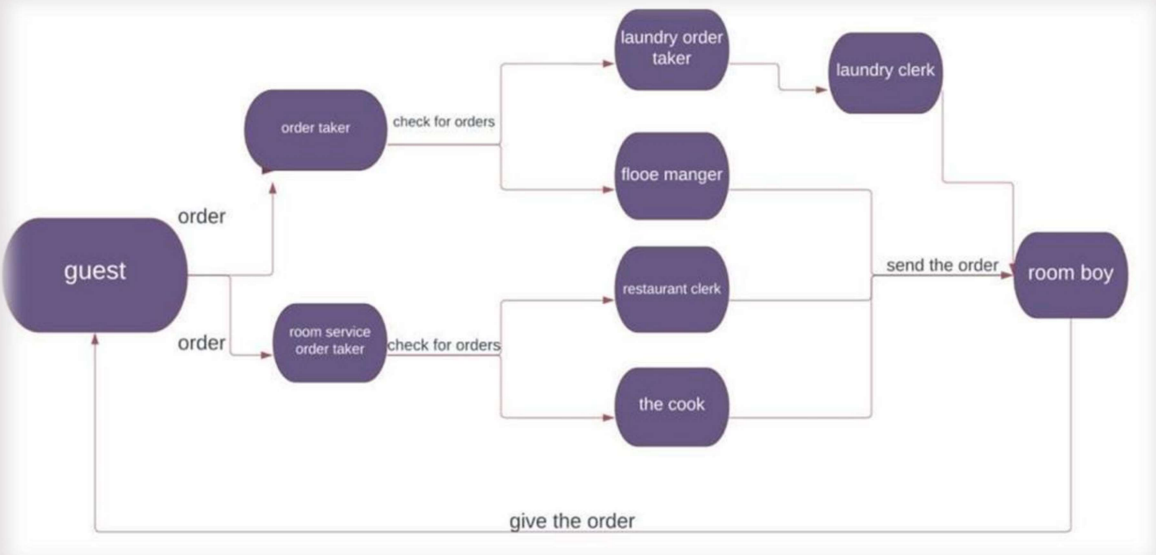
Data Flow Analysis

- Data Flow Diagram

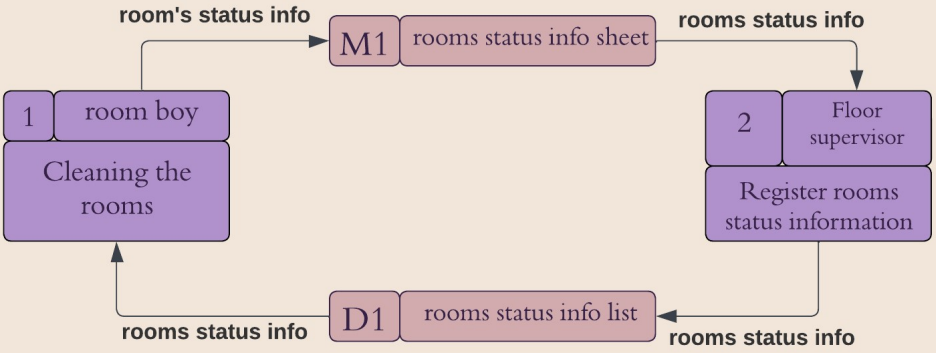


In context diagram shows the system in general, the guest requests an order and the order is provided.

- Data Flow Diagram

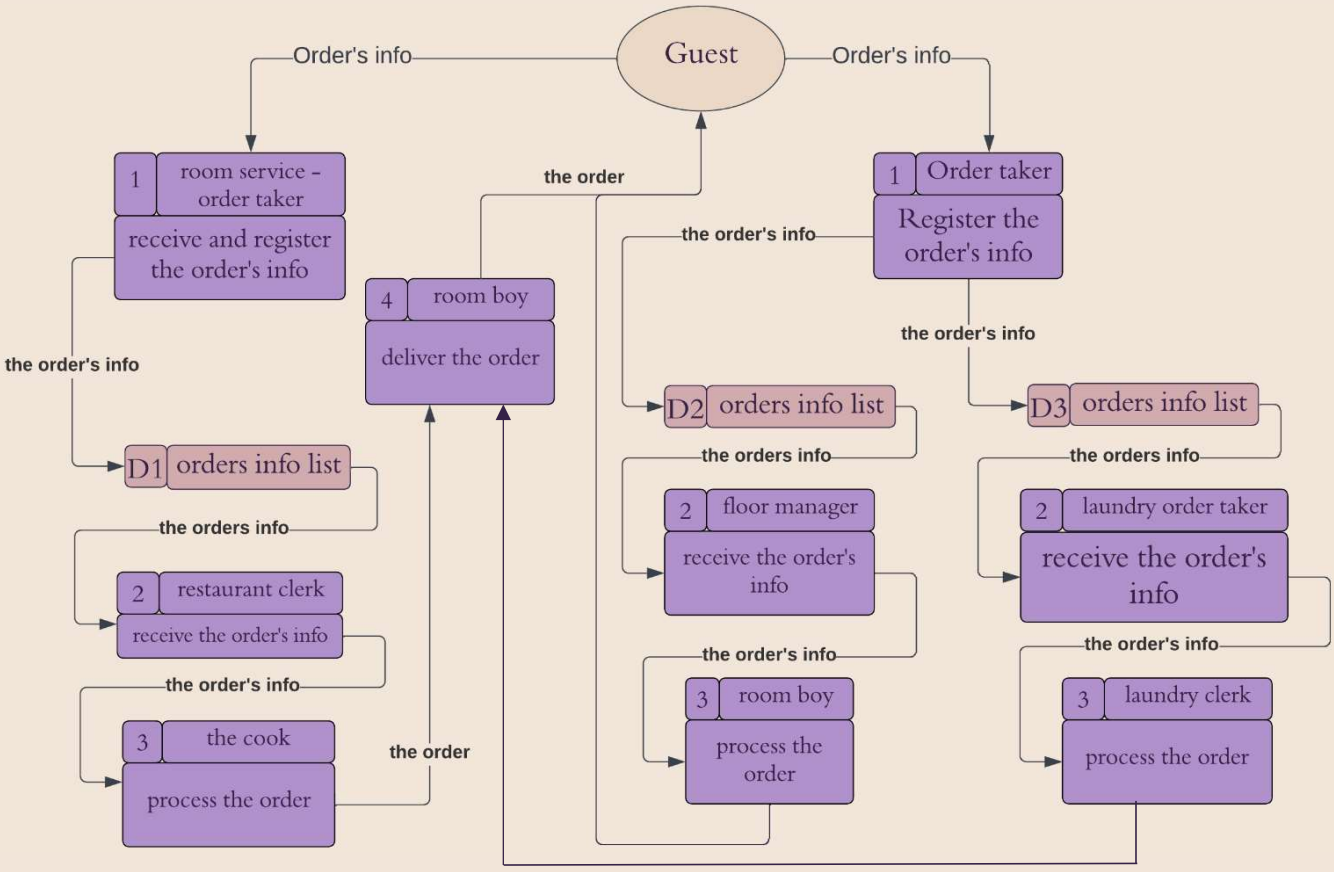


- **Current Physical Data Flow Diagram (1)**



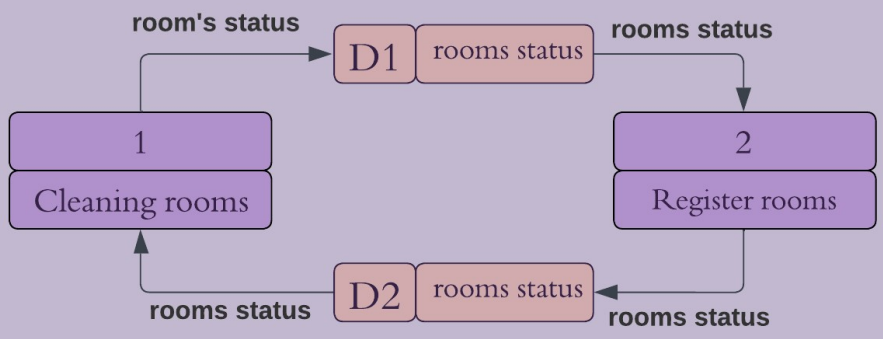
This diagram explains how the rooms are cleaned daily.
The room boy reviews the list of rooms status to start the cleaning cycle and then records the room conditions on a sheet of paper that he carries with him during the cleaning cycle.

- **Current Physical Data Flow Diagram (2)**

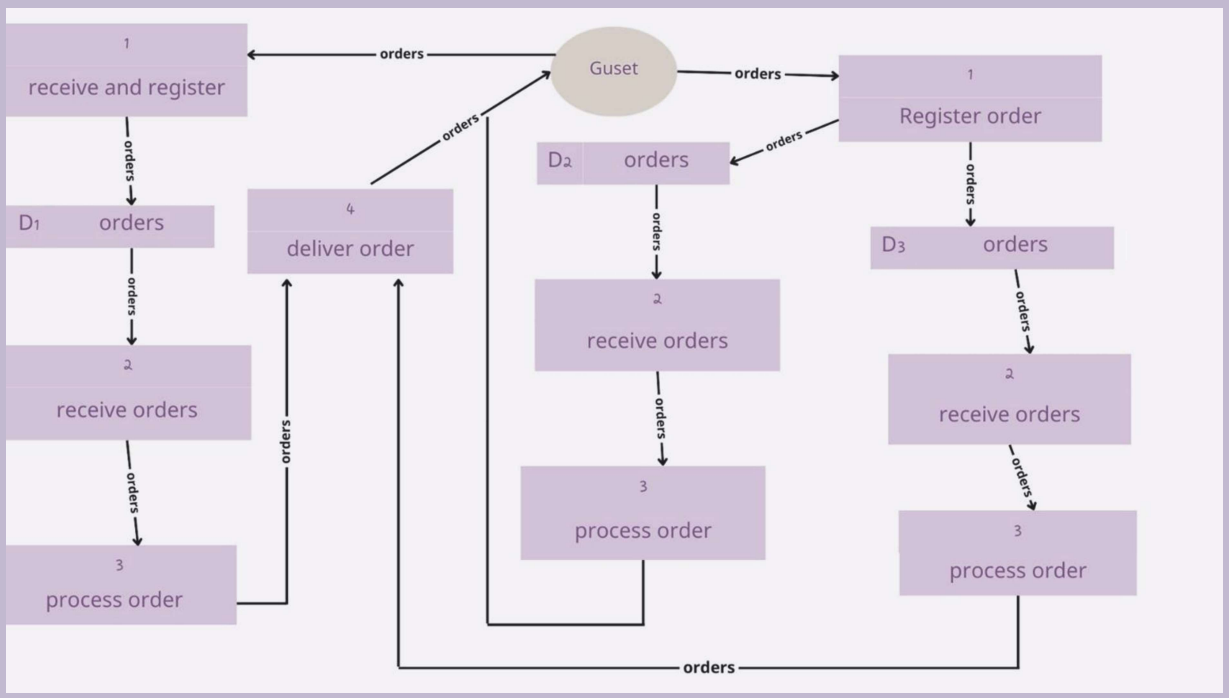


The phone in the room will have a list showing the guest who is the appropriate department for the order he want.

- **Logical data flow diagram (1)**

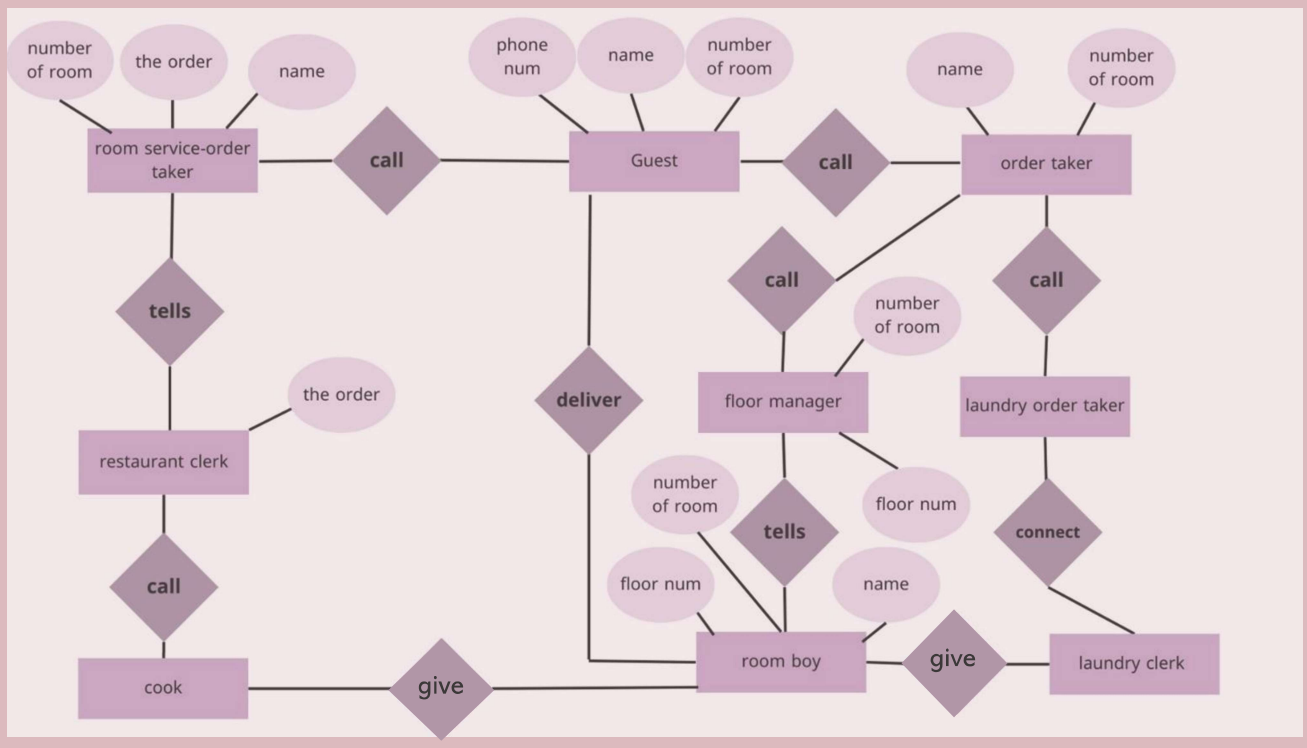


- **Logical data flow diagram (2)**

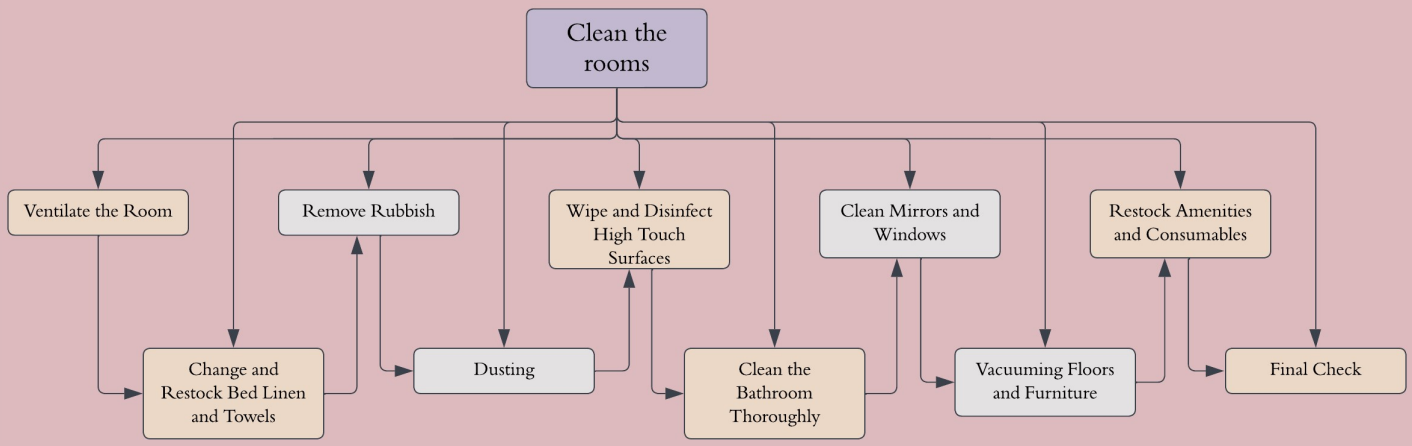


Conceptual Analysis

- **Entity-Relationship diagram**

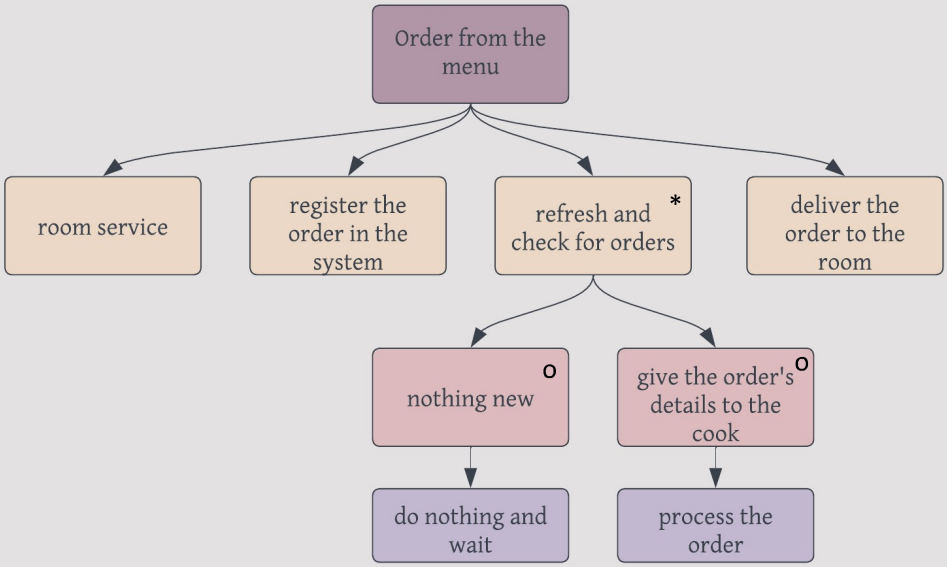


- **Entity Life History diagram (** Clean the room and make it ready for check-in **)**



When the guest check-out the room's status become (**Vacant and Dirty**) so room boy must clean up the room in a complete way to get it ready to check-in, So there is a **specific** way to do that.

- **Entity Life History diagram (** When the guest requests something from the restaurant to his room**)**

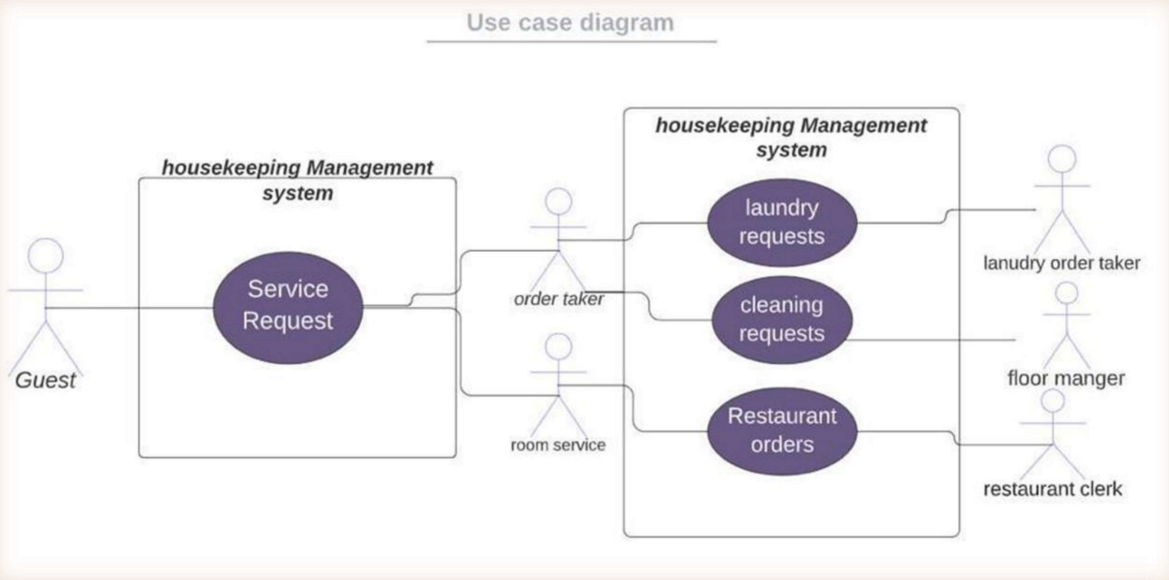


The restaurant has time limits and specific times for receiving orders, and orders outside this range are rejected.

- **Entity Life History diagram (** Laundry cleaning steps **)**

Processes Analysis & Specification

- Use case diagram



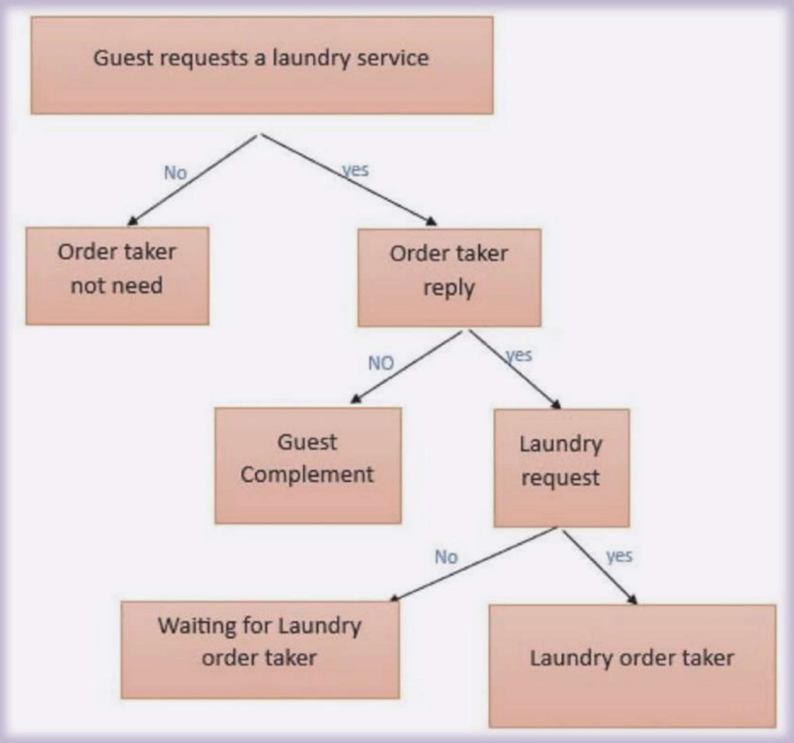
- Use case description

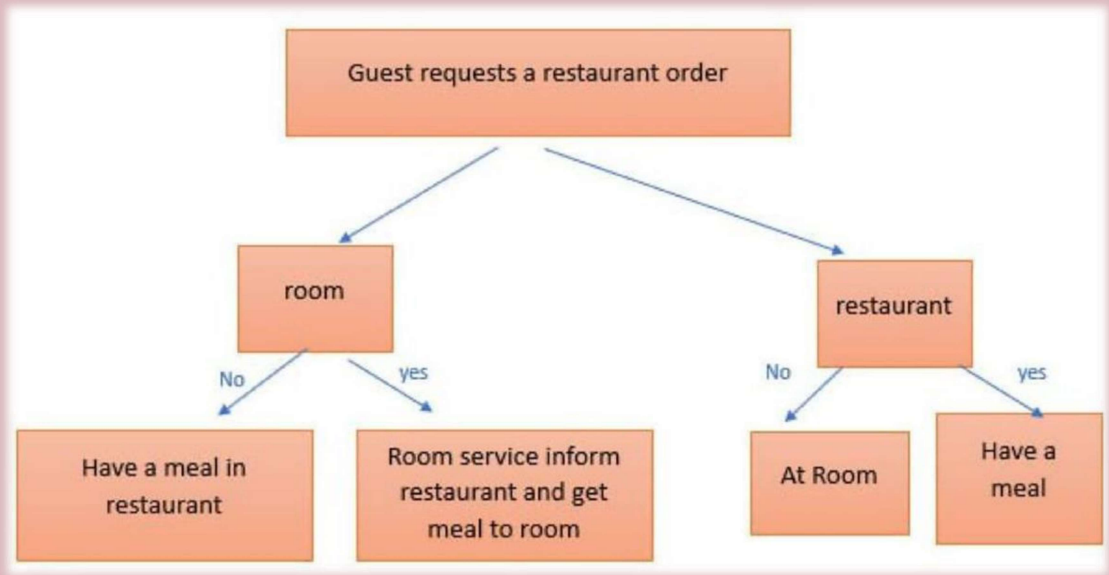
Use Case:	Service request
Purpose:	The order taker gets the order to do.
Require	The Guest will receive a notification on what tasks and which rooms need attention
Event Flow:	1-Guset can inform from his request 2-Either order taker or room service take order 3-classifying the order and execute it in suitable position
Success:	Order taker can be available to take another guest order

Use Case:	Cleaning Request
Purpose:	Clean the room of the guest
Require	guest will the “request” to order taker to get housekeeping to clean room.
Event Flow:	1- Guest transfer message to order taker. 2- Guest needs to clean its room. 3- The order taker communicates with housekeeping to inform him. 4- Housekeeping cleaning room and when finish he leave room.
Success:	The housekeeper available to another order.

Use Case:	Restaurant order
Purpose:	Guest wants to take a meal t room or in restaurant
Require	Guest informs order to room service.
Event Flow:	1- Guest tells to room service that he needs a meal 2- Room service make him to choose his favorite foods. 3- He decides to eat in room or in restaurant 4- Room service inform restaurant the guest order.
Success:	The restaurant finishes this meal and makes new meals to another guests

- **Decision tree**




Guest requests a restaurant order
room
restaurant
No
yes
No
yes
Have a meal in restaurant
Room service inform restaurant and get meal to room
At Room
Have a meal


Guest need cleaning room
No
yes
Do not inform anyone
Talk about room service
No
yes
Do not inform anyone
Inform floor manager for cleaning request