

# Catering Industry

## Stakeholders

ACTOR	What they can do on the software created
Employee/Customer	<ul style="list-style-type: none"><li>• They can order priorly before the lunch time.</li><li>• They can save their time.</li><li>• They can order as what they want to eat (multi cuisine).</li><li>• Can eat at their workstations with their own comfort.</li></ul>
Canteen Manager	<ul style="list-style-type: none"><li>• Can get the total order value/quantity early (before cooking), so food will cook accordingly.</li><li>• Reduction in wastage.</li><li>• Better quality.</li><li>• Helps them to find out the most ordering dish and least ordering dish, they can plan their menu accordingly.</li></ul>
Delivery Boy	<ul style="list-style-type: none"><li>• They can deliver according to floors/workstations.</li><li>• They can deliver the certain quantity at one time.</li><li>• They can deliver within the time.</li></ul>
Payroll system	<ul style="list-style-type: none"><li>• A list of employees with total Price of food items ordered for the specified period.</li><li>• Employee wise list of items ordered and price (date wise) which gets appended with salary statement for employees to check deduction</li><li>• A list of employees with dates enrolling and leaving the canteen ordering system</li></ul>
Management	<ul style="list-style-type: none"><li>• They can do forecasting with the help of most ordered and min ordered food and can prepare accordingly.</li><li>• list of employees enrolled or left.</li><li>• Total numbers of orders in a day.</li><li>• Monthly/weekly reports in terms of finance or quality.</li></ul>

## Problem Definition and Solution

- **Canteen:** Monthly Food wastage. Overcrowded Canteen. Inability to offer wide variety of menu choices. Shortage of dishes on any given day
- **CUSTOMER:** Wastage of time. Unavailability of dishes, choices of food is limited, shortage of dishes if you are late for lunch, Time flexibility

**Solution: A canteen ordering system with an option to eat meals at workstation at the specified time.**

**The ordering system will have following features**

- Order meals from the canteen menu to be delivered or in canteen at specified time
- Create, view, modify, and delete meal menus
- Register/deregister for payroll deduction – this is the pre-requisite for using the system. Only employees registered for payroll deduction can order meals
- Produce summarized order list for the day for canteen staff
- Produce floor wise delivery details for planning deliveries by delivery boy
- Booking for table space in canteen for 20-minute slots between 12 noon to 1pm for employees who want to eat in canteen. To be implemented for 50% capacity initially. 50% space to be left for employees bringing their own lunch
- Produce ingredient lists for meals ordered
- Provide system access through Intranet or Internet access for authorized employees/canteen staff

### **Advantages and Objectives**

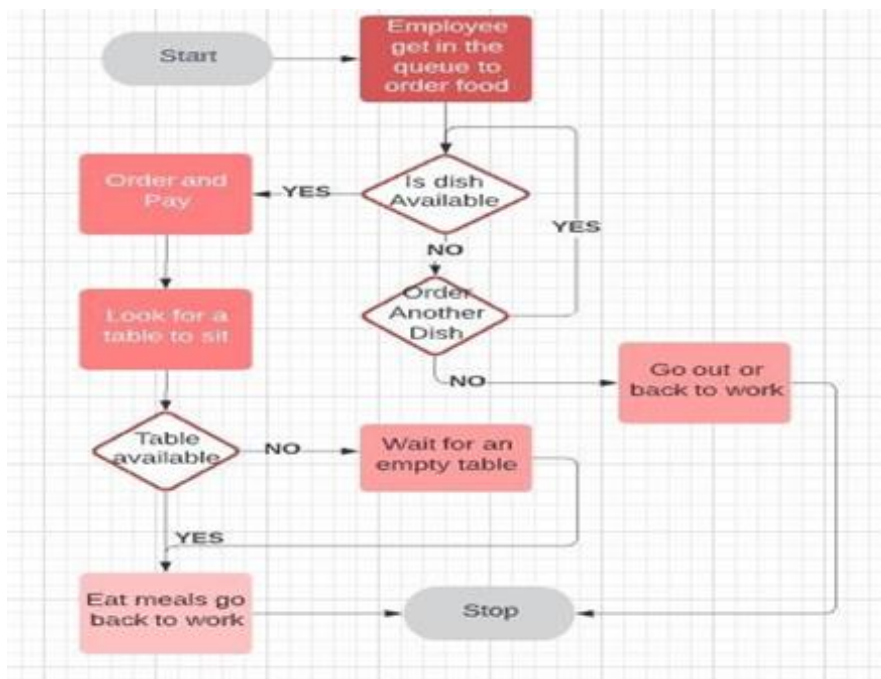
Advantages of the Canteen Ordering System:

- **Canteen:** Helps in predicting the monthly inventory and reduce wastage of food. De-clogging of the Canteen space. Faster better customer service, hassle free collection of payments,
- **CUSTOMER:** Saves Time, ease of ordering no ques, option of eating at workstation or Canteen, Variety of Cuisines availability, Time flexibility, ease of payment.

**Objectives:**

- Reducing the time taken by employees for having lunch by 50%
- Increasing the cost efficiency of Canteen, the operating costs should get reduced by at least 15% in first year
- Enhancing operating efficiency of Canteen resulting in reduced manpower.
- Making canteen a food efficient system with minimal wastage.
- At least 30% reduction in food wastage in the first 6 months of going live.

## Existing System

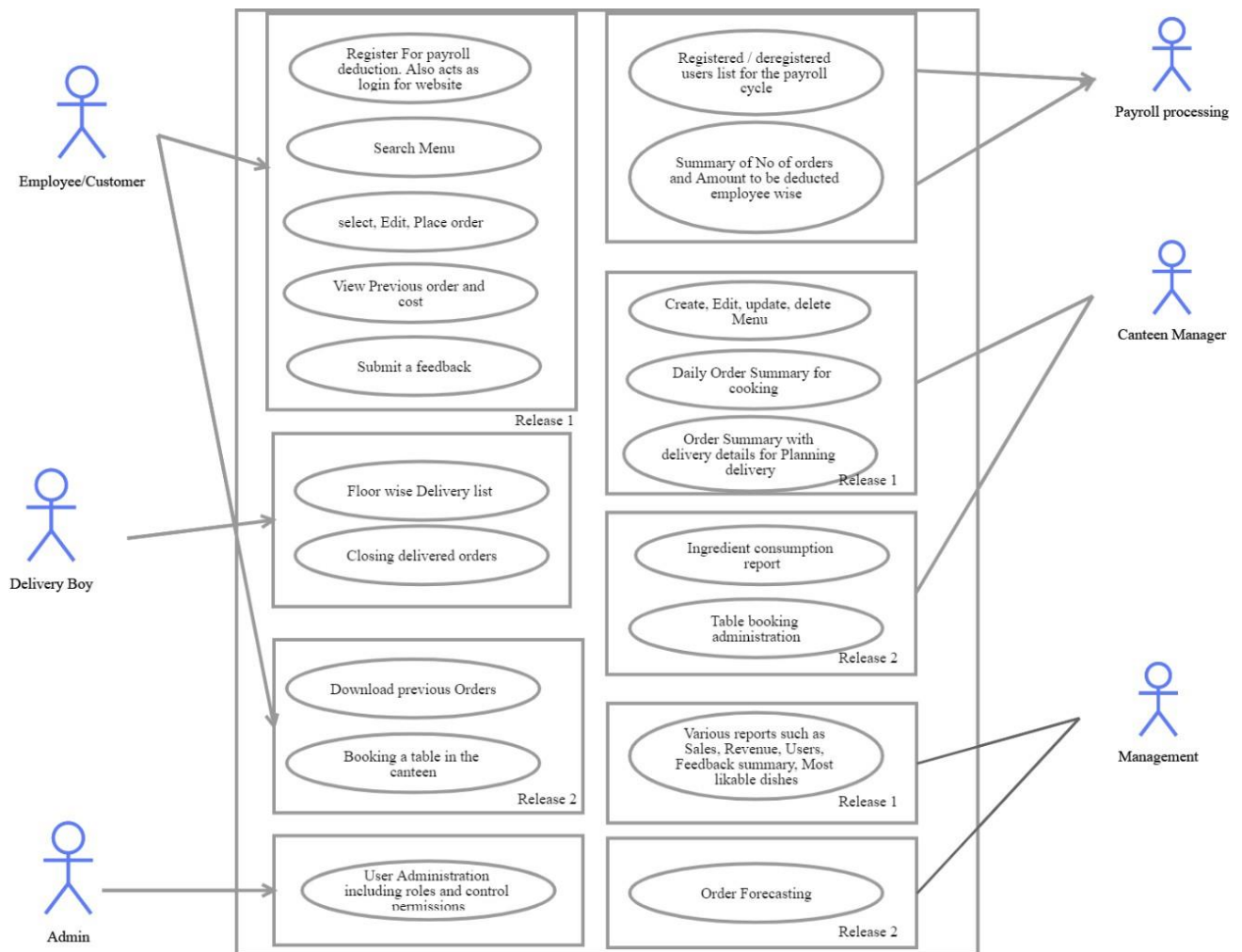


## Proposed System

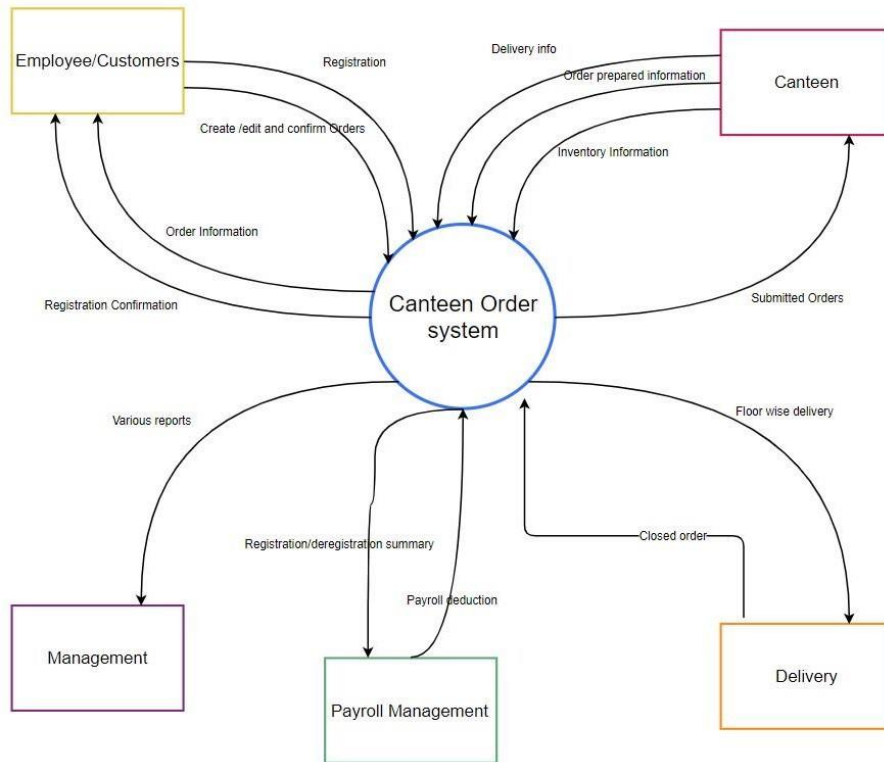
What is the proposed solution or system? Mention in points how the system itself will be for the user.

- User friendly interface
- Enrollment through Salary deduction acceptance
- Ease of choice of Menu
- Can order more than one or a variety
- Can submit one or multiple order
- Can view previous order details including total costs
- Choice of eating at workstation or Canteen
- Management can control offers can be made easily over the Portal offering employees an improved experience.
- Enable cut off at selected time 11:00

## Scope using use case diagram (UML)



## Scope using context diagram



## Assumptions

- Existing canteen staff will continue to be there such as cooks, cleaners, helpers etc.
- Existing infrastructure will suffice for the transformed structure.
- Existing infrastructure will suffice for the transformed structure.
- Canteen servers can transform into delivery boys.

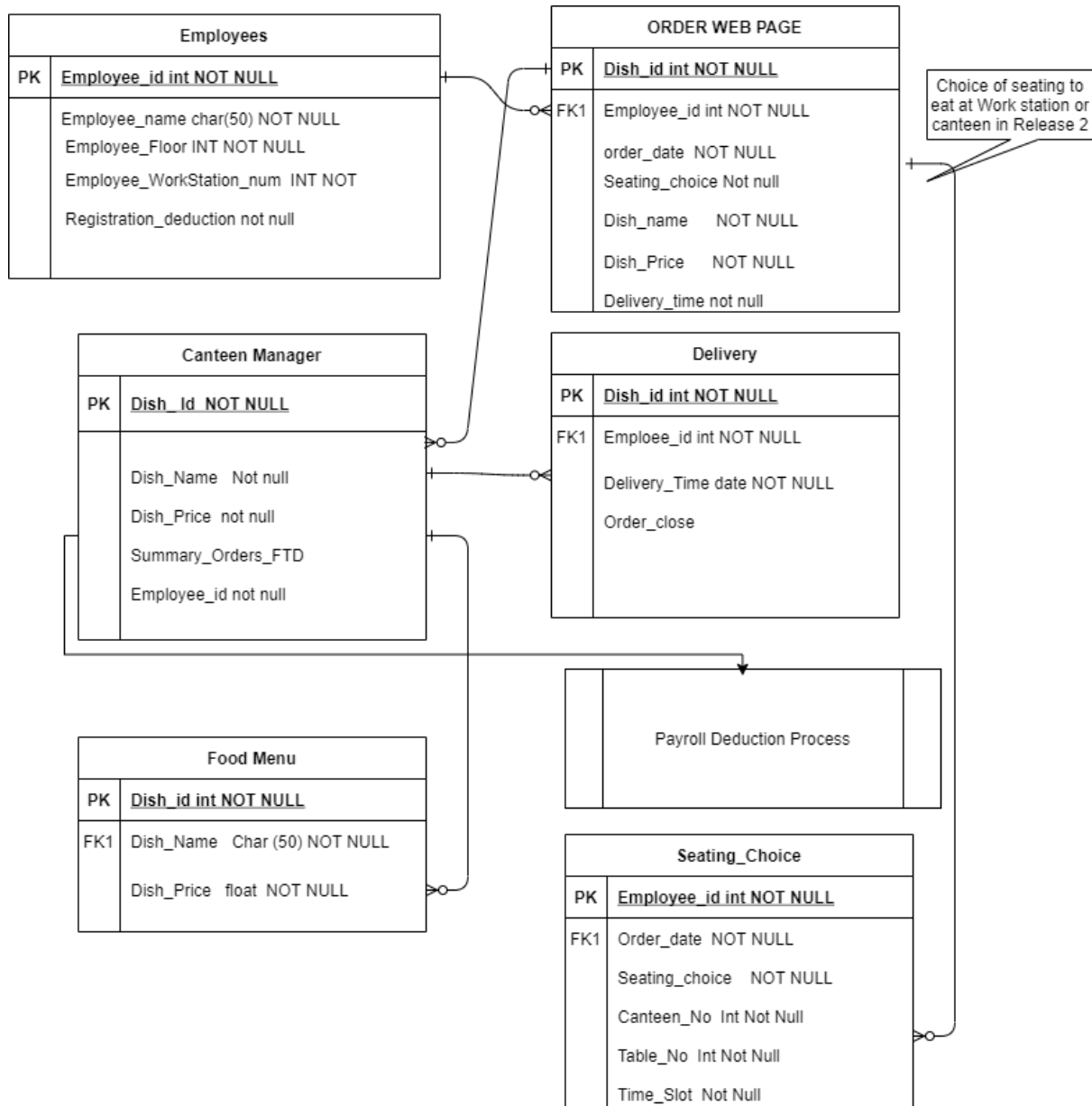
### **In Scope**

- Mention the name of features and what they are used for.
- Online ordering system is only applicable to Unilever UK office.
- Webpage shall capture food payroll registration, menu, order and feedback details.
- System shall support registered employee's information done via payroll system.
- System shall allow registered employees to login via company credentials.
- System shall allow entry and maintenance of menus.
- System shall allow consolidation and delivery of orders
- System shall support inventory and wastage management.
- System shall have Reporting module for required reports mentioned as part of detailed requirement.
- System shall have Payroll deduction information generation and maintenance.
- System shall capture Manpower utilization details.
- Application shall mark delivery post order delivery.

### **Out of Scope**

- Choice of location Canteen / Work station in release 2
- Registration module in Payroll system to enrol for the online food order facility.
- Online ordering system implementation at every location of Unilever Office in first release.

### **ER Diagram for the System:**



## Preconditions and Triggers: Example

- Precondition: User/Employee has an account and registered with the Salary reduction scheme
- Precondition: Manager has an account for Canteen System.
- The User/Employee should be able to select and click order effortlessly.
- The Manager should be able to get a list of summarized orders for the kitchen at 11:00
- The Delivery Boy should be able to get a list by predefined conditions (such as locale) at 12:00
- Trigger 1 is the Employee wanting to place an order in the Canteen System.
- Trigger 2 is the Canteen Manager wanting a summarized list of meals to cook.
- Trigger 3 is the Delivery Boy needing to pick up the meals, and details of where to deliver them.

### Basic Flow

- Employee places Order. Canteen Manager gets summary of Orders at 11:00.

Delivery Boy get meals and details of where to deliver them.

What are the data elements?

- Users, Menus, Orders, Feedback

In case of errors, what happens?

- Contact Support – Incident Management Process

## **Business Requirements:**

- Business Objective 1:
  - Reduce canteen food wastage by a minimum of 30% within 6 months following first release.
  - Scale: Value of food thrown away each month by examining the canteen inventory
  - Previous - 25% wasted
  - Must plan for: Less than 15%
- Business Objective 2:
  - Reduce canteen operating costs by 15% within 12 months, following initial release.
- Business Objective 3:
  - Increase average effective work time by 30 minutes per employee per day, within 3 months.
- Business Objective 4:
  - By making the ordering process automated and by delivering the food to the user's workstation, the canteen will be able to operate with lesser manpower.

## **Functional Requirements**

FR 1	Users should be able to create accounts, logon and have password recovery.
FR 2	An administrator should be able to assign roles to a User, which reflects their position. e.g. Canteen Manager, Delivery Boy, Management, User (Employee/Customer) and create Incident management process
FR 3	Salary deduction acceptance to act as login and employee uses his existing company credentials to login. Employee ID and Workstation Details as login details.



FR 4	Roles should have access only to respective modules: Canteen Manager Role – Amend Menus, create a variety of lists of Orders including for Delivery Boy User Role – Select a Menu and place an order. Provide feedback on the order. View past orders, accept/deselect salary deduction option Delivery Boy Role – View a list of Orders as defined by the Canteen Manager. Update an order to indicate delivered. Management Role – Generate Reports, have the capacity to have them send in email.
FR 5	Web Interface to be able to add/change/remove menus. This includes adding the price for the menu.
FR 6 Release 2	Inventory coming in to be recorded in the system and once order gets prepared the inventory is shown as consumed. All the wastage also gets recorded and updated in the system
Fr 7 Release 2	Table management for 50% canteen tables for employees wanting to eat in the canteen

## **Nonfunctional Requirements**

### **System Requirement:**

NF 1	Employees should be forced to change their password every pre-determined period
NF 2	Order Transactions or feedback should be traceable
NF 3	The application should be low-maintenance requiring minimal manual intervention
NF 4	Can be used using Company Authorised Browsers.
NF 5	Orders will be archived after a predefined period.
NF 6	System should be stable to take the load of 1500 logins and ordering
NF 7	Webpage should be light so that rendering is fast for browsing and order placing

### **Usability:**

NF 8	User friendly and self-explanatory user interface preferable with pictures
NF 9	Webpage should be available on Intranet as well as internet
NF 10	All employee can browse but only those who accept payroll deduction will be allowed to order
NF 11	All activities of current canteen system will stop on the day of Go Live of Web application

### **Environments**

Java code to be used as low in maintenance.

Wireframe:

Desktop - 1

Unilever Canteen Ordering System

Menu

Link to Payroll Payment

Indian

Veg (Accompanied with choice of Bread/Rice)

Paneer

Dal

Mix Veg

Bread

Rice

Non Veg

Butter Chicken

Chicken Fry

Chinese

Continental

etc

