Canteen Ordering System for Unilever Business Analyst

Course-end Project 1

Submitted by Yugandhar KB.

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Business analyst core concept model (BACCM):

Need	to have an online food ordering system for the employees which could save considerable time of the employees. Preferred/ordered food delivered to desk. And reduce the cost through waste reduction
Change	To automate the ordering system by making it online so that Canteen user gets to order meals online to get their choice of food
Solution	The solution required is of an online canteen ordering system, that will allow users to pre-order their meals, receive delivery of ordered items, and have meal costs deducted from their salary through payroll.
Context	● 1500 Employees ● 2 canteens -Canteen space was designed only for 150 employees & All of them seeking their meals within the 12-1pm window which resulting in waiting time of 30-35 mins ● Huge rush in the canteen during lunch hours resulting in employees wasting a lot of time waiting for tables to be vacant ● In addition, the unforeseen demand of the food items results in a wastage of food from the canteen
Value	The primary values that the new system aims to deliver benefits to different stakeholders in different manners. **a. To the employee** • Reduced waiting time • Availability of desired food item • Reduced travel requirement • Quality of work life and their productivity **b. To the Organization (or canteen)** • Reduce wastage • Advance notice to prepare ordered items • Cost saving

Requirement Classification Schema (RCS)

1. Business Requirements:

1. Management of the Canteen Ordering system online for the employees

2. Getting the food delivered to their respective workstations so that the average effective work time will be increased by 30 minutes.

3.The operating costs to be reduced by 15% within 12 months

4. Reduce the wastage of food by a minimum of 30% within 6 months of implementing the online food ordering system.

5. 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

Stakeholders

ACTOR	What they can do on the software created
Employee/Customer	● Employees should be able to order the preferred food from the menu displayed on the online food ordering portal with their respective prices.
Canteen Manager	● should be able to view the orders placed by the employees. ● should take an inventory check of all the dishes ordered by the employees and get them cooked by the chef. ● assign the delivery boys to their respective delivery locations.
Delivery Boy	● Should deliver the food to the employee's desk. ● should close the online customer order after delivery
Payroll system	● end of the month the payroll system shall calculate the total number of dishes ordered by each employee. ● The payroll system shall deduct money from the employee's salary
Management	● System usage history by employees ● Analysing for the most popular in the menu ● satisfaction of employees based on feedback, ● sales for each day, total monthly earnings and order forecasting

Task 1 – Identifying Stakeholders

This activity is carried out by using the RACI Matrix, as shown the table below. The table intends to convey the responsibility of each of the identified stakeholders

R- Responsible, A-Accountable, C-Consulted & I-Informed

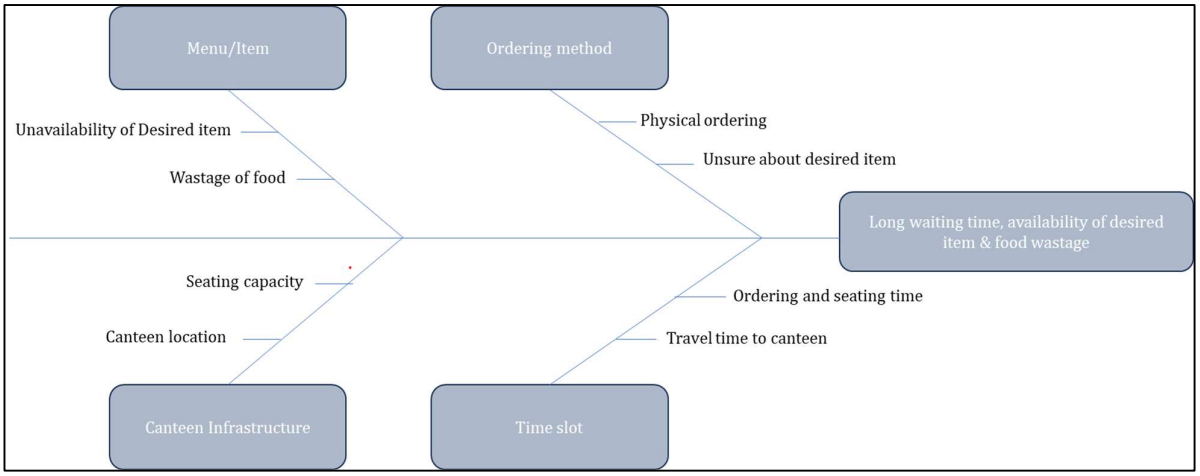
Stakeholders	Responsible	Accountable	Consulted	Informed
Supplier	**R**			
Business Analyst	**R**			
Project Manager		**A**		
Canteen Manager	**R**			
Canteen Chef/s	**R**			
Employees				**I**
Payroll team	**R**		**C**	
Delivery Team	**R**		**C**	
Technical team	**R**			
Senior management				**I**

Task 2 - Problem Definition and Solution

The problem is with the current canteen ordering and operation process. The existing process needs all the 1,500 employees of Unilever to have their lunch within the same window of 12 to 01 pm (one hour). In order to do this, employees need to spend about 10 minutes travelling to and from the canteen + 15 minutes ordering/collecting the food, and another 15-20 minutes waiting for a seat. Due to this bottleneck, the employees are also unable to get what they desire and are faced with items are out of stock by the time they reach.

In addition, the canteen is also been reporting a 25% wastage in food items due to unconsumed each month.

To help understand the problem better and their various source categories, a fishbone diagram is illustrated below.



Task 3: Identify objectives of New Canteen Ordering System-

Business Objective 1:
Reduce canteen food wastage by a minimum of 30% within 6 months following first release.
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.

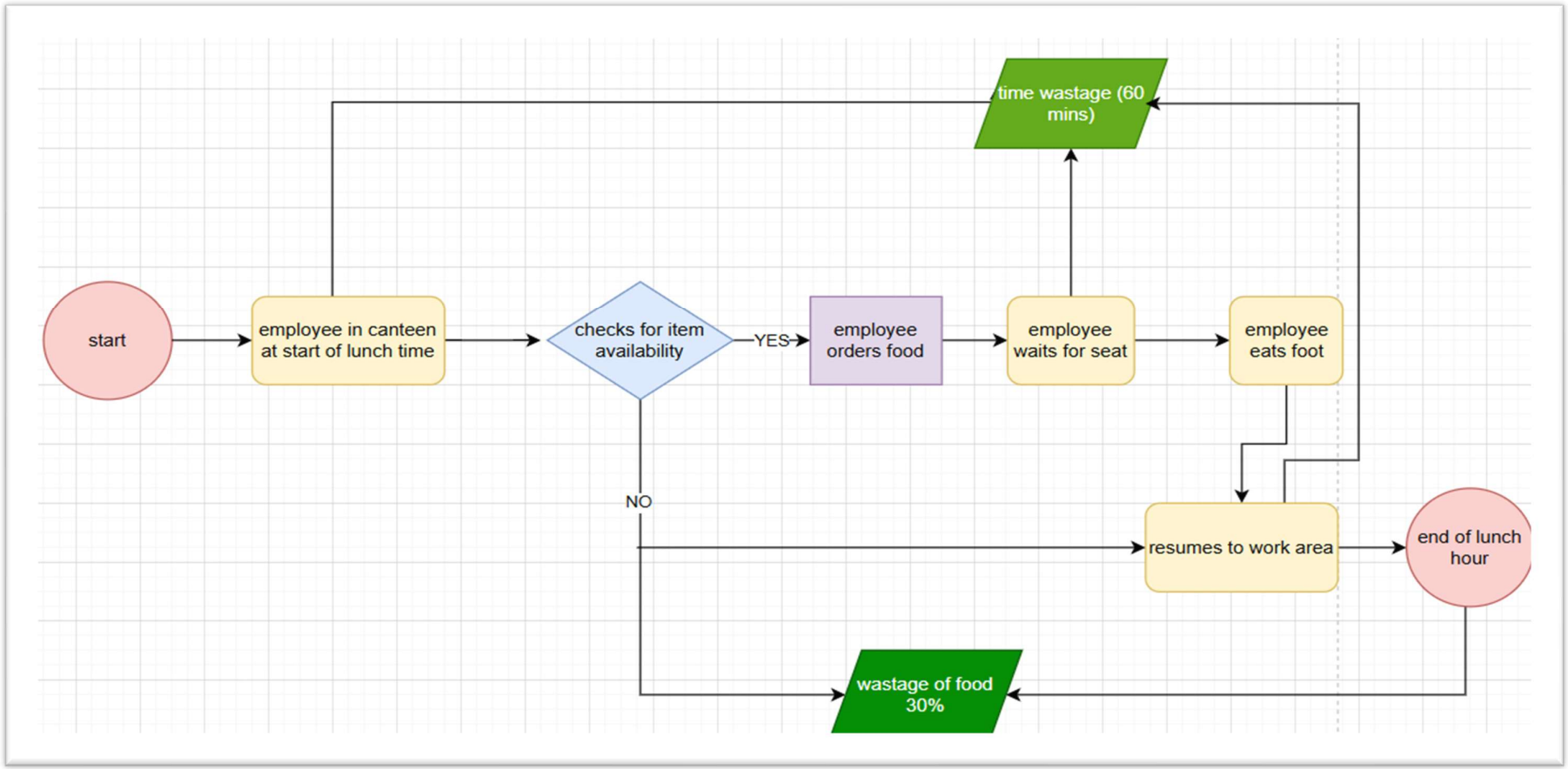
Business Objective 3:
Increase average effective work time by 30 minutes per employee per day, within 3 months.

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.

Task 4 - Existing and Future System Process Map

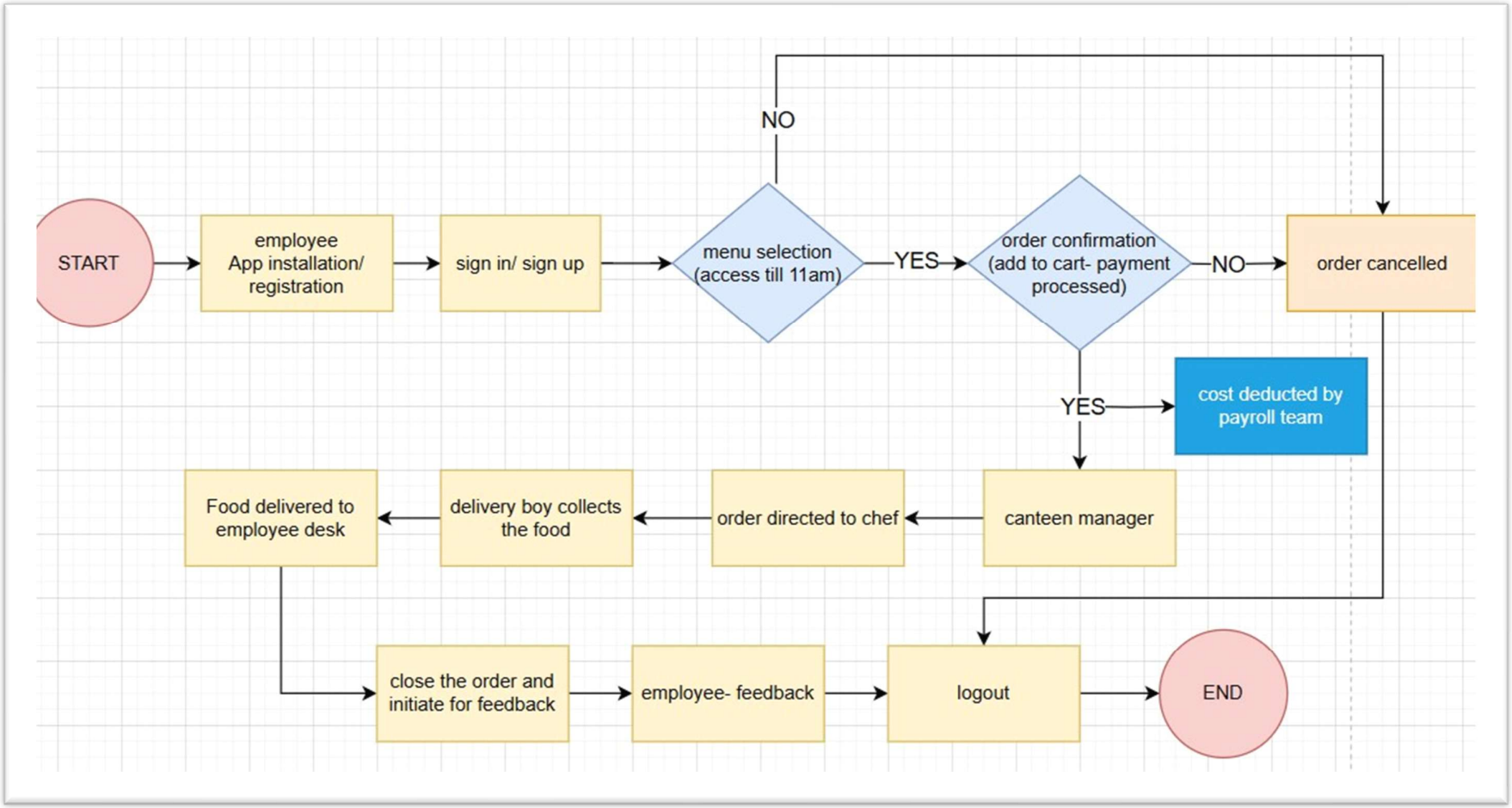
Existing process

The existing system, data collected and understanding of wastage are depicted using the below process flow



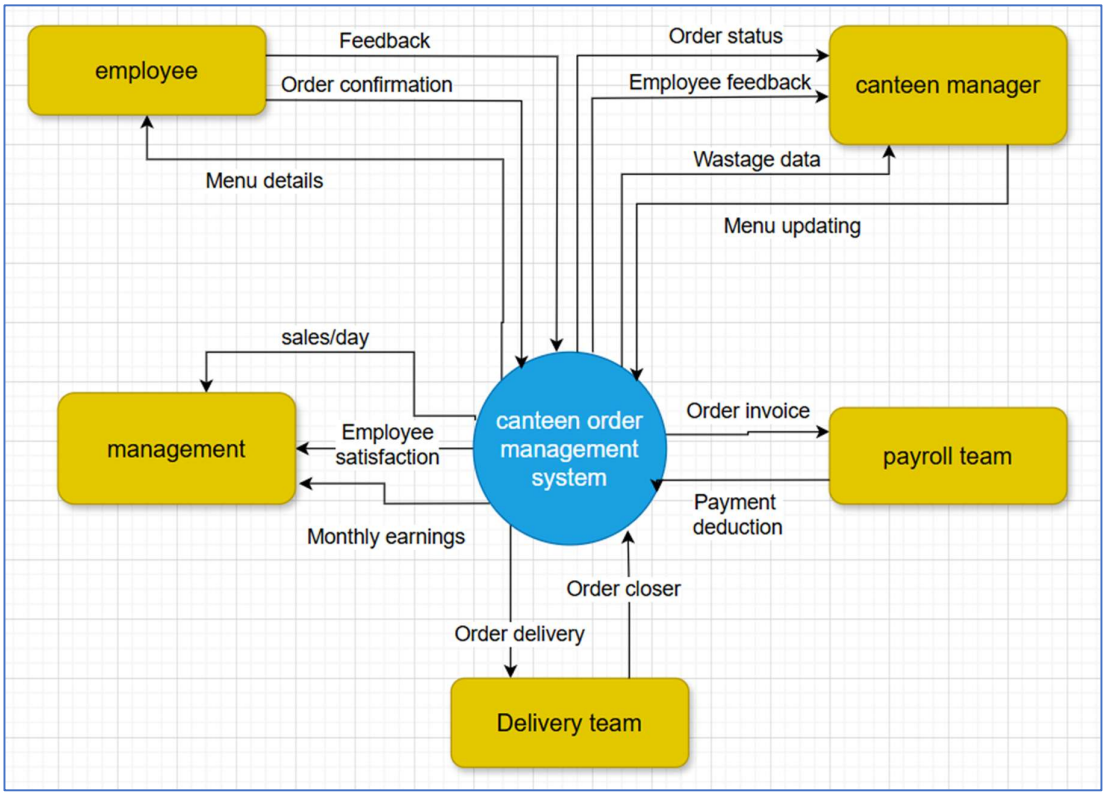
Future Process

The Future State system has been depicted using the below flow diagram.



Task 5 - Scope using use case diagram (UML)or Context Diagram

Below picture is a context diagram showing the interaction between various actors and functionalities expected from the Canteen Ordering System.



Task 6: Features to be developed:

1. Employee registration and login credentials

2. Update the list of menus offered for the day

3. Employees must able to select and edit the order they prefer before confirmation

4. User will not be able to edit the order after the confirmation of the order on the system after 11 am.

5. The canteen manager collates the orders and assign to Chef for the preparation

6. Canteen manager also assigns a delivery associate to deliver food to the employees' desk

7. After delivering, delivery boy should close the order

8. The payroll system shall calculate the total number of dishes ordered by each employee. The payroll system deducts money from the employee's salary.

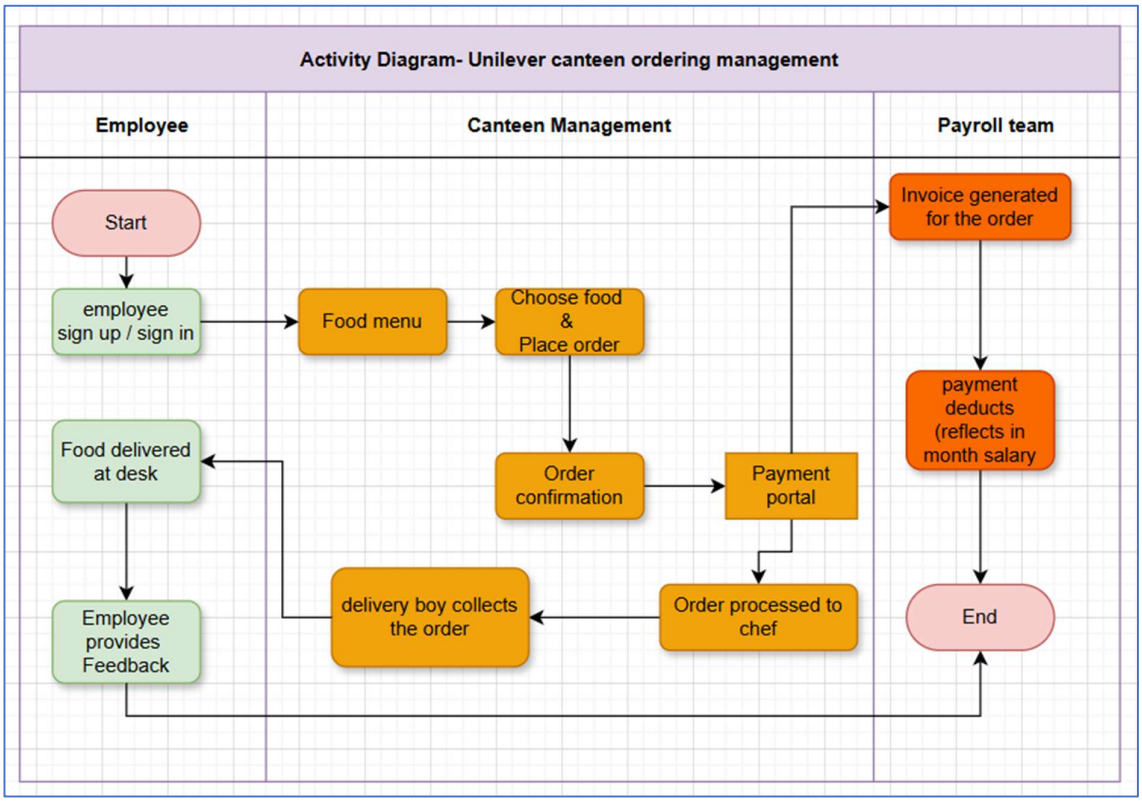
9. Generation of the reports and submit to the management

10. Feedback system for the employees regarding the order/system

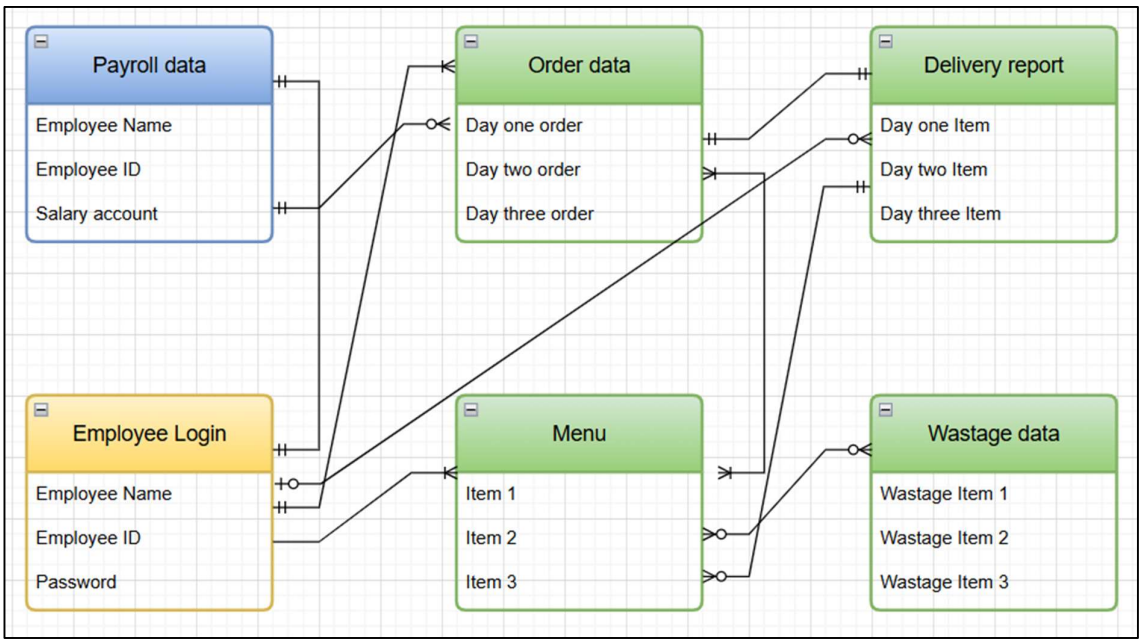
Task 7: in-scope and out-of-scope items for this software:

In scope requirements	Out of scope requirements
Employee sign up/sign in	Food vendor management
Menu page	Food supplies out of stock notification
Meal ordering screen	Canteen cost management
Order confirmation screen	Pre-Order requirement
Order status page	Refund Options
Meal delivery details	Raw material procurement
Close the order by delivery associate	Item out of stock
Monthly payroll adjustment	
Feedback submission	
Sales report for canteen management	

Task 8: Activity diagram for system:



Task 9: ER (Entity Relation) Diagram



Task 10 -Business Requirements:

Functional Requirements

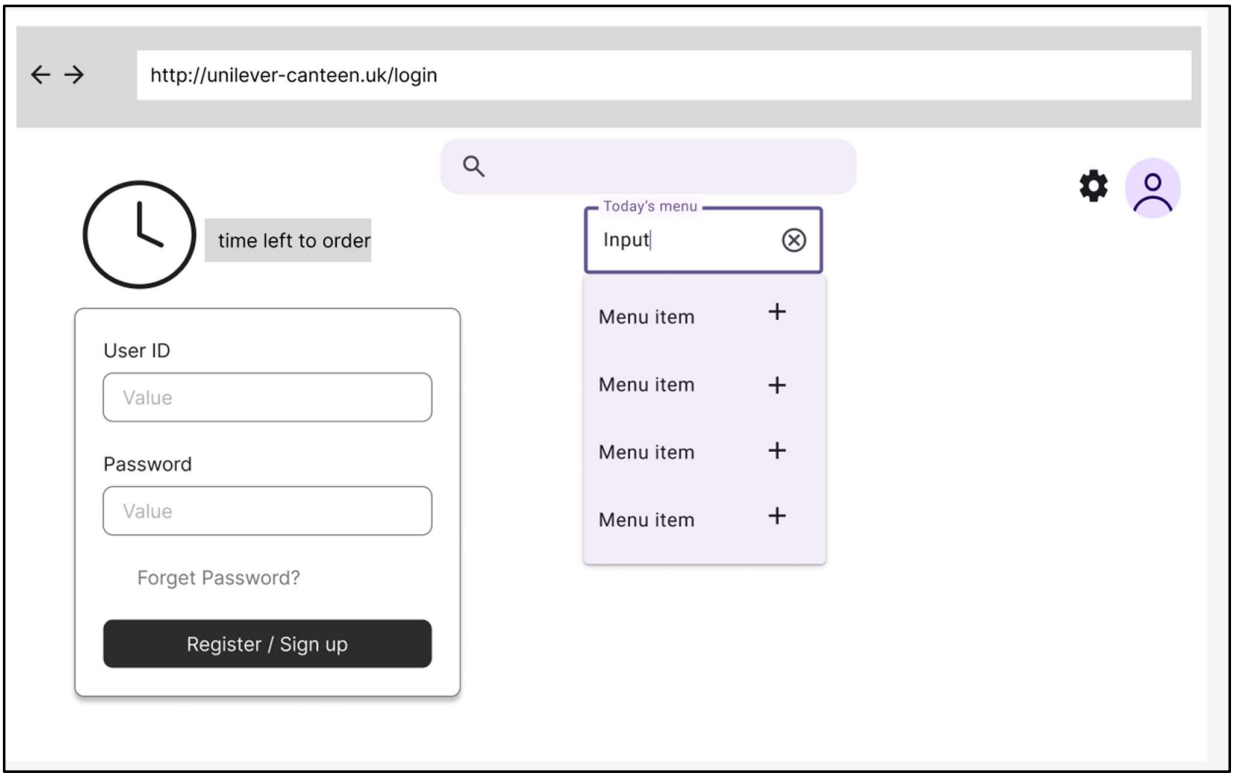
- Employee Registration
- Employee Login
- Menu to be updated before each day
- Order creation to be done within permitted window
- Preparation of total food quantity
- Delivery of food to individual employee
- Employee feedback to be collected
- Wastage to be reported and monitored
- Orders and monthly totals to be submitted to payroll for deduction

Nonfunctional Requirements

- System Requirement: Should be able to manage the required volume of 1500 employees and multiple menu items
- Usability: Should be fast, reliable and easy to use

Task 11: Wireframes for canteen ordering system:

Employee Login Screen



Employee menu selection screen