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# CANTEEN ORDERING SYSTEM FOR UNILEVER

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SIMPLILEARN PROJECT FOR CBAP

*SUBMITTED BY*

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# **1. Project overview and objectives**

## **1.1 Company overview**

Unilever is a British-Dutch MNC FMCG company, headquartered in London, England. Unilever is one of the oldest FMCG companies, and its products are available in around 190 countries.

## **1.2 Project Overview**

In UK offices of UNILIVER, Unilever had around 1500 employees which were spread across 12 floors. They had 2 canteens to cater to these 1500 employees. Each canteen could seat around 150 employees at a time.

Most employees would prefer to take their lunch between 12 noon to 1 pm. This led to a huge rush in the canteen during lunch hours resulting in employees wasting a lot of time waiting for tables to be vacant.

Management calculated that it took around 60 minutes for employees to go and come back from lunch. Almost 30-35 minutes were wasted in waiting in a queue to collect their food and get a table to sit and eat. However, the time spent eating was barely 10-15 minutes. The remaining 10 minutes were spent reaching and coming back from the canteen using the elevators.

Employees don't always get their choice of food they want because the canteen runs out of certain items. The canteen wastes a significant quantity of food by throwing away what is not purchased.

Many employees have requested a system that would permit a canteen user to order meals online, to be delivered to their work location at a specified time and date.

## **1.3 PROJECT OBJECTIVES**

### **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.

## **2. Project Tasks**

1. Identifying stakeholders – Create a list of stakeholders (as taught in Business Analysis Planning and Monitoring Knowledge Area)
2. Identify the problem statement in this system.
3. Identify objectives of the new Canteen Ordering System.
4. Create as-is and future process map (using flowcharts).
5. As a Business Analyst working on this project, find out the scope of the Canteen Ordering System. To find the scope you can use the case diagram (UML) or context diagram for the same.
6. Write down the main features that need to be developed.
7. Write the in-scope and out-of-scope items for this software.
8. Draw an activity diagram for the system.
9. Draw an ER diagram of the system.
10. Write out the business requirements, both the functional and nonfunctional requirements.
11. Draw wireframes or mock screens for any two of the features namely Menu Creation and any other feature

### **3. List of Stakeholders**

<b>Stakeholders list</b>	<b>Responsible</b>	<b>Accountable</b>	<b>Consulted</b>	<b>Informed</b>
Employees				I
Chefs	R			
Operational support			C	
Canteen manager	R			
Delivery boy	R			
Payroll Staff				I
Tester	R			
Implementation SME			C	
Project Manager		A		
Domain SME			C	
Business Analyst	R			

### **4. Problem Definition and Solution**

- Canteen serving 1500 employees at lunchtime between 12 pm -1 pm with 150 seating facilities. Therefore, the canteen is overcrowded
- Employees have to wait in long queues. This led to a waste of time and productivity
- Sometimes the canteen runs out of food.
- No option for employees to order their preferred food, it causes food wastage
- high operational cost of the canteen

#### **4.1 Advantages**

Advantages of the Canteen Ordering System:

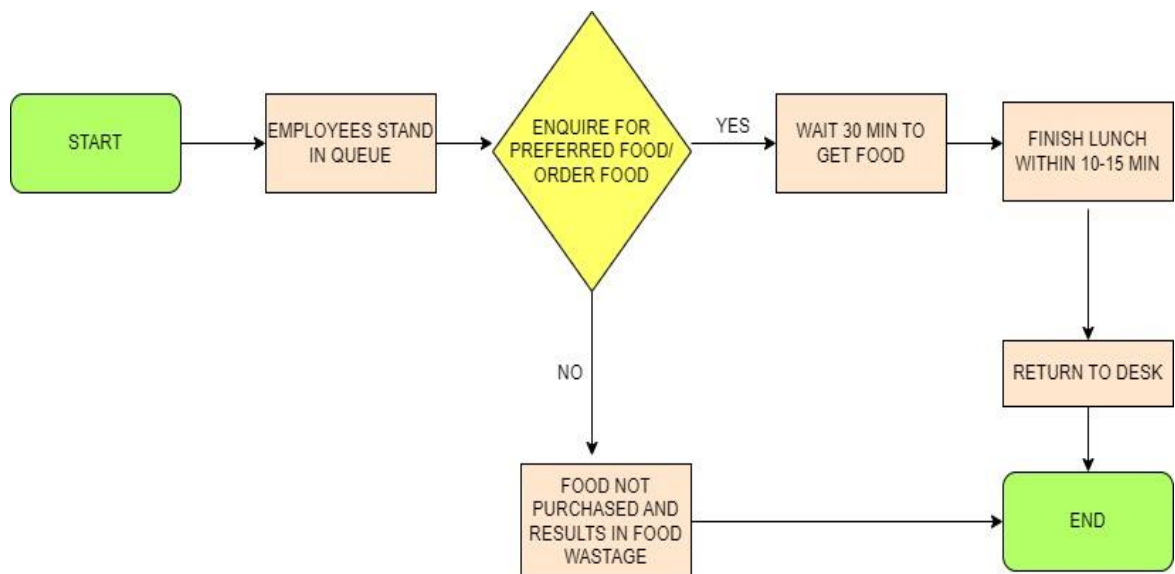
- Reduce canteen food wastage by a minimum of 30% within 6 months.
- Reduce canteen operating costs by 15% within 12 months.
- An automated food ordering system will help employees to order their preferred food.

## 5. Objectives of the new canteen ordering system

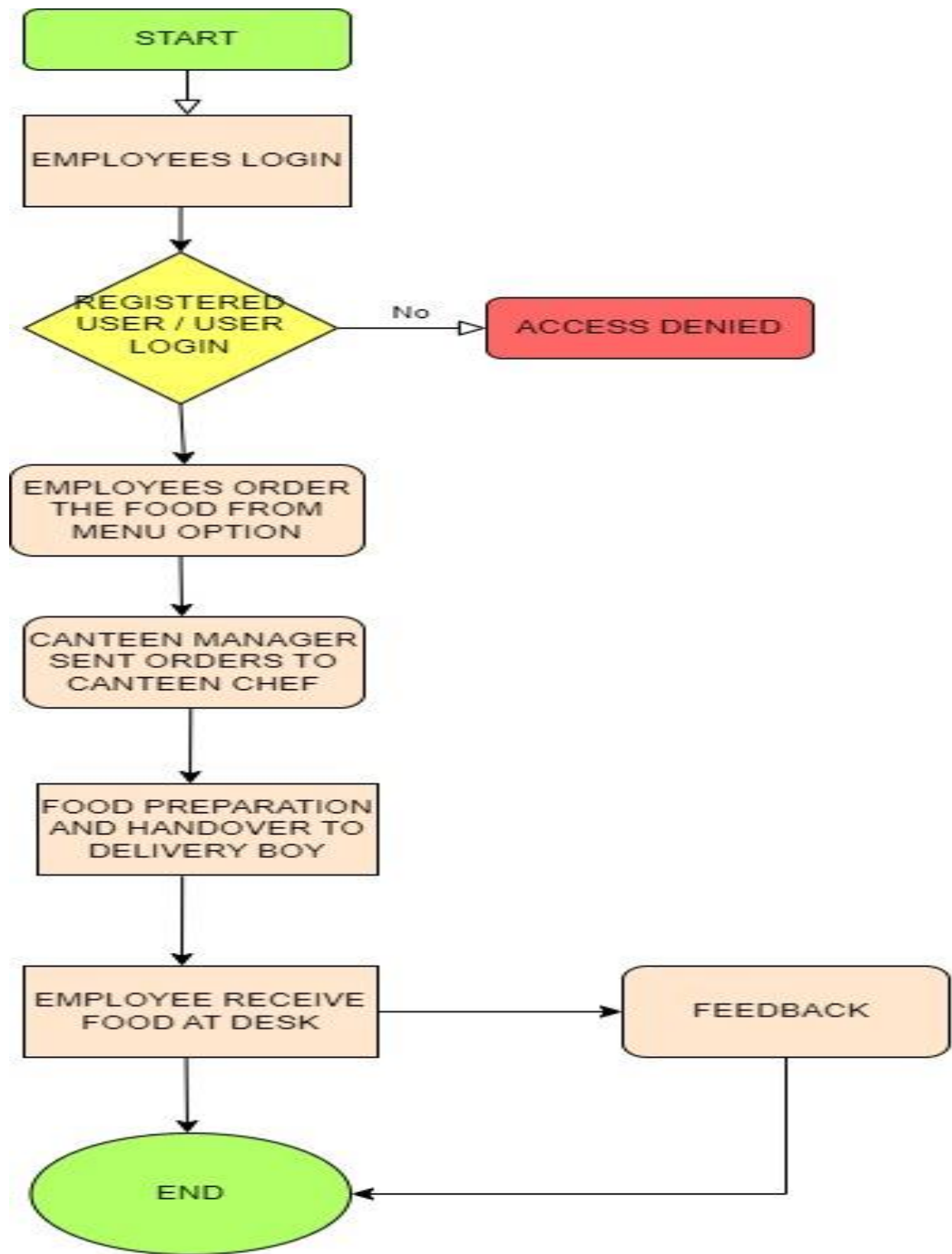
- Reducing the time taken by employees to have lunch by 50%
- Increase the cost efficiency of the canteen, the operating costs should be reduced by at least 15% in the first year
- Enhancing the operating efficiency of the canteen by reducing manpower
- Making a good food-sufficient system with minimal wastage. At least a 30% reduction in food wastage in the first 6 months.

## 6. As-is and future process map

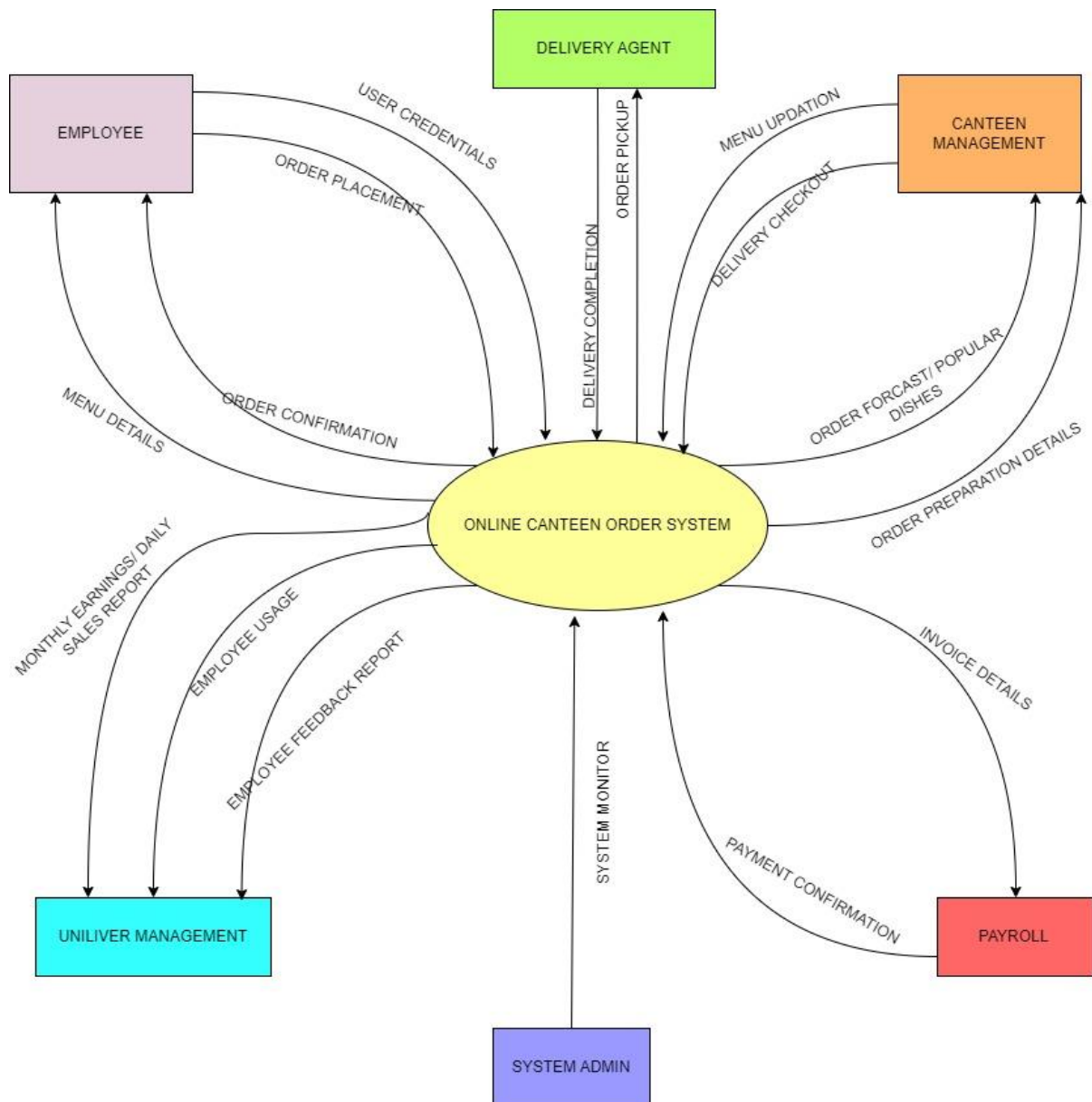
### 6.1 Existing System



## 6.2 Future state System



## 7. Scope using use case diagram (UML)



## 8. Features of new canteen system

- The organization can reduce operating cost like manpower, canteen maintenance, and unnecessary inventory purchase
- Employee productivity will be increased by eliminating time wastage
- Employee morale will be high when they feel that they are served better
- Employees can select the food that they want, which will reduce food wastage



## **9. In-scope and Out of scope items of software**

### **9.1 In Scope**

IN SCOPE REQUIREMENTS	
MENU SELECTION	
1	Employee will get access to canteen ordering system main page via URL
2	Employee should be able to view today's menu without having to login
3	To order, employee will have to log in with user credentials
4	For new employees, 'register' sub-option on the login page
5	System active hour until 11 am. Orders after 11 am will receive the message 'session expired'
6	The system performs a security check against the username and password from the initial registration
7	If password is forgotten, the system will initialize the 'reset password' option
8	User will select items from the daily menu to cart with an option to select the quantity
9	Menu shows subcategories: snacks, main course, drinks, desserts
10	Items displayed with photograph, description and price

#### CHECKOUT

11	The menu page shows a cart icon on the right corner
12	The cart page will display a list of all items selected by the user with their price and quantity
13	Users can click the 'Remove' icon to deselect the items. An 'item removed from cart' message will be displayed when the user presses the 'remove' icon
14	Users have options to 'continue shopping' or 'confirm order'
15	If a user presses 'continue shopping', then the page is automatically redirected to the menu page
16	If the user selects 'confirm order', a payment summary with all applicable charges will be displayed
17	A dialogue box will appear and ask for confirmation from the user to 'check out', For sending a payment request to the payroll department and orders to canteen management. Once the order is confirmed and the user has checked out, they should not be able to cancel or edit the order.

#### PAYMENT

18	Order invoice will be received by payroll staff
19	Order value will be added to the employee due amount and sent payment confirmation to canteen management
20	Monthly canteen payment will be deducted from employee salary at end of month

#### REGISTRATION WITH SYSTEM

21	First time user will need to create a profile in the system
22	Customer need to enter employee ID, full name, email ID and Office number
23	Customer want to create a password with standard rule (combination of capital letters, small letters, special characters, and numbers). Password should not be longer than 12 characters

24	If a customer forgot the password, the initial page should have a 'forgot password' link that will send an automated email to reset the password. The profile will be updated with a new password
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#### CANTEEN SYSTEM REQUIREMENT

25	The canteen menu manager will have write access to update the daily menu. it includes adding, update and deleting items with price, description, and photographs
26	The system will require canteen management staff to enter user name and password
27	The canteen manager will have 'administrator' capabilities for updating the webpage
28	Canteen manager will hand over the orders to the kitchen by 'assign chef'
29	Canteen manager will have a 'delivery checkout' option for assigning delivery agent

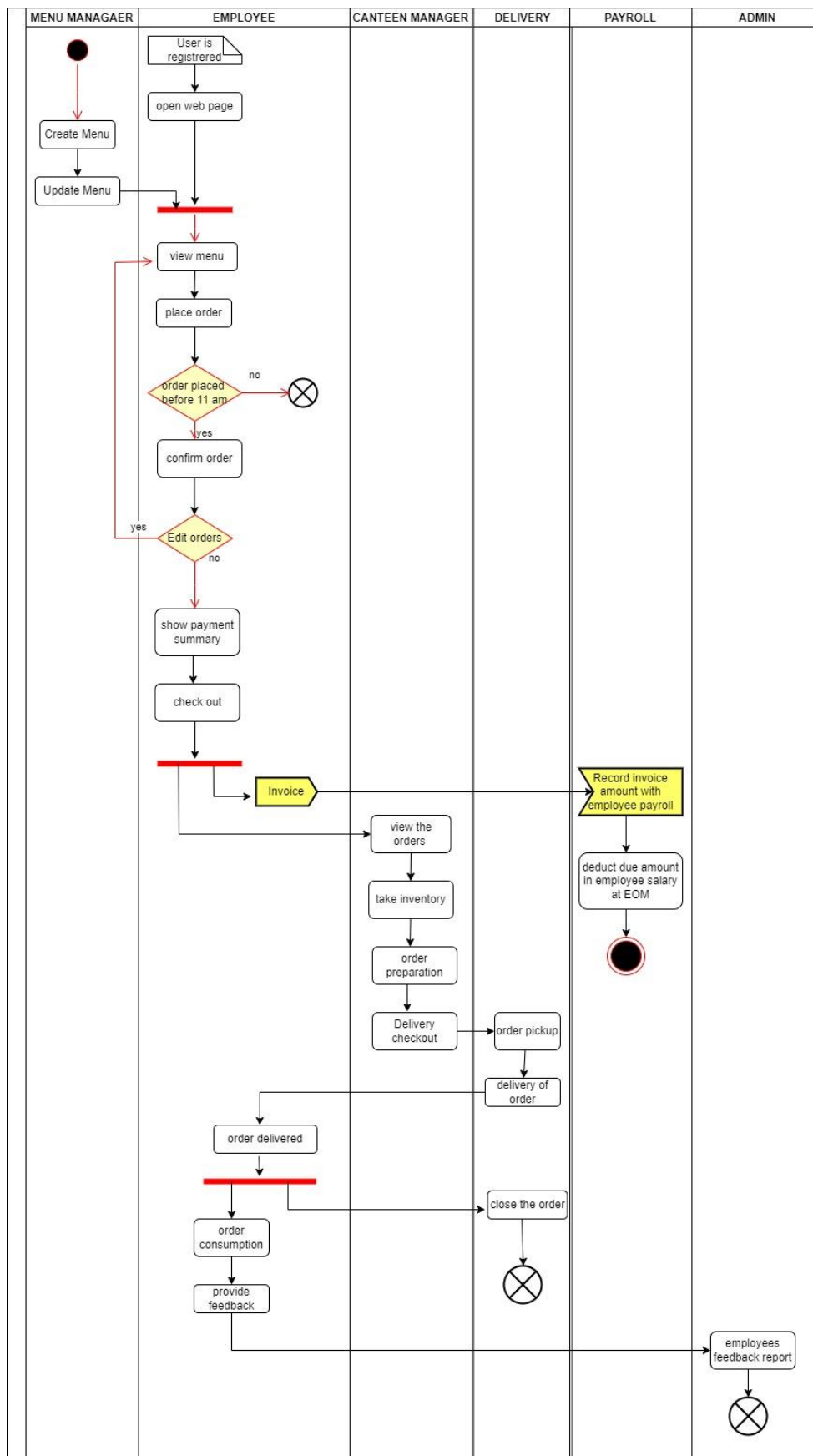
#### SYSTEM REQUIREMENT

28	The application will be written in java for maintenance
29	Canteen manager will need a new server to track orders, maintain inventory, data storage and create report
30	System will auto-create daily reports to track sales, how many employees use the system, feedback report, most popular dishes list and monthly earnings.
31	Server will monitor in real time for all orders and functions
32	Delivery agent will receive message when canteen manager select 'delivery checkout'
33	System will auto create order forecast based on sales reports

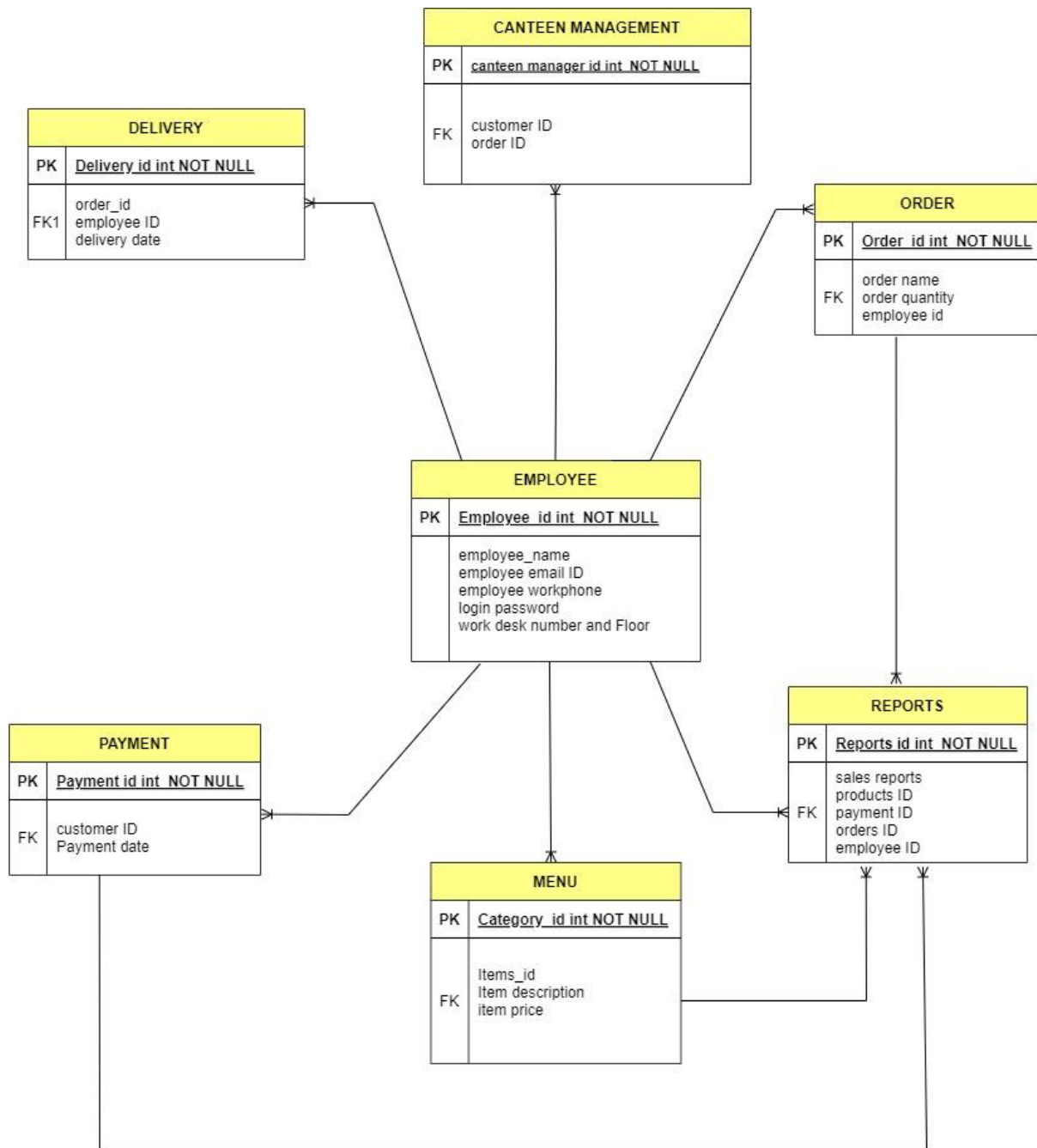
### **9.2 Out of Scope**

1	Breakfast items and evening snacks are not included in the canteen ordering system
2	Refund to customers, if customer order is never received
3	'Order received' confirmation from customer
4	Suggestions from customer regarding what can be done in a better
5	Real-time order status in customer login or registration number or mail
6	Delivery options other than workplace
7	Email or text message confirmation when the order is complete

## 10. Activity Diagram for the System:



## 11. ER Diagram for the System



## **12. Preconditions and Triggers**

- Precondition: Employee has an account and is registered with the salary deduction scheme
- Precondition: The manager has an account for the canteen system
- The employees should be able to select and click orders effortlessly
- The manager should be able to get a list of summarized orders for the kitchen at 11 am
- The delivery boy should be able to get a list by 12 pm
- Trigger 1: The employee wants to place orders in the canteen system
- Trigger 2: the canteen manager wants a summarized list of orders to cook
- Trigger 3: the delivery boy needs to pick up the meals, including details of where to deliver them
- **Basic flow**  
the employee places an order. The canteen manager gets a summary of orders at 11 am. Delivery boys get meals and details of where to deliver them.
- **Data elements**  
users, menus, orders, and feedback
- **In case of errors, what happens?**  
Contact support

## **13. Business requirements - Functional and Non-functional**

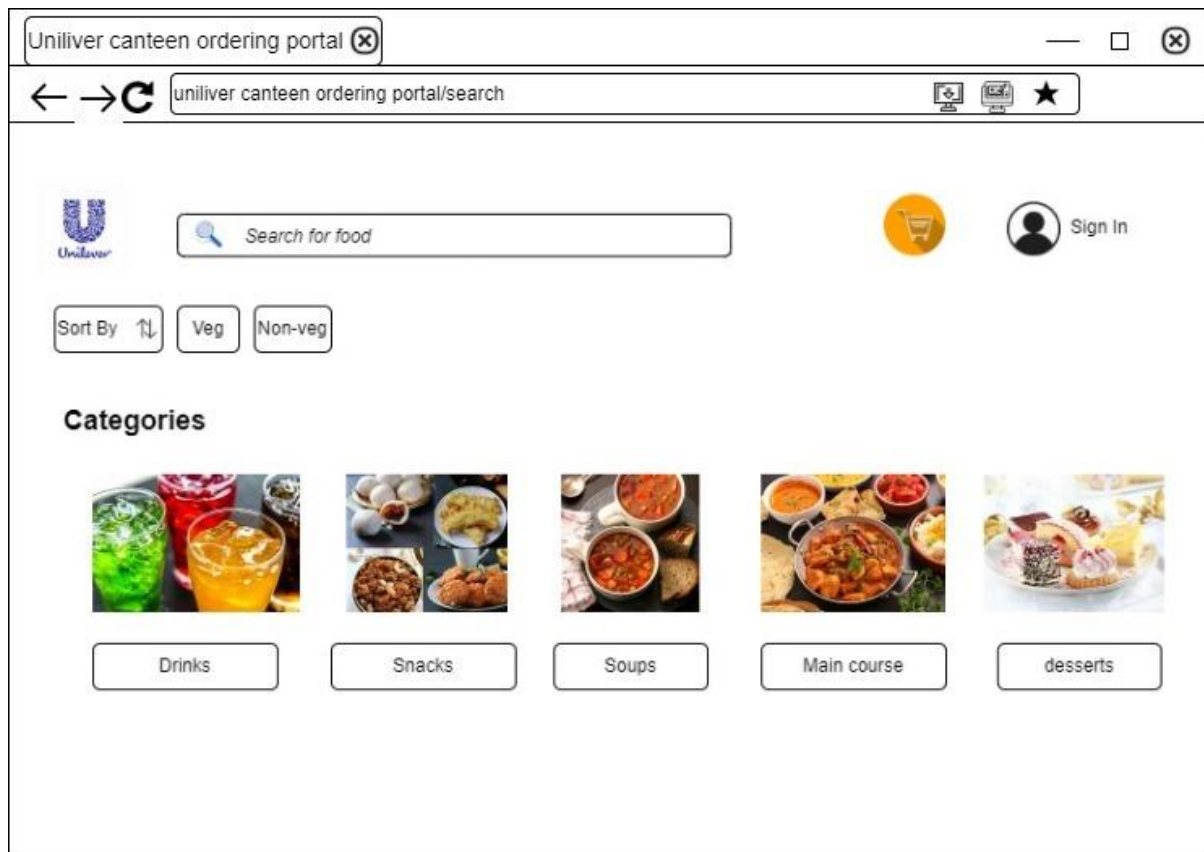
### **13.1 Functional Requirements**

- The system will receive orders from employees until 11 am
- The system must be user-friendly and easy to access with user credentials
- The site will generate and send an invoice to payroll, but no payment transaction at the time of purchase
- The website has a connection with the payroll department and collects payments every month
- Tracking and fulfillment of orders
- The site will auto-generate sales reports, popular dishes, order forecasts, and monthly revenue reports
- The website has a feedback collection mechanism

### **13.2 Nonfunctional Requirements**

- The menu will be easy to read and understand
- The website should be able to serve 1500 employees
- The system should be reliable to end users

## 14.MOCK SCREENS



Uniliver canteen ordering portal

← → ↻

uniliver canteen ordering portal/search/registration

★

Registration

Name

:

Work Phone

:

Employee ID

:

Work floor

:

Email ID

:

Work Desk

:

☐

I hereby authorize UNILIVER PVT LTD to make payroll deductions from my salary for Canteen invoices, effective from 1/10/2024 until further notice.\*

☐

I grant permission for the specified deductions to be processed as per the company's policies. Please consider this letter as my formal authorization for payroll deduction.\*

Proceed

**THE END**