



# CANTEEN ORDERING SYSTEM

SAVE TIME, ENERGY AND ENJOY YOUR LUNCH



LUNCH AT YOUR DESK

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(Image created using canva.com)

## Catering Industry

### Stakeholders

ACTOR	What they can do on the software created
Employee/Customer	<ul style="list-style-type: none"><li>• The employees should be able to open the web page of the Canteen Ordering System to place the lunch order</li><li>• The employees should be presented with an up-to-date menu for the day with a list of dishes and its prices</li><li>• The employees can select the lunch dishes they would like to eat and create an order. They should be able to edit the items they want to order any time before checking out</li><li>• Once the order is confirmed and the employee has checked out, they should not be able to cancel or edit the order</li><li>• The order status should be displayed after placing it on the application and it should tell the customer by when (i.e date and time) it would be delivered to their work location</li><li>• If a customer does not like any food item or is not happy with the delivery system of the canteen, they should be able to submit feedback</li><li>• Since there is no online or offline payment option, the employees should be able to enrol for deduction from their salary using the payroll system</li></ul>
Canteen Manager	<ul style="list-style-type: none"><li>• The canteen manager should be able to view the orders placed by the employees and then take an inventory of all the dishes ordered by different employees and get them cooked by the chef</li><li>• Should be able to request a delivery to the employees' workstation</li></ul>
Delivery Boy	<ul style="list-style-type: none"><li>• He should be able to deliver the lunch to the employee's desk</li><li>• After delivering the lunch, he should be able to close the online customer order</li></ul>
Payroll system	<ul style="list-style-type: none"><li>• The payroll system should have adequate capability to calculate the total number of dishes ordered by each employee and store this information in the database. Also, it should be able to deduct the money from the employee's salary</li><li>• If there are leavers and joiners in the firm, the payroll system should be able to update this information in its record</li></ul>
Management	<p>They should be able to gather the below information and analyse the following:</p> <ul style="list-style-type: none"><li>• Which dishes are the most popular?</li><li>• How many employees are using the system?</li><li>• Satisfaction of the employees on using the system. This should be tracked based on feedback submitted by the employees</li><li>• Sales for each day</li></ul>

	<ul style="list-style-type: none"> <li>• Total monthly earnings</li> <li>• Order forecasting i.e. a prediction of which items will be ordered and when they will be ordered.</li> </ul>
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### **Problem Definition and Solution**

- 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

### **Advantages and Objectives**

Advantages of the Canteen Ordering System:

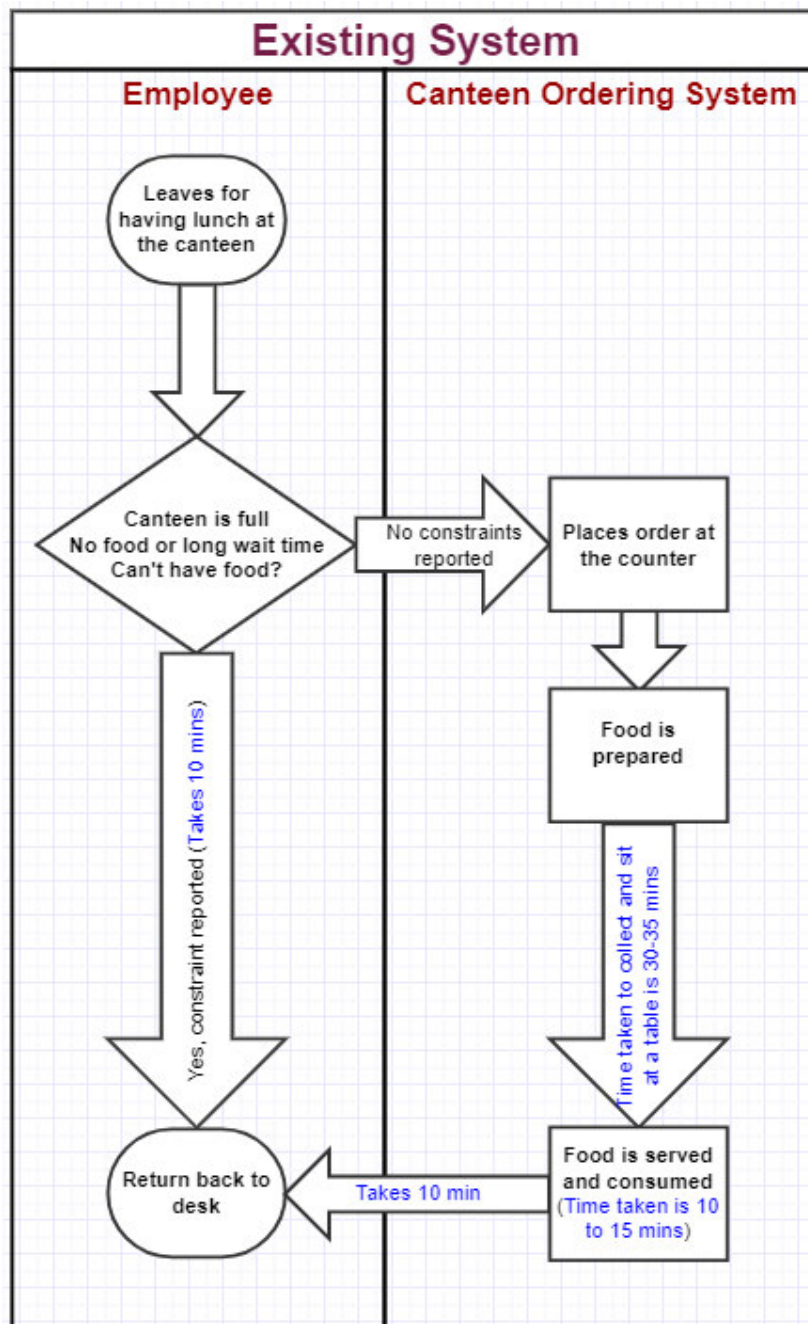
1. A system would save considerable time to those employees who use the service
2. It would increase the chance of them getting the food items they prefer
3. This would improve both their quality of work life and their productivity
4. The food wastage will be reduced
5. This will reduce the cost

### **Objectives**

- Reduce canteen food wastage by a minimum of 30% within 6 months following first release.
- Reduce canteen operating costs by 15% within 12 months, following initial release.
- Increase average effective work time by 30 minutes per employee per day, within 3 months.
- 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.

## Existing System

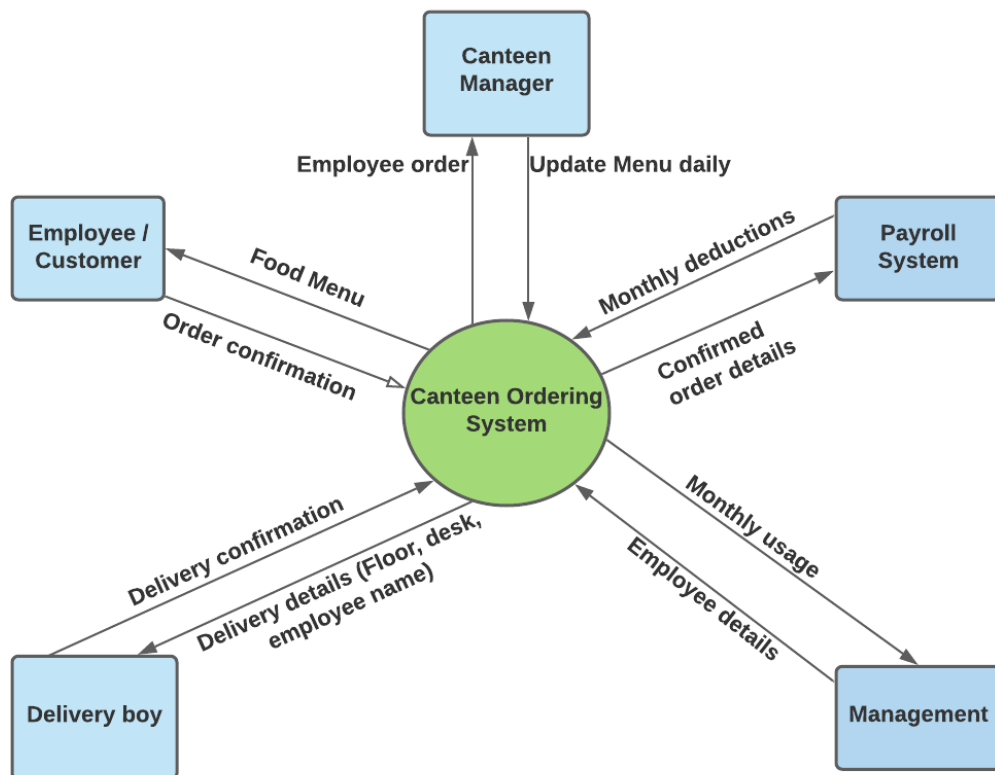
- As-Is process flow diagram prepared using Gliffy



## Proposed System

- User friendly interface
- User can edit an existing order or cancel or confirm the order easily
- User can provide feedback after having lunch
- Manager can check the status of food being prepared and track if delivery boy has delivered the food
- Payroll system will automatically deduct from the salary for every confirmed order

## Scope using context diagram



## In Scope

- Payroll system registration for employee
- Login screen on portal for employee
- User authentication on portal if enrolled for lunch
- Display menu page
- Meal ordering screen with option to place and confirm order to be available only till 11 am
- Order confirmation
- Feedback submission by employee

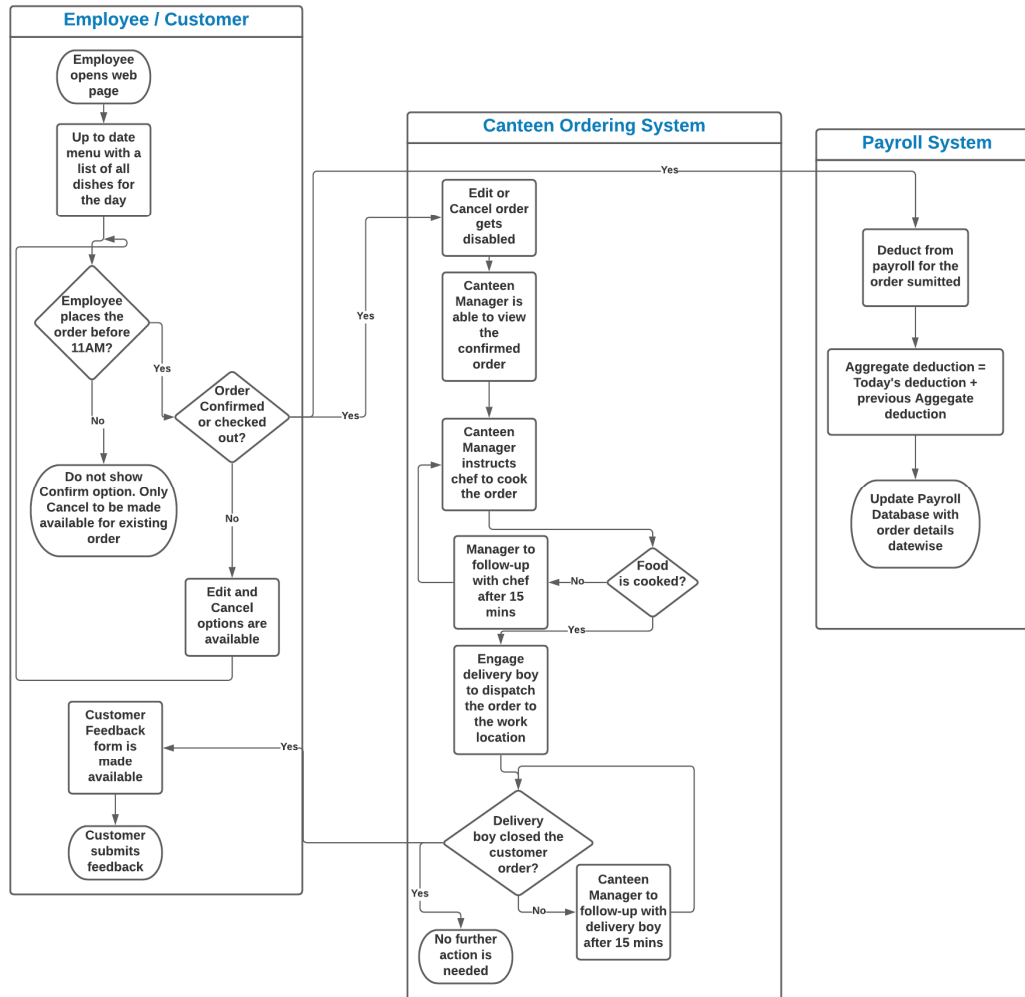
- Details of the confirmed order that includes menu item, time of order and price
- Order status
- Contact details of delivery boy for any guidance (i.e if you are not at desk)
- Delivery closure once delivery boy completes the order
- Payroll deduction
- Monthly sales report for orders placed

### **Out of Scope**

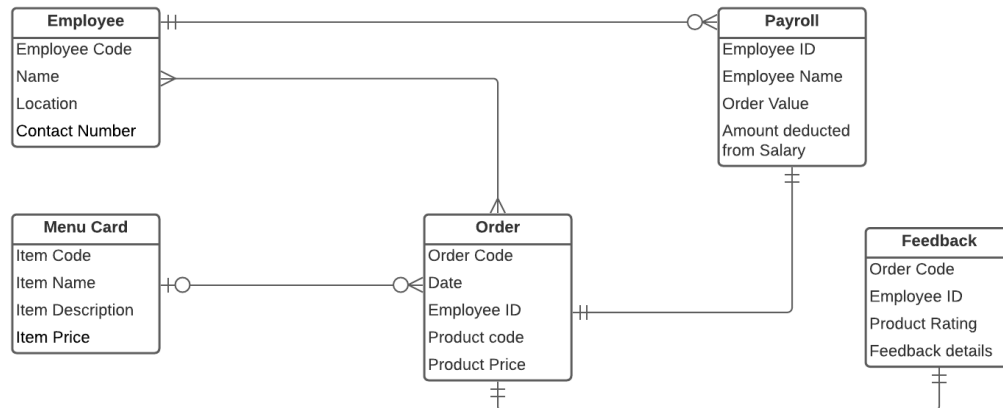
- Any employee who is not part of Unilever for canteen ordering system
- This canteen operation system will be operational only during lunch time (12PM to 2PM). Any time beyond it will be considered out of scope
- Employees not having valid credentials
- 1 order per person. More than 1 order will be out of scope
- Refund for incorrectly placed orders
- Food supplies in stock and impact of food inflation on the prices

## Activity Diagram for the System:

- Flow diagram prepared using Lucidchart



## ER Diagram for the System:



## Business Requirements:

1. **Business Objective 1:** Reduce canteen food wastage by a minimum of 30% within 6 months following first release.
  - a. Scale: Value of food thrown away each month by examining the canteen inventory
  - b. Previous - 25% wasted
  - c. Must plan for: Less than 15%
2. **Business Objective 2:** Reduce canteen operating costs by 15% within 12 months, following initial release.
3. **Business Objective 3:** Increase average effective work time by 30 minutes per employee per day, within 3 months.
4. **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

- Employees should be able to enrol for salary deduction
- User registration using SSO that should display the menu details on the webpage
- System should allow to place/modify orders till 11AM only
- Once order gets confirmed, do not display option to edit or cancel the order
- Canteen manager should be able to check order status and click on dispatch delivery to workstation on the web page
- Delivery boy should be granted access to close customer order
- Feedback mechanism needs to be activated for the customer/end user once the delivery is closed
- Creating and maintaining the program needs to be done using Java
- Every month end Payroll system should display all the orders placed during the month and display the amount to be deducted from the salary



## Non-functional Requirements

- Device compatibility exists with Windows, MAC and other OS when application is built
- Adequate capacity to cater to 1500 employees when they get connected on the web page
- There are no jargons, and the fonts/texts are readable in dim light
- Canteen Ordering should be available during office hrs as employees could work on weekends or public holidays, so ensure SLO exists if support needs to be engaged for incidents

## System Requirement:

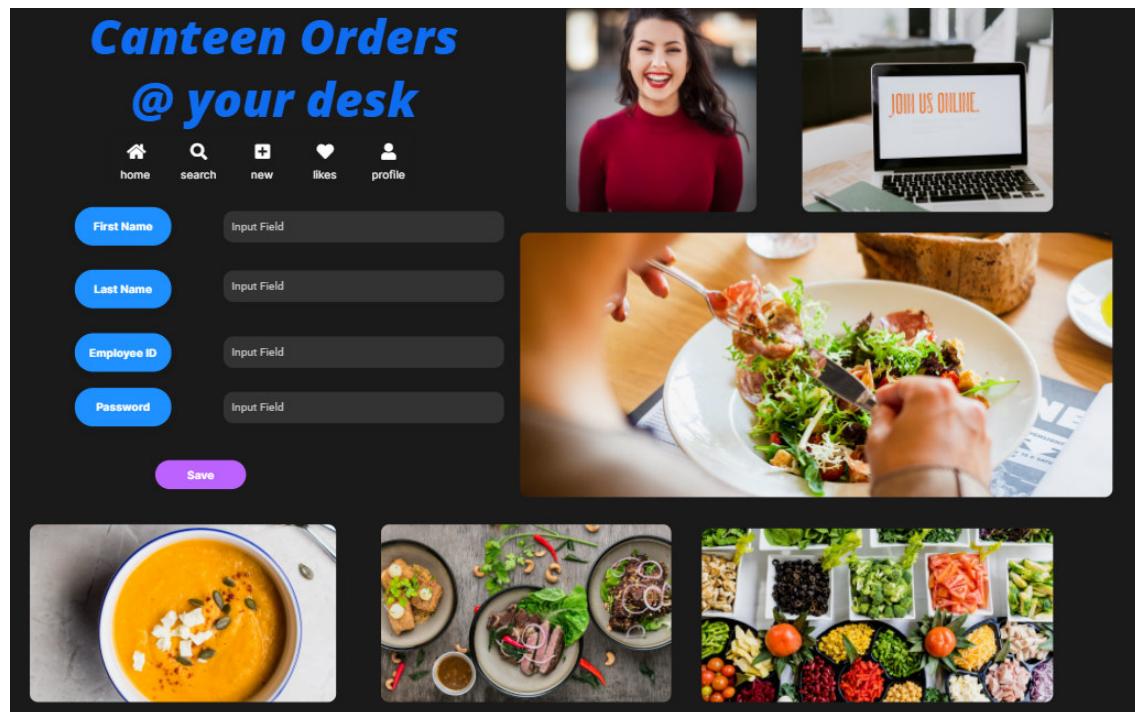
- Should work on Java Platform
- Should be compatible with all the OS in the firm, say Windows, MAC, etc
- System will auto-create monthly reports to include monthly earnings and order forecasting based on what dishes are the most popular

## Usability:

- Should be fit for purpose and fit for use
- There are no jargons, and the fonts/texts are readable in dim light

## Environments

- Canteen Ordering should be available during office hrs as employees could work on weekends or public holidays, so ensure SLO exists if support needs to be engaged for incidents



Today's Menu

10/31/2021



Paneer Makahni



1

Burger



2

Pizza



1

Save