

Online Canteen Catering System

1) Stakeholders

ACTOR	What they can do on the software created
End Users (Employees , Delivery boy, C a n t e e n M a n a g e r and Menu Manager)	<ul style="list-style-type: none">● View Webpage● Browse Menu● Create Order● Add/Edit/Update/Cancel Order● Make Payment for Ordered Meal● Submit feedback● Create/Update/Delete Menu● Keep the raw vegetables and other food items in check● View the Order Details● Request Chef to Cook food● Request Delivery● Deliver food at workstation and close the order
Implementatio n SME	To get help in implementing the Online Canteen Ordering System
P r o j e c t Manager	To complete the project of building website and all Online System process considering budget, risk, scope, schedule and quality.
Tester	To test the solution
Supplier	To use the Service Online Canteen System , Food Management System including Chef, Delivery boy, Canteen Manager and Menu Manager <ul style="list-style-type: none">● Create/Update Menu● Keep the raw vegetables and other food items in check● View the Order Details● Request Chef to Cook food● Request Delivery● Deliver food at workstation and close the order
Operational Support	<ul style="list-style-type: none">● To provide day to day support required.
Sponsor	<ul style="list-style-type: none">● Responsible for the initiative● Will get report with requested details

2) **Problem Statement in the System**

- Canteen space is too small to cater employees during peak hours.
- Time wastage of employees during whole lunch process due to long waiting in queue for their turn.
- Employees do not get their choice of food as canteen would run out of certain items.
- Canteen would waste significant quantity of food by throwing it away what wasn't purchased.

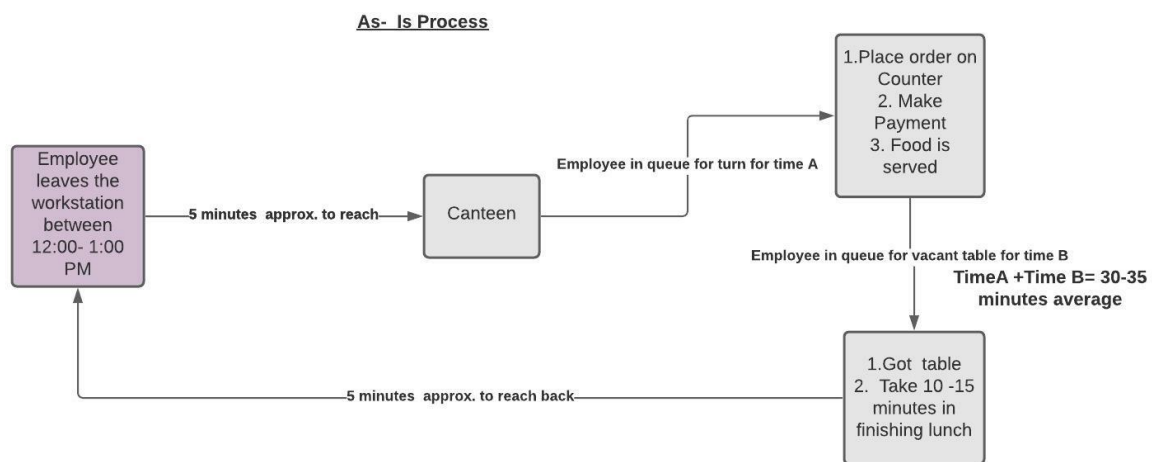
3) **Objectives**

- To reduce Canteen inventory cost by reducing food wastage by a minimum of 30% within 6 months.
- To reduce Canteen operating costs by 15% within 12 months.
- Food availability and Delivery at workstation shall increase employee's average effective work time by 30 minutes within 3 months thus improving work life and productivity of employees .
- Able to operate canteen with lesser manpower.
- Automate Payment process by linking payment through Salary Payment Deduction for easy, quick payment and billing .

4) As- Is

- Currently Unilever Company has 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, leading huge rush in the canteen during lunch hours. This resulting employees wasting a lot of time waiting for turn to get food and then waiting for their turn for tables to be vacant.
- Also food not ordered or preferred by employees got wasted and thrown away.

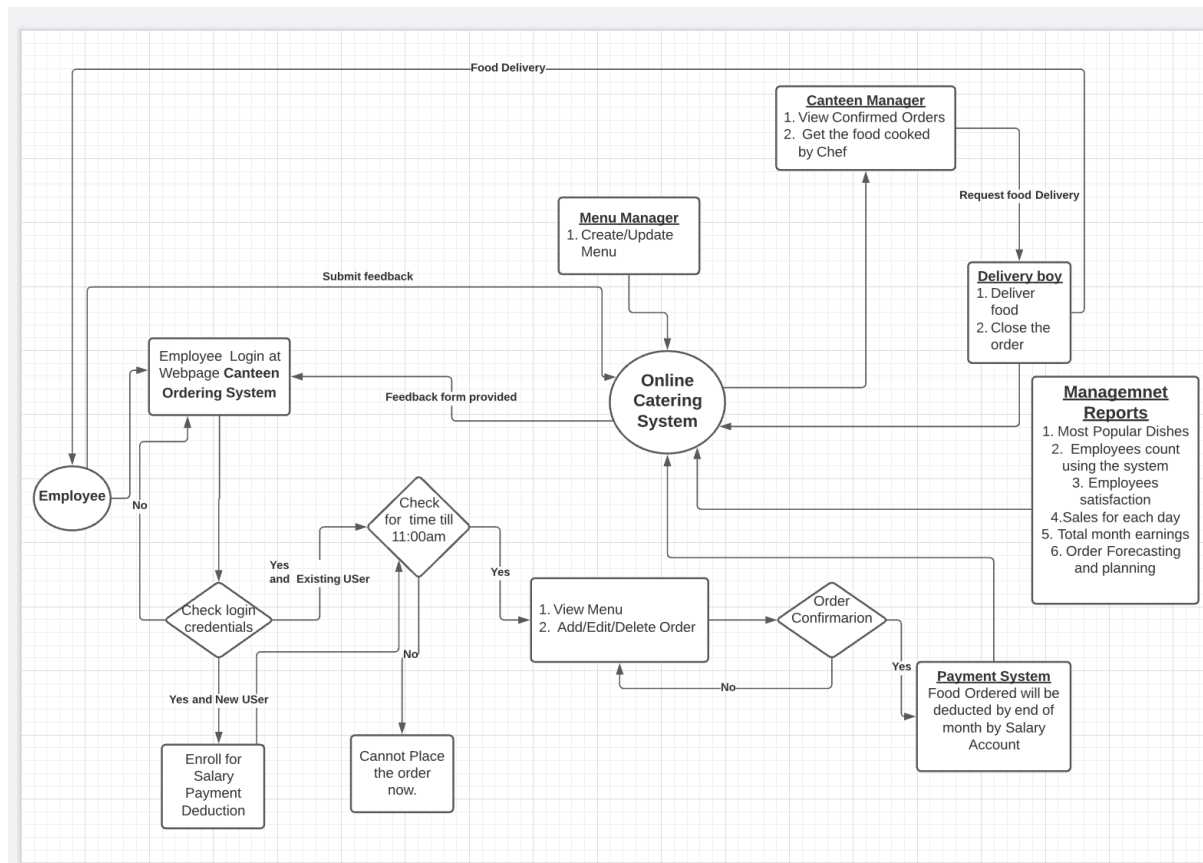
Context Diagram for As-Is Process -



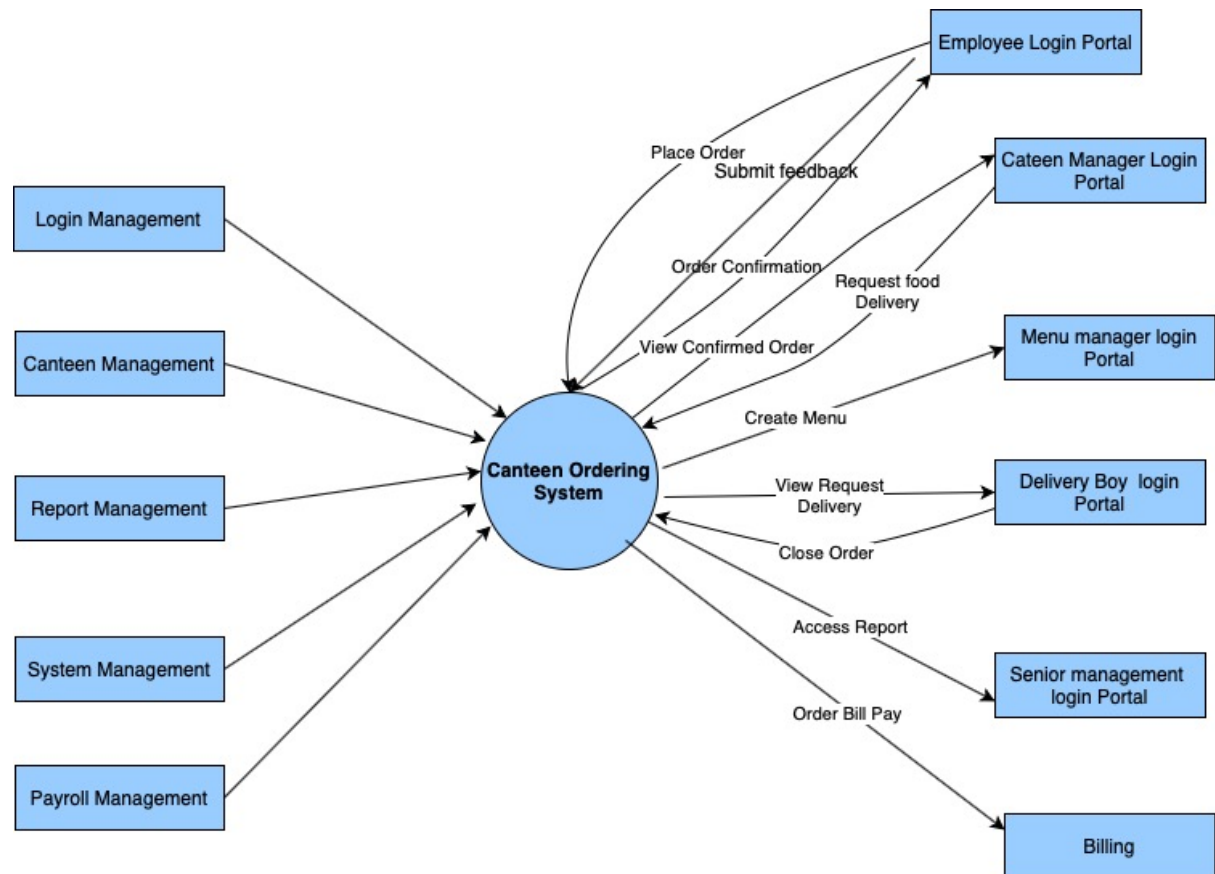
Proposed System

- Have user friendly web page of the Canteen Ordering System will includes
 - Employee shall login with their login credential
 - Updated menu shall be displayed - created and updated by Menu Manager along with prices for the day.
 - Employees shall be able to create/update/delete the order till order hasn't been submitted.
 - Order cannot be cancelled or edited once order is confirmed.
- The lunch order shall be placed by employees latest by 11:00 am. After 11:00 am the system shall not allow the employees to place orders.
- The payment for dishes ordered shall be deducted only from employee's salary. Hence, the employees need to enroll for Salary Payment Deduction.
- The Canteen Manager shall be able to view the confirmed orders placed by the employees. He shall take an inventory of all the dishes ordered by employees and get them cooked by the chef.
- Canteen manager shall request food delivery through the system by Delivery Boy to the employees workstation.
- Delivery boy shall close the online customer order once order is delivered.
- Employees shall be provided with feedback form to improve the performance and efficiency of the system.
- At the 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 would like the following reports:
 - Which dishes are the most popular?
 - How many employees are using the system?
 - Satisfaction of the employees on using the system. This should be tracked on the basis of feedback submitted by the employees.
 - Sales for each day
 - Total monthly earnings
 - Order forecasting i.e. a prediction of which items will be ordered and when they will be ordered.
- 10. The web page should be light and render fast.

To- BE PROCESS -



5) Scope using context diagram



6. Main features that need to be developed -

- Two types of webpage for Canteen Ordering System to be developed - one for employees and other for Caterers.
- Employees Management page - to have all options available to make the purchase on their webpage of Canteen ordering System that includes -
 - Login Access
 - Enroll for Salary Payment deduction to use the Online Canteen System
 - Edit/Cancel/Confirm the Orders
 - Not allowing to place order after 11:00 AM
 - Feedback form availability
- Caterers Management page - Able to
 - create, update, view and delete menu
 - view confirmed orders and take actions accordingly
 - to close the order once order is delivered
- Payment gateway through only salary account deduction would be available for deduction of all orders at once by end of month
- Reports to be provided for that includes -
 - Most popular dishes
 - Count of total employees using the system
 - Satisfaction level through the input provided. By employees in feedback form
 - Sales for each day
 - Totally monthly earnings
 - Order forecasting

7. In Scope

- Employees to register on Employees Canteen Ordering System through the weblink provided using their official email id.
- To use the Canteen Ordering System website, every New user has to register themselves.
- Workstation location is must to complete registration process process for default option for delivery. Once registered in the system, their entries would be saved as an Existing User.
- While placing the order, employee shall be provided with option to review the workstation location to update if required for delivery.
- Forgot/Reset password link will be provided at the webpage.
- For wrong entry of login id/password - they would be notified with an error to check their login id/password and retry to login.
- Once logged in, employees must enroll themselves for Salary payment deduction to place the order and make the payments.
- Payroll System shall calculate total purchase by end of month for each order placed by employees and deduct the money from their salary.
- There will be check to ensure that order cannot be made after 11:00 AM.
- Employees shall be able to view the Menu with list of items along with their price against each item and have cart to add food items.
- When item/s is added in cart, employees will be able to add/delete/remove the count of item from the cart till theorizer is not confirmed.
- Employees shall be provided with two tabs - 'Continue Adding' or 'Confirm Order'.
- Once employee confirm the order by clicking on 'Confirm Order', they shall have another option for final confirmation by clicking on "Make Payment " tab. They cannot edit or cancel their order if they clicked on 'Make Payment' tab. Will be notified on their email address with order confirmed details.
- Caterers shall have their own registration process at their Caterer Canteen Ordering System inline with Employees Canteen Ordering System page.
- Caterers will be provided with roles as
 - Menu Manager - shall Create and Update Menu.

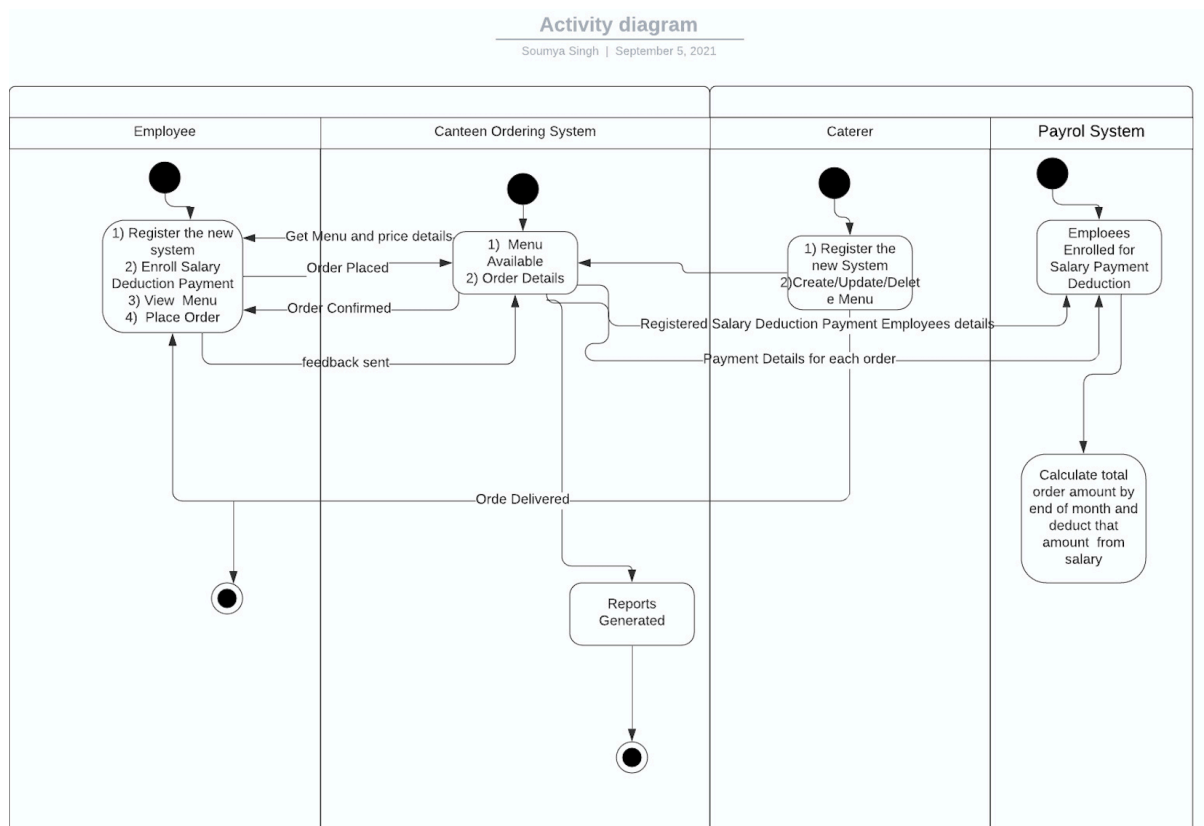
- Canteen Manager (Order Processor) - shall view the confirmed order from employees , take inventory of all orders and get them cooked by the Chef.
 - Canteen Manager shall be able to request the delivery in the system when food is ready.
 - Delivery boy - shall be responsible to deliver food at workstation on receiving request of delivery and closing the order.
- Feedback form will be provided in the system to improve. The performance of the system.
- Reports would be made available to Senior Management with the information about -
 - Most popular dishes based on count of purchase against particular item.
 - Count of employees using the system
 - Employees satisfaction level based on feedback form.
 - Each day total sales.
 - Total Monthly Earning
 - Order Forecasting

Out of Scope

- Employees cannot register themselves on Online Canteen Ordering System Page through help desk. They shall be able to register themselves online only through the provided website link.
- Employees cannot use Credit Card or any other mode of payment to confirm purchase against the order. They shall register for Salary Payment Deduction system to avail the services of Online Canteen Ordering System.
- Employees cannot edit or cancel order after 11:00 AM in any case.
- Ordering after 11:00 AM is out of scope.
- Shortage of inventory for raw vegetables or any food item is out of scope of the system.
- Employees cannot order breakfast item.
- Refund cannot be initiated through this system in any case.
- Webpage does not support entries for food allergies.

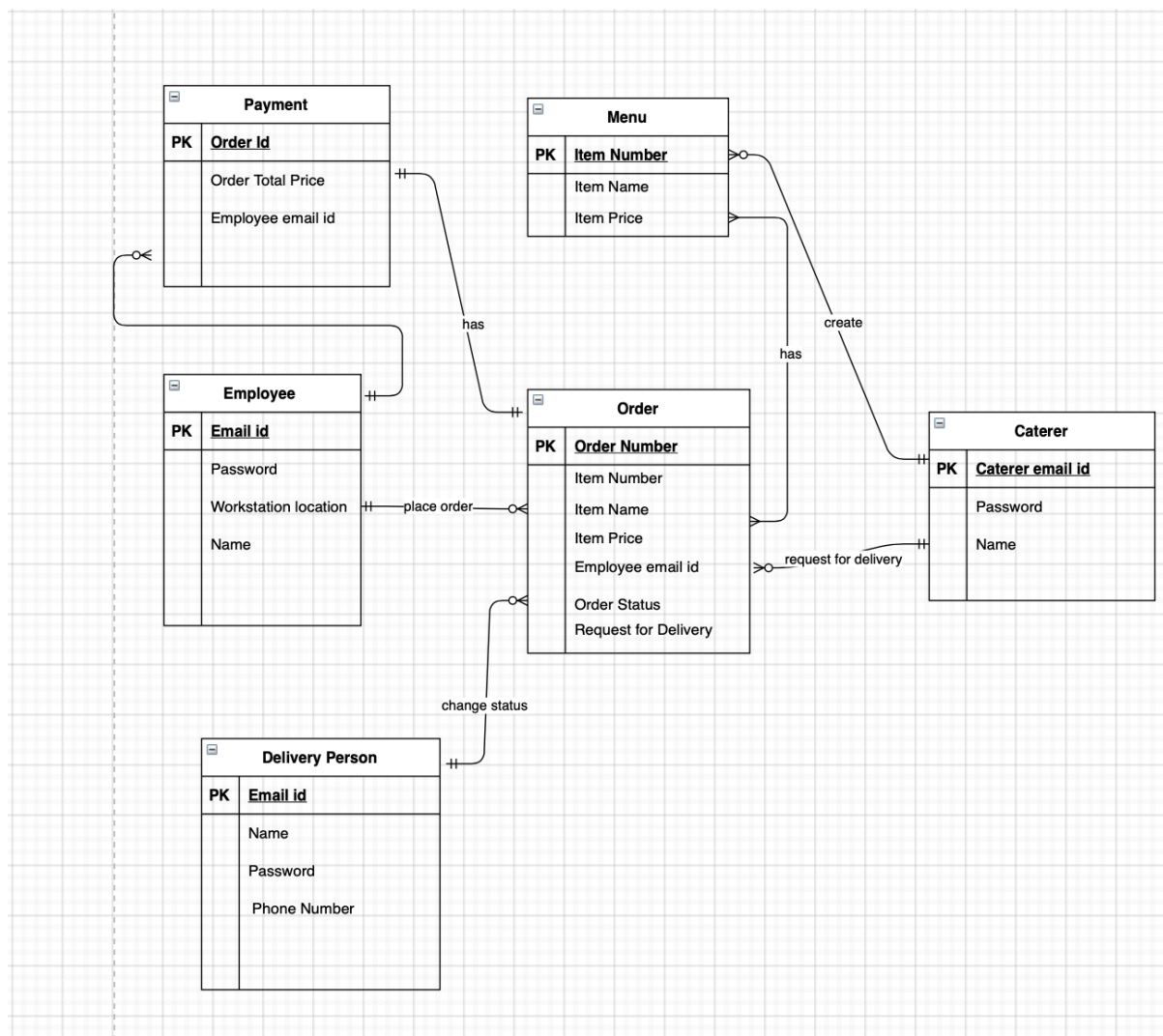
- The Catering system availability on app is out of scope.

8. Activity Diagram for the System:



9. ER Diagram for the System:

ER Diagram for the system designed.



10. Functional Requirements

In-scope Requirements -

Employee Website Details

- Employees would be able to register on Employees Canteen Ordering System site through the weblink provided using their official email id.
- To use the Canteen Ordering System website, every New user has to register themselves. Registration shall require workstation location as a default option for delivery. Once registered in the system, their entries would be saved as an Existing User.
- While placing the order, employee shall be provided with option to review the workstation location if needed to be updated for delivery.
- Forgot/Reset password options will be provided at the webpage.
- For wrong entry of login id/password - they would be notified with an error to check their login id/password and retry to login.
- Once logged in, employees must enroll themselves for Salary payment deduction to place the order and make the payments.
- Feedback form will be provided online on the Employees Canteen Ordering Page to learn about the system and for required reports.

Order Page

- 'Confirm order' button in the web page will be active only until 11:00AM.
- After 11:00 AM - Message 'Ordering Time Expired' will appear in Main Page.
- On Menu Page, Employees will have options to select items from Daily Menu by clicking tick on square box available next to each item.
- Menu will be separated into 'Appetizers', 'Main Dishes', 'Drinks', 'Desserts'
- The Menu Page have Menu with list of items/dishes along with its prices.
- Menu page will also have Shopping Cart Icon on Upper right corner.

- Order Page have two options at the end of the page 'Continue Adding items' and 'Confirm Order'.

Check-Out Page

- Checkout Page will have item listed with item number, edit the count of items and to remove the item from the box against every item.
- Employees will have options at the end of the page to 'Continue Adding items' or 'Confirm Order'
- If 'Confirm Order' is pressed, message will appear that Customer will not be able to make changes or Cancel the order, once clicked on 'Make Payment' tab.
- Once clicked on 'Confirm Order', page will direct to Check-out page for final confirmation (Clicking on 'Make Payment' tab)
- Purchase is complete and order is confirmed when clicked on 'Make Payment' tab.
- 'Order confirmed' will be displayed on webpage with an Order confirmation email on employee's email id that will contain order details includes listed items, item number and total amount paid.

Payment-Setup

- Once order is confirmed - invoice will be sent to Payroll system for payment deduction through Salary account for respective employee.
- Payroll Set up will be made to sum up all amount against each Invoice generated for each employee .
- Payroll System shall calculate total purchase made against each order by employees by end of month and deduct the money from their salary.
- There will be no other option available for payment other than Salary Deduction Method to make the purchase on Online Canteen Ordering System page.

Caterer Website Details

- Catering Employees in office premises have to register themselves on website using provided registration link to use Canteen Ordering System.

- To use the Canteen Ordering System website, every New user has to register themselves. Once registered in the system, their entries would be saved as an Existing User.
- Caterers will have to log in with their Email ID and Password.
- Forgot/Reset Password option will be provided on web page.
- Caterer webpage will be available for only 3 Roles - Menu Manager, Canteen Manager and Delivery Boy.
- The web page access rights will be made available as per the Caterer's Role.
- Menu Manager - will have ability to - Create, Update and Delete Menu.
- Canteen Manager (Order Processor) - will have 'view access only' to view the confirmed order from employees.
- Canteen Manager will take inventory of all orders and get them cooked by the Chefs.
- Canteen Manager will update in the system when food is ready - to Request the Delivery.
- Delivery Boy will have only 3 options on his page -> to view the 'Request on Delivery' signal received from Canteen Manager, 'Workstation location' of employee for delivery and 'Close the order' when food is delivered. Payroll System shall calculate total purchase made against each order by employees by end of month and deduct the money from their salary.

Senior Management Portal:

- Senior Management has to register themselves in line with Employees.
- They will have access to reports with details -
 - Most popular dishes based on count of purchase against particular item.
 - Count of employees using the system
 - Employees satisfaction level based on feedback form.
 - Each day total sales.
 - Total Monthly Earning
 - Order Forecasting

Nonfunctional Requirements

System Requirement and Environment :


- Application will be written in Java for easy maintenance and for its longevity .
- This canteen ordering system is required to support a volume of 1500 employees ordering, the web pages should be light and render fast.
- System will auto-create reports for
 - Most popular dishes based on count of purchase against particular item.
 - Count of employees using the system
 - Employees satisfaction level based on feedback form.
 - Each day total sales.
 - Total Monthly Earning
 - Order Forecasting


Usability:

The screens should be self-explanatory and very user friendly. Management would not want employees not ordering from the system as they cannot understand the screens and data fields on screen.

11.

User Login Page -



[Home](#)[Menu](#)

WELCOME TO ONLINE CANTEEN ORDERING SYSTEM

Email Id

Password

Sign In

New user? SignUp Now



START YOUR ORDER

Today's Menu

Appetizers

Main Dishes

Drinks

Desserts



ORDER DETAILS

Order Number:

Date:

Item id	Item Name	Quantity	Price
101	Biryani	- 1 +	\$12.00

Continue Adding Items

Confirm Order