Canteen Ordering System for Unilever

Simplilearn CBAP Certification Project 1

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Date of Submission

May 2022

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Task 1

BUSINESS ANALYSIS CORE CONCEPT MODEL (BACCM)

ACTOR	What they can do on the software created
Employee/ Customer	● Registers on the application ● Login and select preferred food on the menu ● Will be able to modify selected items before confirmation of order ● Will be able to submit feedback on the system ● Should enroll for payment deduction from salary
Canteen Manager	● He will create food menu and update regularly. ● He will be able to view confirmed orders placed by users ● He will forward the list of confirmed orders to the chef for preparation ● He will ensure delivery to the employee's desk
Delivery Boy	● He will deliver the meals to employees' desks ● He will mark the order as delivered and close it once delivery is completed.
Payroll system	● Will calculate total amount to be deducted on food orders from employee's salary ● Will handle deductions from employee's salary at the end of the month.
Management	● Will go through various reports on variety of areas regarding the canteen ordering system ● Will decide whether to make adjustments where necessary.
Implementation SME	● To build a user-friendly application using Java
Operations Team	● Will handle the operations and needed support tasks ● Will make necessary updates to the application when necessary
Chef	● Will prepare the ordered food

Testers	● Will confirm the functionality of the application once it is developed before release to users
Business Analyst	● Will engage with all key stakeholders and create Business Analysis deliverables and required documents

Task 2

Problem Statement in the System

The canteen can only accommodate about 10% of the total employees at a time which makes employees to spend a lot of their lunch break queuing to get food and getting a vacant table to sit and eat.

They also do not often get their choice of food because the canteen runs out of supplies which result in lots of wastage when significant amount of food not purchased are thrown away.

Task 3

REQUIREMENTS CLASSIFICATION SCHEMA (RCS)

Business Requirements:

- 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 less manpower
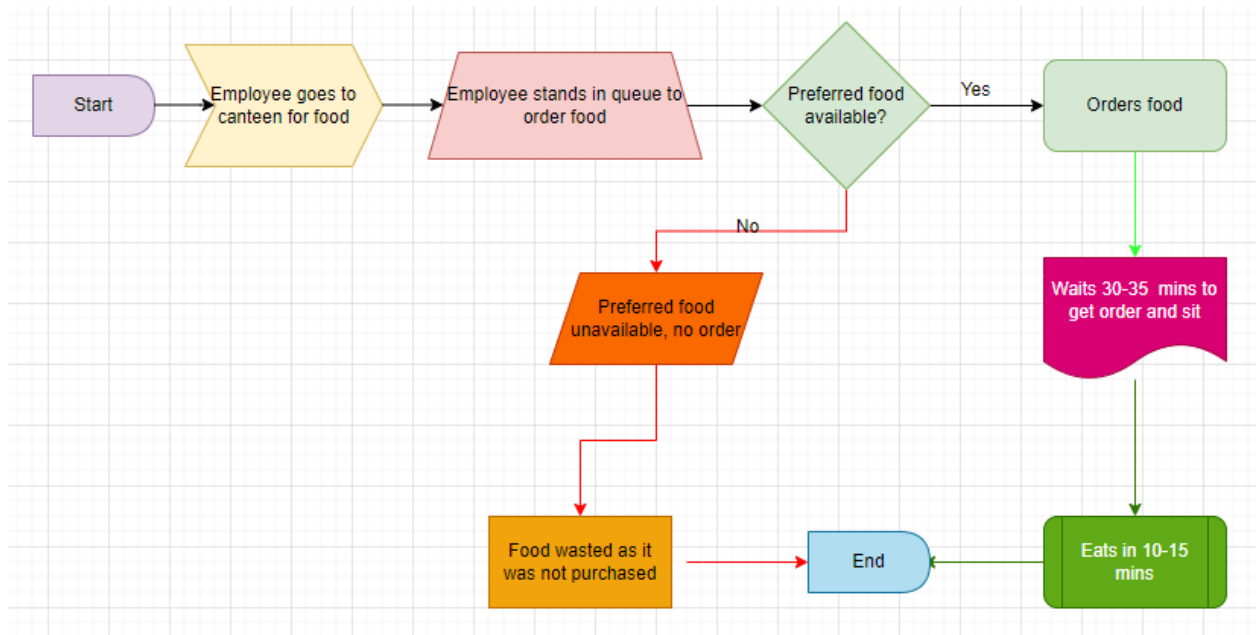
Stakeholder Requirements:

- Employees: The employees would be able to register, login and order their preferred choice of food online through the application. The food will be delivered to the workstation of each user and the cost of the meal will be deducted from their monthly salary.
- Payroll Team: Through the application, they will be able to calculate the total monthly cost of food ordered by each employee and deduct same amount from the employee's salary.
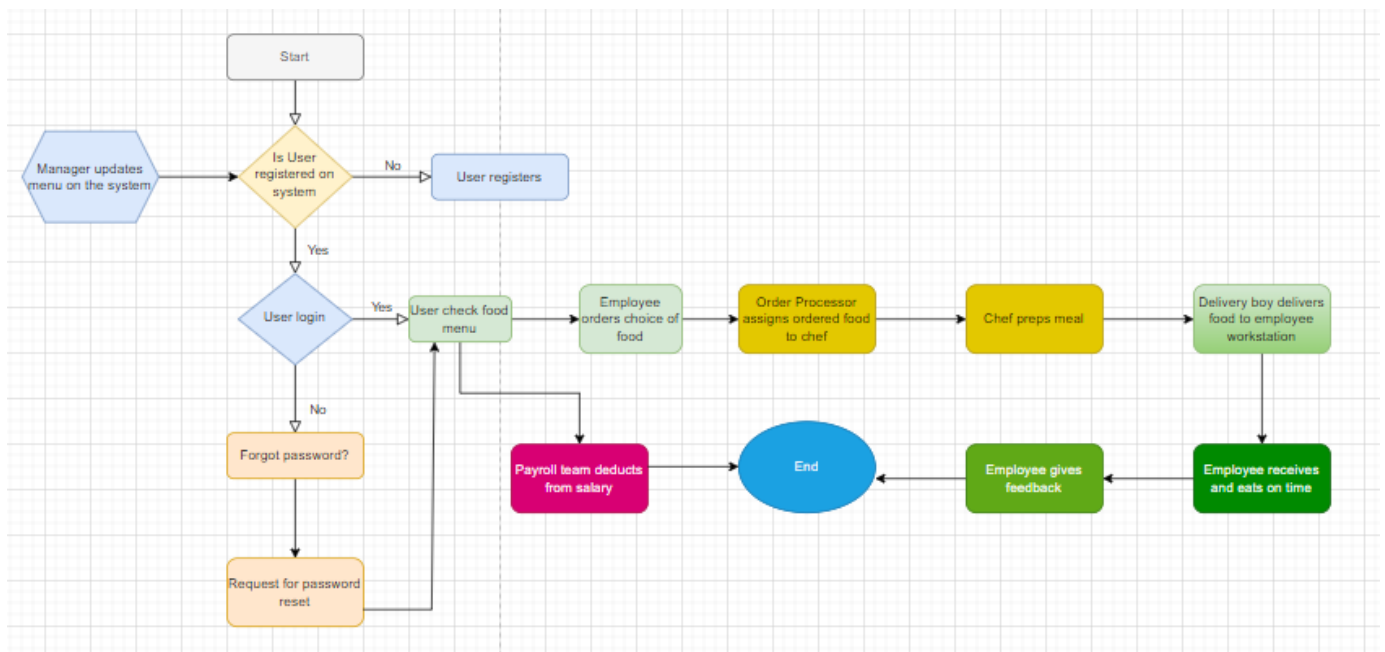
- Canteen Manager: The canteen manager should have access to view all orders made, take the inventory and forward them to the chef for preparation. The manager should also be able to request a delivery to employees' workstation.
- Meal delivery guy: After successful delivery of each meal, the delivery guy should be able to close the customer order online.
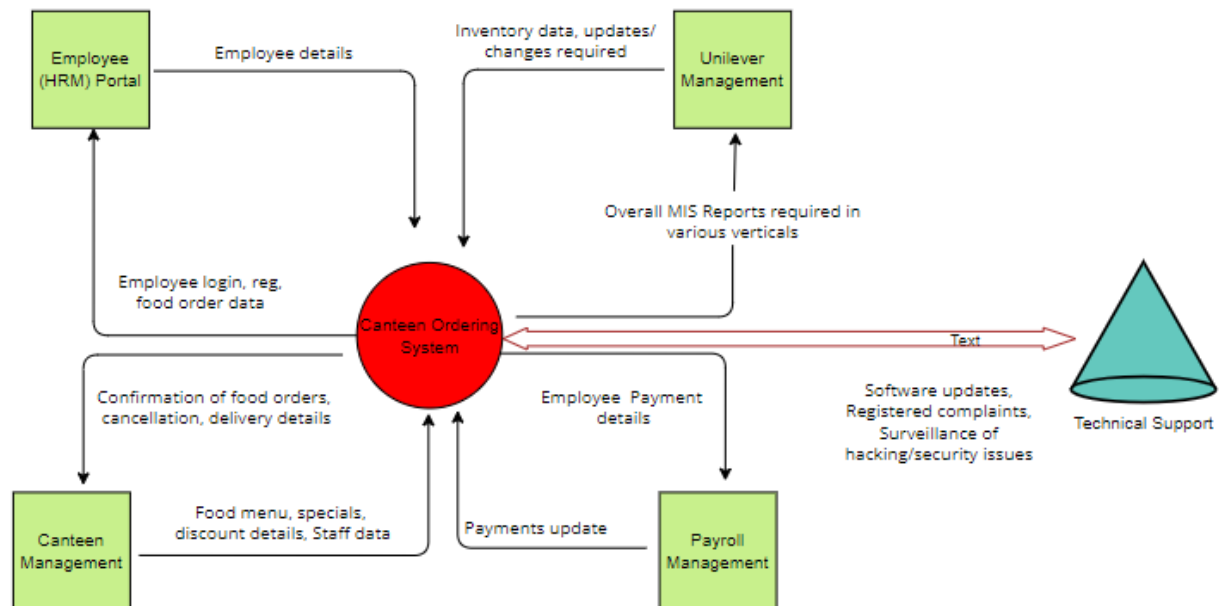
Task 4
As is Flow chart

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Start → Employee goes to canteen for food → Employee stands in queue to order food → Preferred food available?
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Preferred food available? --Yes--> Orders food

Preferred food available? --No--> Preferred food unavailable, no order

Orders food → Waits 30-35 mins to get order and sit → Eats in 10-15 mins → End

Preferred food unavailable, no order → Food wasted as it was not purchased → End

Future Process

```
Start → Is User registered on system?
Manager updates menu on the system → Is User registered on system?
Is User registered on system? --No--> User registers
Is User registered on system? --Yes--> User login
User login --Yes--> User check food menu
User login --No--> Forgot password? → Request for password reset
User check food menu → Employee orders choice of food → Order Processor assigns ordered food to chef → Chef preps meal → Delivery boy delivers food to employee workstation → Employee receives and eats on time → Employee gives feedback → End
Payroll team deducts from salary → End
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Task 5: Scope of Canteen Ordering System using Context Diagram

Task 6: Main features that need to be developed

- Web application and mobile app to be developed
- Employee registration and login into the system
- Upon successful login, Employee should be able to see the display of updated food menu and the cost of each
- Employees are notified that they can place orders till 11am (to allow enough time for Chef to prepare the choice of food for all employees)
- Employee can modify orders before placing the final order
- Employee is notified to confirm order after which modification can no longer be made
- Canteen Manager views each order and assigns them to the Chef for preparation
- Once meal is prepared, delivery boy is notified with employee details
- Once delivered, delivery boy should be able to mark the order as delivered
- On completion of the order, employee is notified to fill a feedback form
- Payroll system should have access to the total cost of orders for each employee and deduct the cost from the salary accordingly
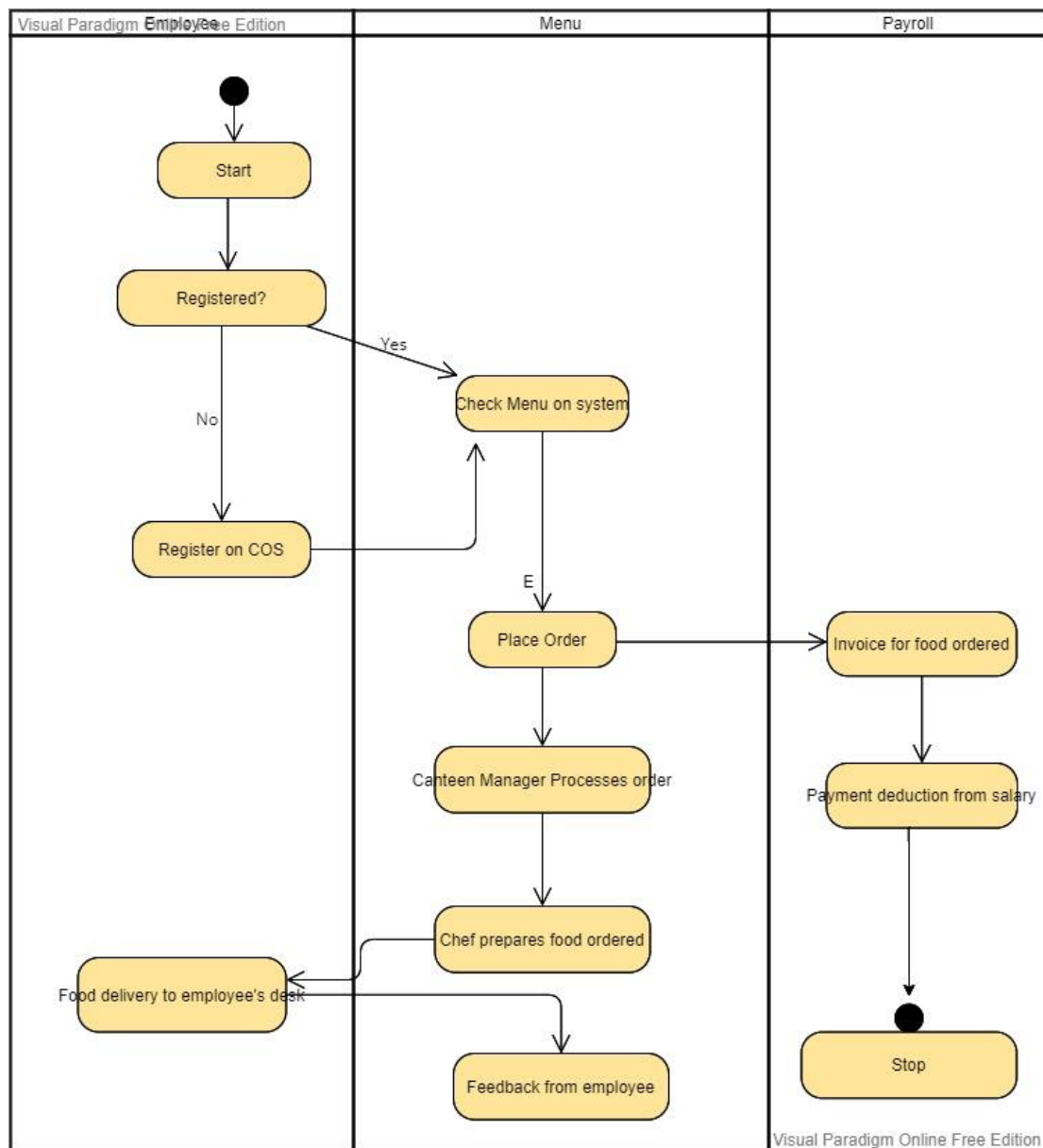- Reports are generated at regular intervals for Management

In-Scope:

- Online web portal and mobile application
- Employee registration and login window
- Food menu/cost
- Order placing screen
- Order confirmation screen
- Live tracking and order status
- Order closure option to delivery boy
- Feedback form
- Employee details and order history for payment deduction
- Reports generation screen
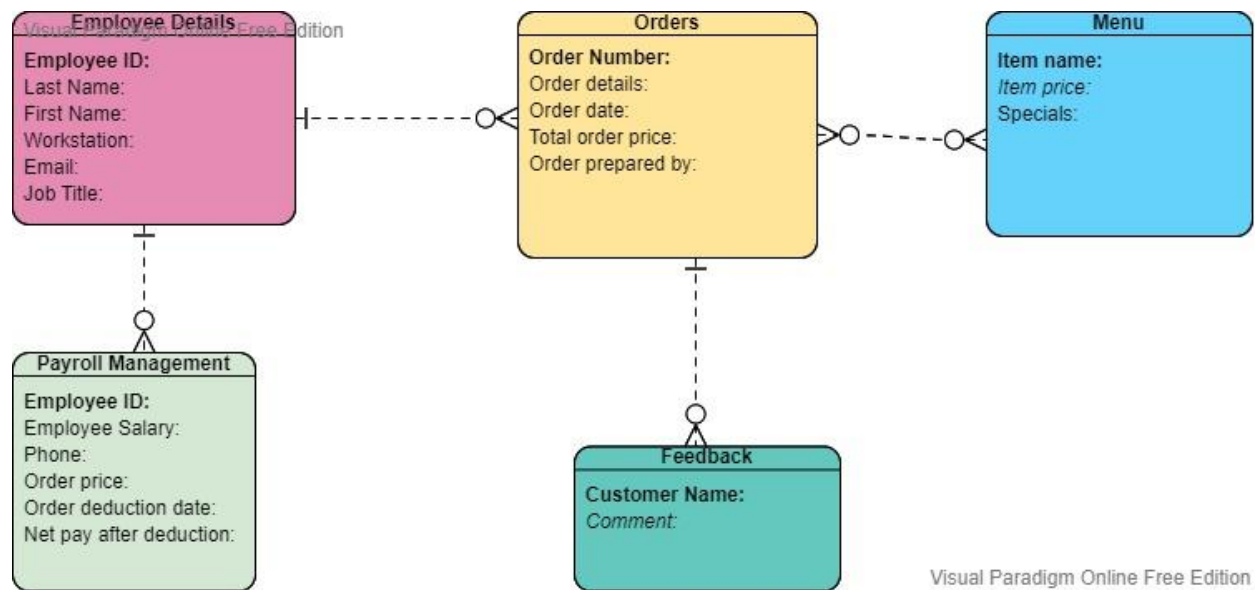- Canteen Manager and delivery boy contact details

Out-of-Scope:

- Food supply data
- Vendor details
- Chef and cook management
- Vendor management
- Supplier details

Task 8: Activity Diagram of System

Task 9: Entity Relationship Diagram for the system

Employee Details
- Employee ID:
- Last Name:
- First Name:
- Workstation:
- Email:
- Job Title:

Orders
- Order Number:
- Order details:
- Order date:
- Total order price:
- Order prepared by:

Menu
- Item name:
- *Item price:*
- Specials:

Payroll Management
- Employee ID:
- Employee Salary:
- Phone:
- Order price:
- Order deduction date:
- Net pay after deduction:

Feedback
- Customer Name:
- *Comment:*

Functional Business Requirements:

- User Registration and login
- Daily updated menu
- Order should be placed in line with stated timings
- Place and modify order before order confirmation
- Chef notified of the confirmed orders
- Delivery boy notified of prepared orders
- Delivery of food to the employee workstation
- Once delivered, delivery boy closes the order and marks as delivered
- Feedback form available for customers to fill and submit
- Generation of reports for management about the effectiveness of the Canteen order system, reduction in operating expenses including:
  - Most popular dishes
  - Number of employees using the portal
  - Satisfaction rate
  - Total sales, daily, weekly, monthly
  - Order forecasting report

Non-functional business requirements

- Scalability for use by 1500 employees at a time
- System should be light and fast
- User-Interface should be user friendly and self-explanatory
- The application should be created using Java to ensure usability for prolonged period of time and with less maintenance required on the code

Task 11: Mock Screen for Canteen Ordering System

Mock screen for Canteen Ordering System