Canteen Ordering System

Stakeholders

ACTOR	What they can do on the software created
Employee/Customer	● Employees can order food online without wasting their productivity time ● Can choose items from menu without moving from their desk.
Canteen Manager	● Canteen Manager will be able to handle all food related queries online.
Delivery Boy	● Delivery boy can check order through this system directly and can act accordingly. ● With this service delivery boy will get sufficient time to get deliver food to employee workstation.
Payroll system	● HR payroll section will be checking how many employees are ordering food online ● Can track the all the orders, ordered by individual employee and can make deductions from salary.
Management	● Can get feedback of the employees using the system.

Problem Definition and Solution

- Avoids food wastage.
- Shortage of dishes.
- Saves the time of employees, which increases the productivity.
- Flexibility for employees.

Advantages and Objectives

Advantages of the Canteen Ordering System:

- **Canteen**: Helps in predicting the monthly inventory and reduce wastage of food. De-congestion of the Canteen space. Faster better customer service, hassle free collection of payments.
- **Customer:** Saves Time, ease of ordering, option of eating at workstation or Canteen, Variety of Cuisines availability, Time flexibility, ease of payment.

Objectives:

- Reducing the time taken by employees for having lunch by 50%.
- Increasing the cost efficiency of Canteen, the operating costs should get reduced by at least 15 - 20 % in first year .
- Enhancing operating efficiency of Canteen resulting in reduced manpower.
- Making canteen a food efficient system with minimal wastage. At least 30% of reduction in food wastage in the first 6 months.

Existing System

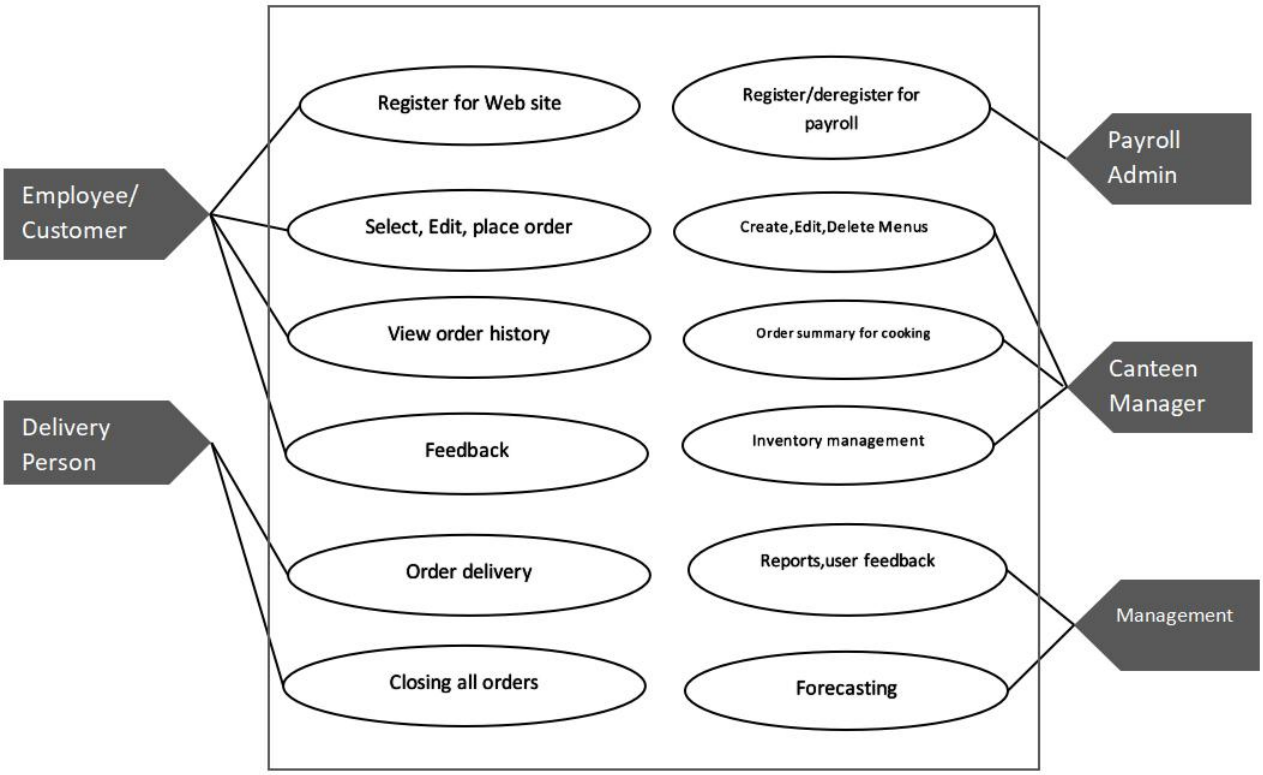
- Employee should stand in a queue for ordering food.
- Doesn't have lot of options on dishes.
- No proper tracking of food wastage.
- More manpower in place for maintaining.
- Conjusted in peak hours.
- Waiting for an empty table.
- No proper track on inventory.

Proposed System

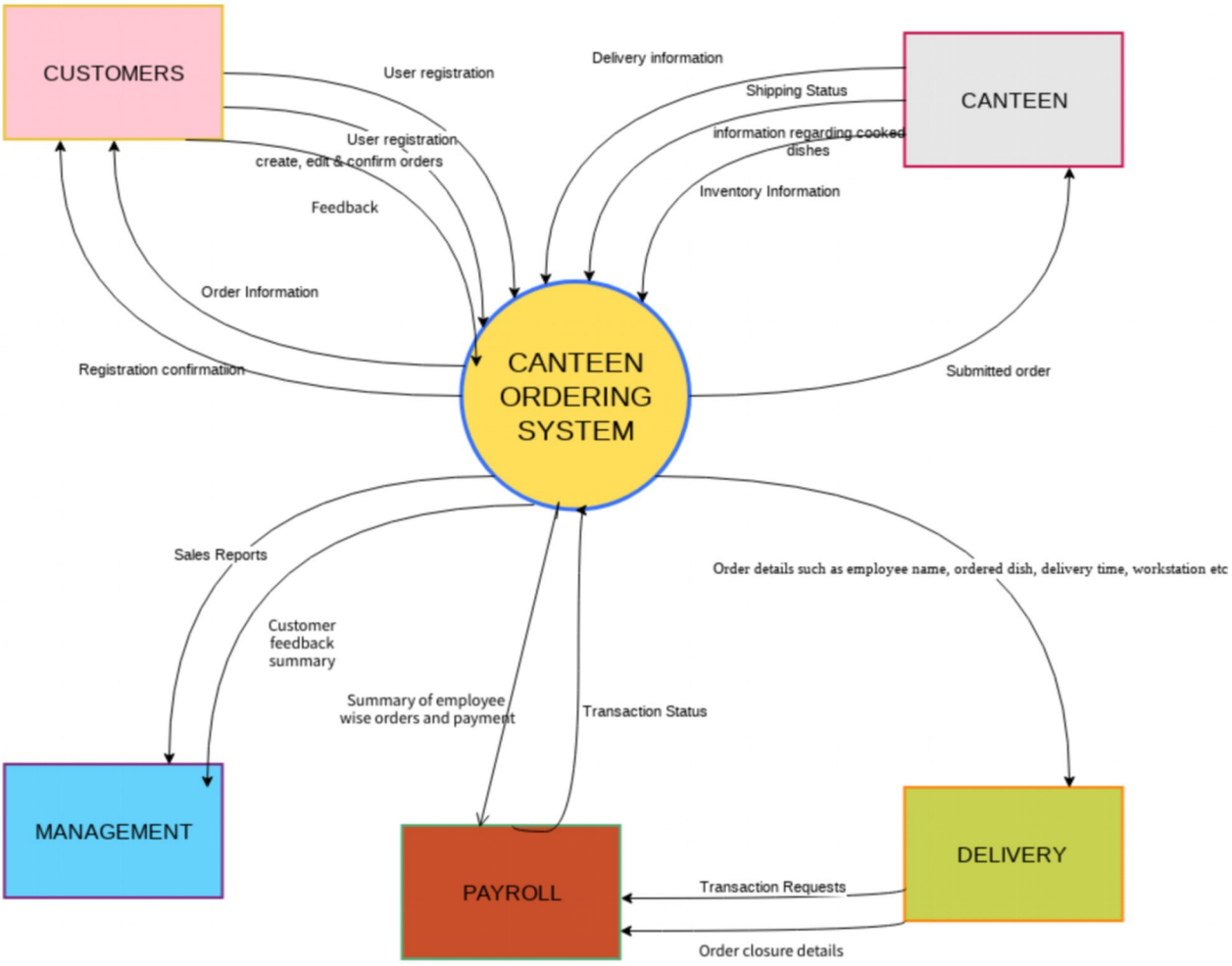
What is the proposed solution or system? Mention in points how the system itself will be for the user.

- User friendly interface
- Enrollment through Salary deduction acceptance
- Ease of choice of Menu
- Can order more than one or a variety
- Can view previous order details including total costs
- Enable cut off at selected time 11:00

Scope using *use case diagram* (UML)



Scope using *context diagram*



In Scope

(Mention the name of features and what they are used for)

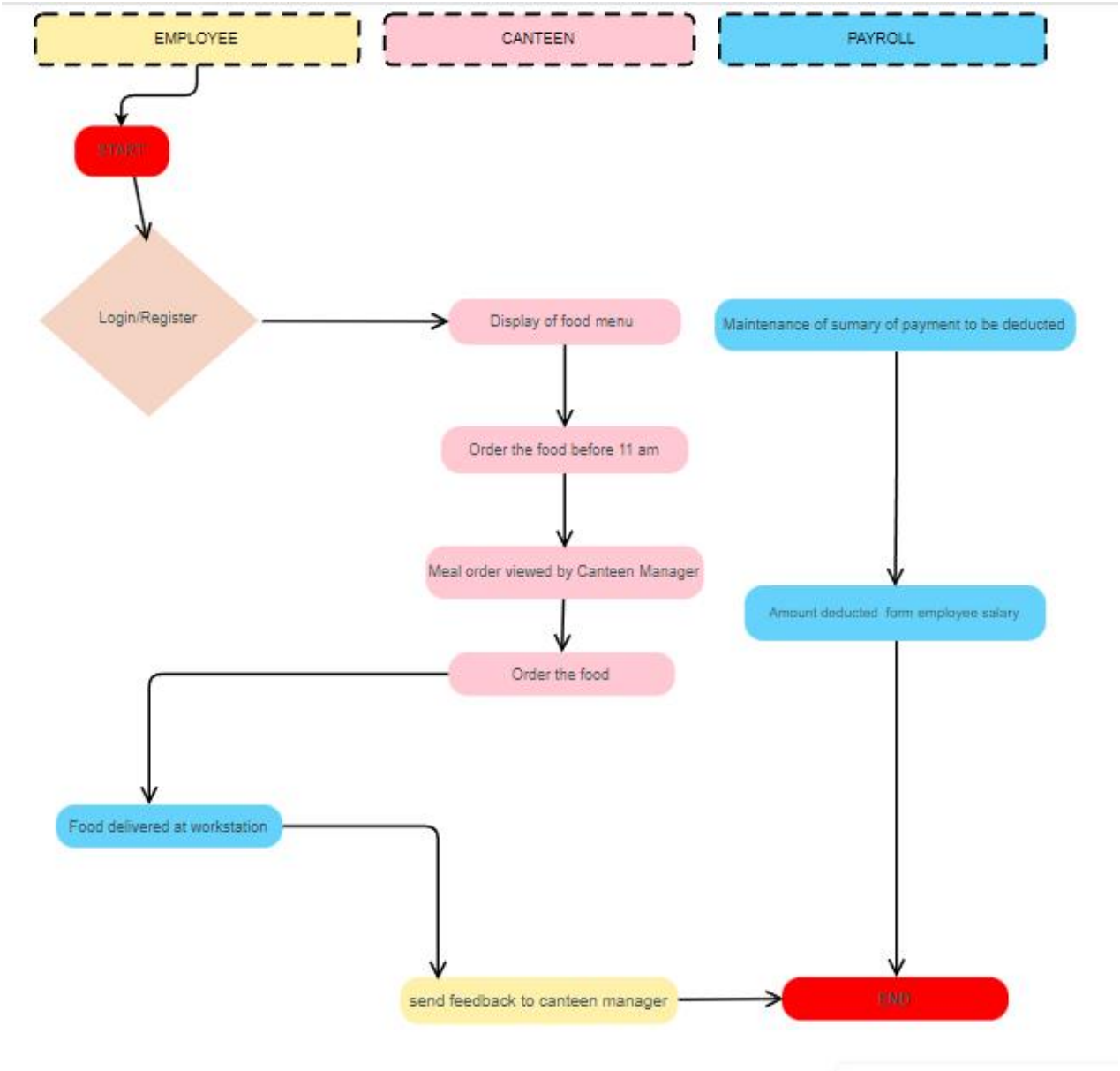
- Web page shall capture food payroll registration, menu, order and feedback details.
- System shall allow registered employees to login via company credentials.
- System shall allow entry and maintenance of menus.
- System shall support inventory and wastage management.
- System shall have Reporting module for required reports.
- System shall have Payroll deduction information generation and maintenance.
- System shall capture Manpower utilization details.
- Application shall mark delivery, post order delivery.

Out of Scope

(What are the facilities or features—for both patron and the canteen—the are out of scope or cannot be implemented now)

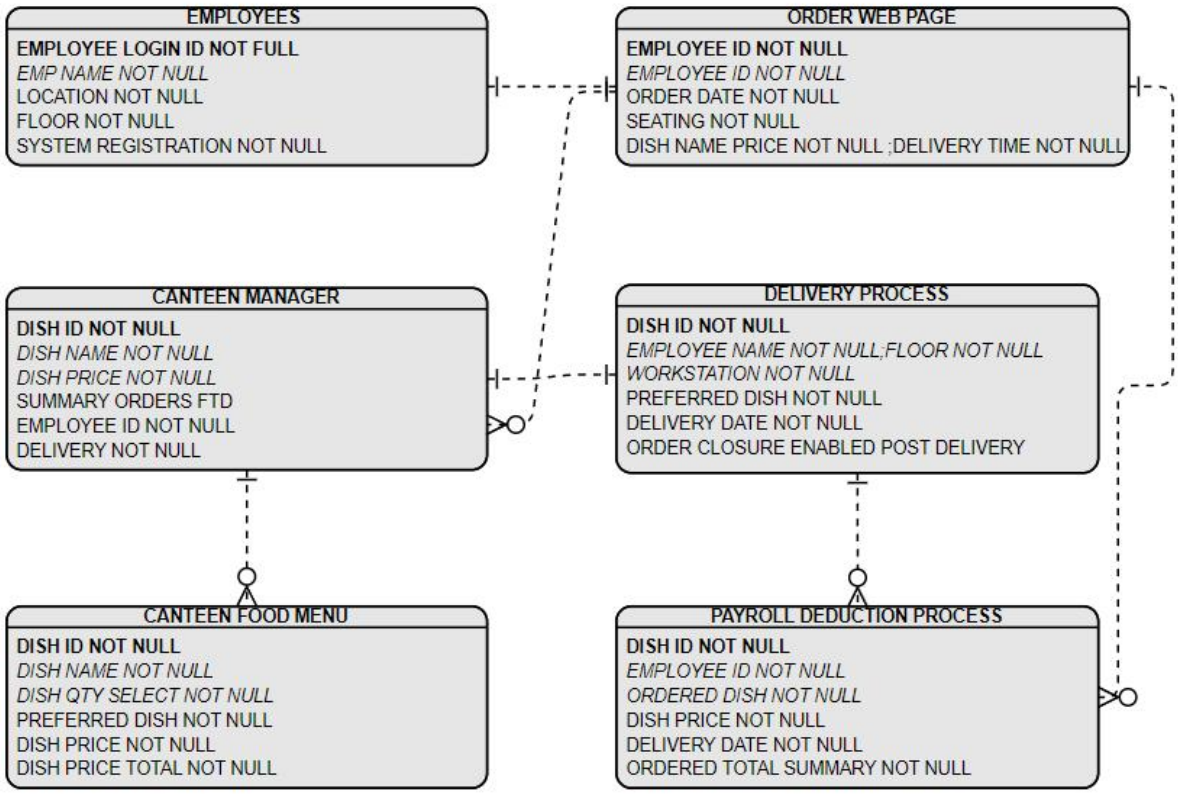
- Delivery to any other place besides work station.
- Inclusion of automated emails with the day's menu and suggestions.

Activity Diagram for the System:



ER Diagram for the System:

Create an ER Diagram for the system you have designed.



Preconditions and Triggers: Example

- What user/manager should be able to do in a step?

  - Create an account and get registered with the Salary reduction scheme.
  - The Manager should be able to get a list of summarized orders for the kitchen by 11:00 .

- What are the triggers?

  - Employee wanting to place an order in the Canteen System.
  - Canteen Manager wanting a summarized list of meals to cook.
  - Delivery Boy needing to pick up the meals, and details of where to deliver them.

- What is the basic flow?

  - Employee places order - Canteen manager gets summary of orders - Delivery person gets the details of delivering the order.

- What are the data elements?

  - Users, Menus, Orders, feedback

- In case of errors, what happens?

  - Report, Contact support

Business Requirements:

Business objective – 1:

- Reduce canteen food wastage by a minimum of 50% within 6 months.
- Previous - 30% wasted.
- Must plan for: Less than 15%.

Business objective – 2:

- Reduce canteen operating costs by 15% within 12 months.

Business objective - 3:

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

Business objective - 4:

- Reducing the canteen manpower.

Functional Requirements

(functional requirements for the system)

- Users should be able to create accounts, logon and have password recovery.
- An administrator should be able to assign roles to a User, which reflects their position.
- Roles should have access only to respective modules.
- Web Interface to be able to alter menus. This includes adding the price for the menu.
- Inventory coming in to be recorded in the system.
- Inventory gets updated for every order prepared.
- Canteen seating availability to be updated.

Nonfunctional Requirements

(nonfunctional requirements for the system)

System Requirement:

- The application should be low-maintenance requiring minimal manual intervention.

- System should be stable to take the load of 1500 logins and ordering.
- Web page should be light so that rendering is fast for browsing and order placing.

Usability:

- User friendly and self-explanatory user interface.
- All activities of current canteen system will stop on the day of Go Live of Web application.

Environments

Application will be written in Java for easy maintenance

By

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