Catering Industry

Stakeholders

ACTOR	What they can do on the software created
Employee/Customer	● Choose food type and delivery time, Order and reject food ● Confirmed order intimation. ● Enter feedback about service.
Canteen Manager	● update availability of food with due price, ● organize order confirmation and rejection, ● Assign delivery schedule to delivery boy.
Delivery Boy	● Get delivery work and details for particular customer, ● Enter the delivery status.
Payroll system	● Confirm order convert as due in salary, ● Receive notification about due amount with confirm order,
Management	● Check customer feedback, ● Convert overall data in analytical form, ● Upgrade and edit the system.

Problem Definition and Solution

Problem Definition	Solution
In existing method food demand and wastage occur 25% because thump rule data about employees food choice.	Increase choices of select food items prefer by employee with Arrange delivery in employees schedule.
In canteen seating arrangement not adequate for 1500 employees, so for vacant seat take more time this loss productivity in both side	Serve to users workstation increase employee productivity and prevent separate seating rush.
Manual order system complicate way to follow-up employee order details and deduct amount from salary.	Orders amount process directly to employee salary deduction.
For arranging seats and prepare canteen and cleaning process require more manpower	Serve to users workstation reduce man power

Advantages and Objectives

Advantages of the Canteen Ordering System:

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

Objectives:

Point1:
Reduce canteen food wastage by a minimum of 30% within 6 months following first release.

Point2:
Reduce canteen operating costs by 15% within 12months, following initial release.

Point3:
Increase average effective work time by 30 minutes per employee per day, within 3 months.

Point4:
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

- Arranged reservation applicable only 150 seats in two canteen from 1500 employees,
- All employees waiting in a queue then collect their food.
- Order at canteen reservation and payment deducting process manual

Proposed System

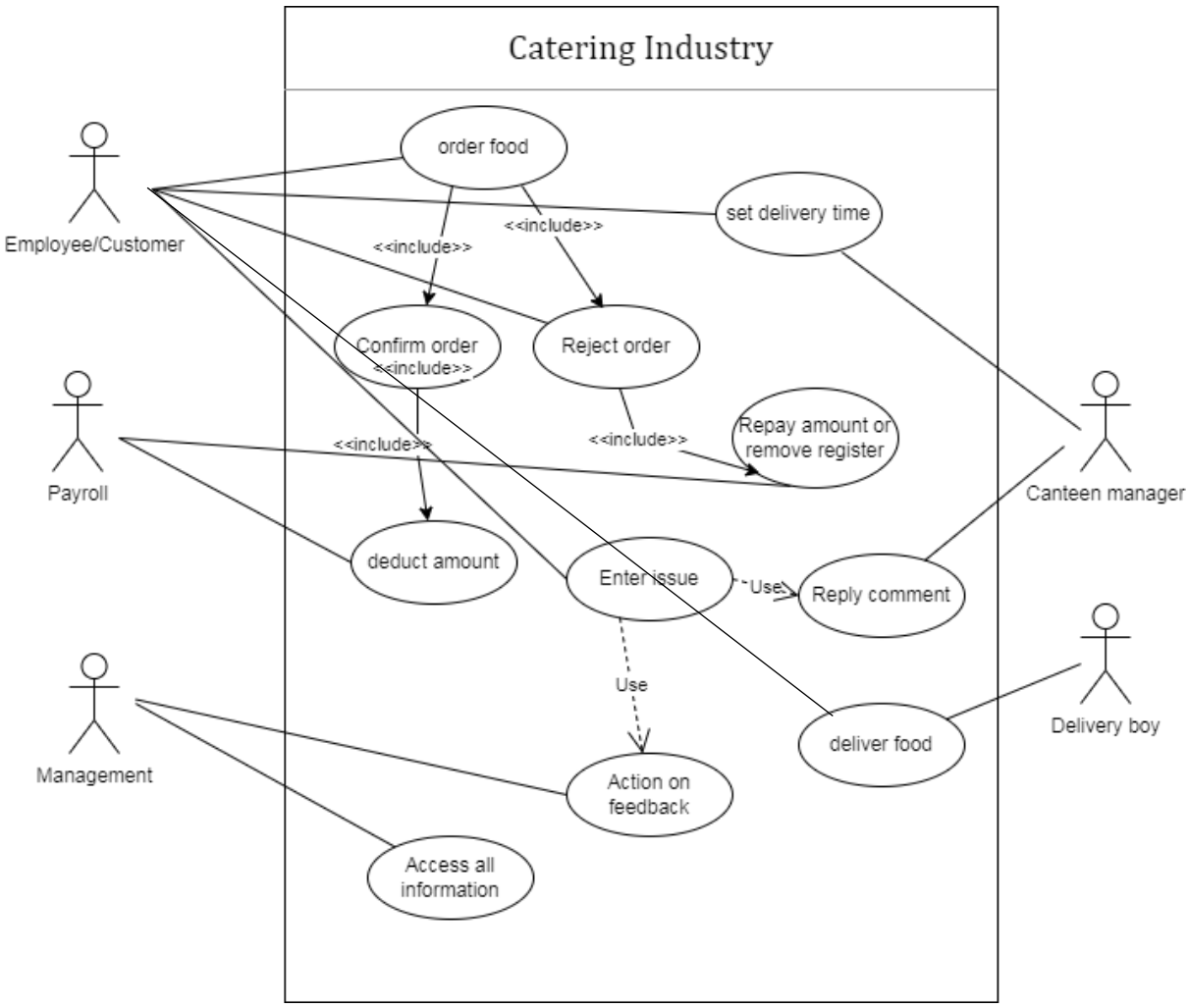
We are going to be creating and maintaining the program in Java. We chose Java because it will not change much over time, and if we make it well, there will be very little maintenance to be done on the code.

System itself will be for the user.

- User friendly interface,
- Cost & time effective,
- Security and safely payment,
- Accuracy of data conversion.

Scope using *use case diagram* (UML)

Create a use case diagram including all the actors and processes for an end to end process of the system.



Scope using *context diagram*

Depict the scope using Context diagram.

In Scope

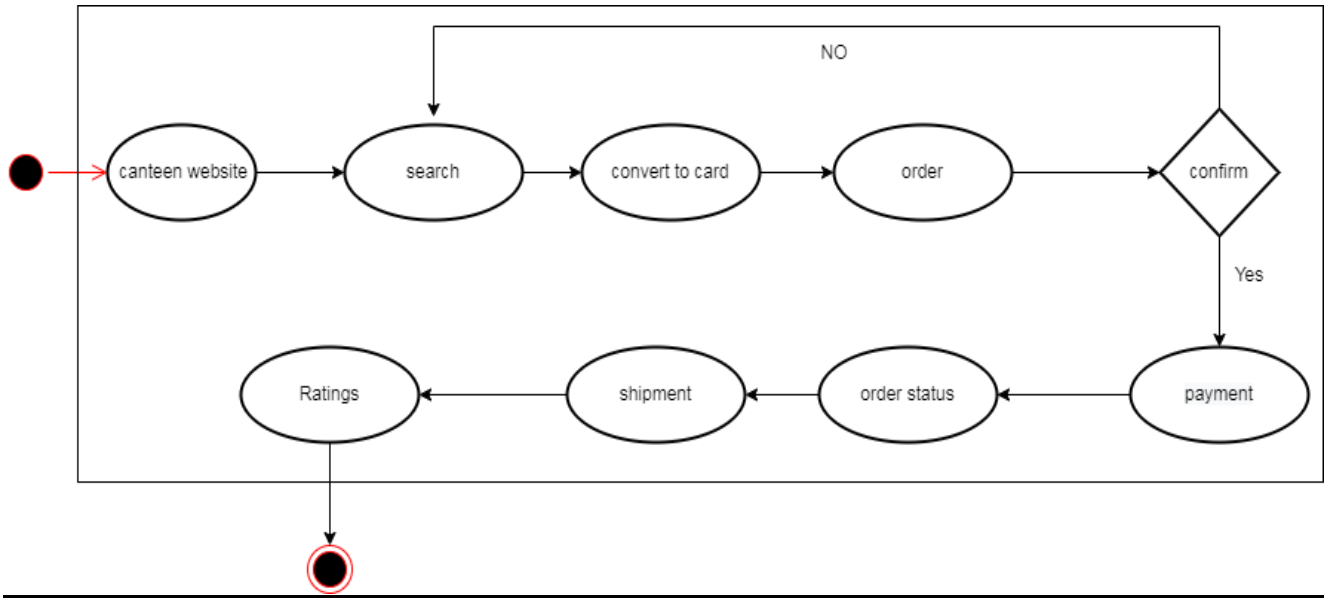
- The order feature used for order different verity of food
- The Bill feature shows history amount deducted with form of payment included with salary deduction.
- Process feature shows in order process status and rejected orders roadmap.
- Feedback feature gives right to enter feedback and put rating.

Out of Scope

- Choose delivery agent contact them directly for special type of food.
- EMI method of bill payment for regular user of contract employees.
- For work from home candidate extend service with fixed delivery charge.
- Extend upcoming licence and standards.

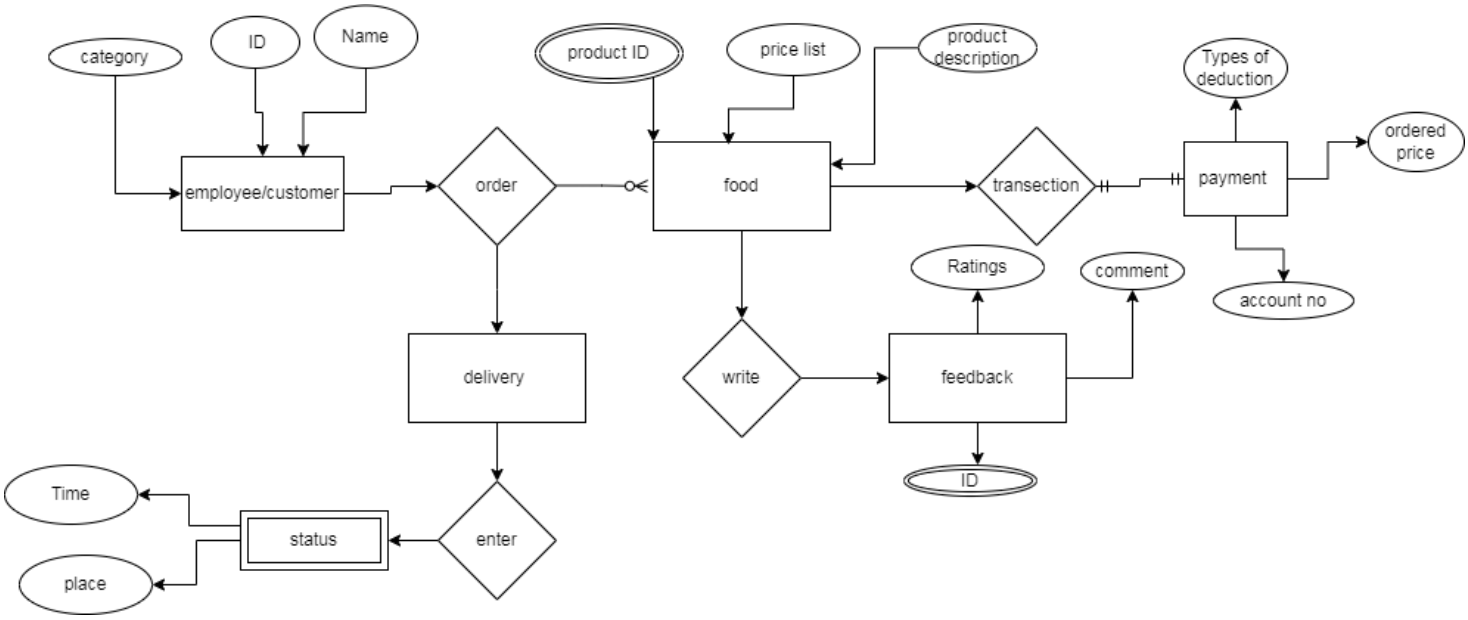
Activity Diagram for the System:

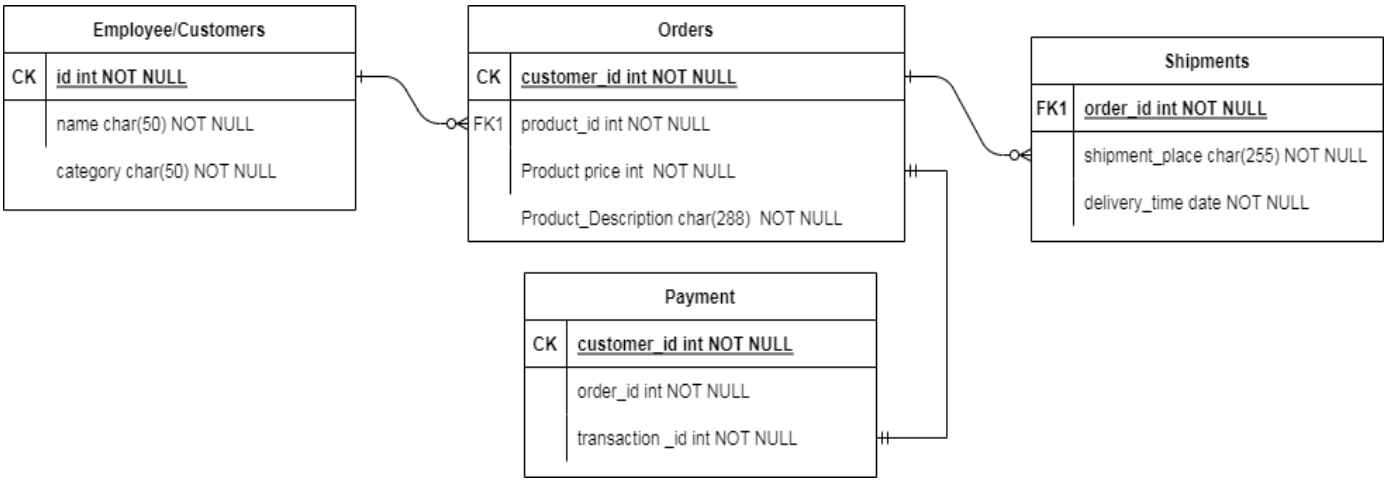
Create an activity diagram for the system.



ER Diagram for the System:

Create an Entity Relationship diagram for the system you have designed.





Preconditions and Triggers: Example

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

- User can update after shipment feedback-star ratings, comments and update picture and video clips.
- User can intimate via toll-free number or chat box method, about necessary technical issue like as payment failure and login issue, server busy.
- Manger can take action over customer feedback, organize the team for reduce the bottleneck in process, Ensure the quality product and timely delivery.

What are the triggers?

Triggers are anything that might cause a person to recall a experience they've had in particular service.

Example:

- Easy and efficient ordering system-arranged website, proper description and Offord cost,
- Convenient payment like deduction in salary, pay on delivery, online truncation.
- Shipment on workplace in timely.

What is the basic flow?

The Basic Flow of Events specifies the interactions between the actors and the system for the ideal case, where everything goes as planned, and the actor's result of value is met. The basic flow represents the main capability provided by the system for this use case.

Example:

- Increase employee efficacy
- Reduce capex from traditional method

What are the data elements?

- Collect employee id and types of employee details,
- Salary account details, department and employee place.

In case of errors, what happens?

- For fixing the error appoint technical team,
- Do quick announcement if find solve about issue might take more time period,
- Discuss with stakeholder and set optional system like arrange third party service temporally.

Business Requirements:

1. Investment for portal development, rearrange the canteen land,

Train the workers for adopt new system, and appoint new stakeholders, gather orders,

2. Achieve target of sale per day, ensure quality of product,

3. Select source of raw product supply,

4. Prepare spicy and healthy food, method of delivery, packing and handling for dispatch.

5. Set time table shift works and assign default works to respective workers,

6. Access control provide to necessary team based their default work.

Business objective – 1:

Increase revenue and increase employee efficiency while reduce the time waste.

Business objective – 2:

Eliminate food wastage, make productivity, and increase orders.

Business objective - 3:

Get good feedback about service from employees and workers and reduce unwanted work pressure and stress.

Business objective - 4:

Improve easy access and control the process and eliminate blind expanses and works make target base and utilize competence, time, experience.

Functional Requirements

Write down all the functional requirements for the system.

- set rules and regulation about canteen system and portal access,
- Transaction corrections, adjustments and cancellations,
- Task and responsibilities determine to respective stakeholders,
- Audit the quality of substances from the source,
- Legal licences and certification like food quality approval, environmental regulation,
- fixed pay scale to workers,
- Save and trace historical data about order and other function.

Non-functional Requirements

- Write all the non-functional requirements for the system.
- consistent taste and quality of food, product customer data privacy, on time delivery, response over feedback,
- quantity of food process in each flavour, Ensure workers availability and discipline of works,
- Ensure error free order system, use environment for consistent and user-friendly performance,
- Types of payments immediate payment via online or cash on delivery, or only for permanent employees offer deduction bill from monthly salary

System Requirement:

1. System is user-friendly and self-learning type

2. For consistent preparation give certain preparation techniques and guideline access to the chef

3. To the delivery boy providing location access, gives guideline to delivery on time on workplace,

4. Payment transection and completion ensure end to end encrypted mode, giving notification about o process to respective personal.

Usability:

Reduce the food wastage due to lack of prediction,

Increase productivity and efficiency of employee because of eliminate the stress of employee and waiting time in canteen.

Receive favour of food with desired payment mode

Environments

We are creating portal by using java code for reduce the often modification and maintenance risk, and while using the portal we give the space to create consistent and collaborative work environment to the employees/customers, its increase the every employee performance individually.