



**Dharmsinh Desai University,  
Nadiad Faculty of Technology  
Department of Computer**

**Engineering B. Tech. CE Semester – IV**

**Subject: SEPP/SP**

**Project title: Canteen Management System**

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## **Introduction**

Canteen Management System in which there are mainly two users Admin and Customer. This System is specifically for Restaurant in which manager take order of customer. Basically all customer create own account in which customer does first register then login with appropriate credentials.

Admin side is built in MVT Django so that it can access through a pc machine. Admin have to first login with their username and password . After login the admin can add category of food like Non-veg.,Veg., etc...After that the admin can also edit details of category. Then also add item after that admin can also edit details of items. As informed in the above paragraph the Manager will take orders, after that they can see the record of the placed order on a particular date. Admin can change status of order.

Customer can choose one of the category then system shows appropriate items of category. Customer can search the item which ever his/her want and add to cart. Now customer can increase/decrease item quantity and customer can see summary of order and customer can place order or see preview of invoice or download invoice . Customer can see status of order.

## **Technologies/tools used :**

- Platform used: Visual Studio 2019 for Admin side  
Technology: MVT Django
- Platform used: Python  
Technology: Web-Site
- Platform used: MYSQL/POSTGRESQL

# Software Requirement Specifications:

## Canteen Management System

### R.1: Food-item management:

**Description:** User have few option like veg., non-veg., cold things. Customer can choose appropriate categories of item. System shows the appropriate item which is related to that category.

#### **R.1.1: Select category**

**Input:** User has choose one of the category.

**Output:** System shows all item related to that category.

#### **R.1.2: Select item**

**Input:** User can select item

**Output:** System shows all details of item like price, rating ,etc..

### R.2: Customer management:

**Description:** Customer has two option sign up and log in if user is fresher for this site then it should choose sign up option otherwise take log in and selecting all items which is like to order then system generate token number and depend your token number system generate appropriate waiting time.

#### **R.2.1: log in or sign up**

**Input:** User selection.

**Output:** System redirect to log in or sign up page.

#### **R.2.2: Token number**

**Input:** select order confirm button.

**Output:** system give token number and waiting time.

#### **R.2.3: service type**

**Input:** select radio button

**Output:** service type (restaurant or parcel).

#### **R.2.4: Cancel order**

**Input:** User selection.

**Output:** Display cancel confirmation message

### R.3: Canteen management:

#### **R.3.1: Add category**

**Input:** User selection.

**Output:** category details page.

#### **R.3.2: Add item**

**Input:** User (Admin) selection.

**Output:** item details page.

#### **R.3.3: Update item**

**Input:** User selection.

**Output:** Updated item details

#### **R.3.4: Delete item**

**Input:** User selection

**Output:** delete item confirmation message

#### **R.3.5: Order details**

**Input:** User selection.

**Output:** System shows order details sort by token number.

#### **R.3.6: Order Complete**

**Input:** press done button by canteen department.

**Output:** system send message to customer, "Your order is ready".

### R.4: Employee management:

**Description:** This management handle employee details like attendance, name, salary, e-mail id, etc...

#### **R.3.1: Add Employee**

**Input:** User (Admin) selection.

**Output:** Employee details page.

#### **R.3.2: Update Employee detail**

**Input:** User selection.

**Output:** Updated employee details

#### **R.3.3: Delete Employee**

**Input:** User selection

**Output:** delete employee confirmation message

#### **R.3.4: Display Employee detail**

**Input:** enter employee id

**Output:** System display details of employee

## R.5: Bill management:

**Description:** If customer afford above condition like price, waiting time, etc. then it presses confirm button and system generate invoice otherwise presses cancel and it will move to home page and pay the money which is prefer payment mode and take order.

**Input:** press print invoice button

**Output:** system display invoice of order.

## R.6: Sales management:

**Description:** this management only for restaurant purpose. And it content all order of day, week, month and year. And also display how many item sold by restaurant.

### **R.6.1: order statistic**

**Input:** choose one of the option like day, week, month or year.

**Output:** shows number of order place by restaurant.

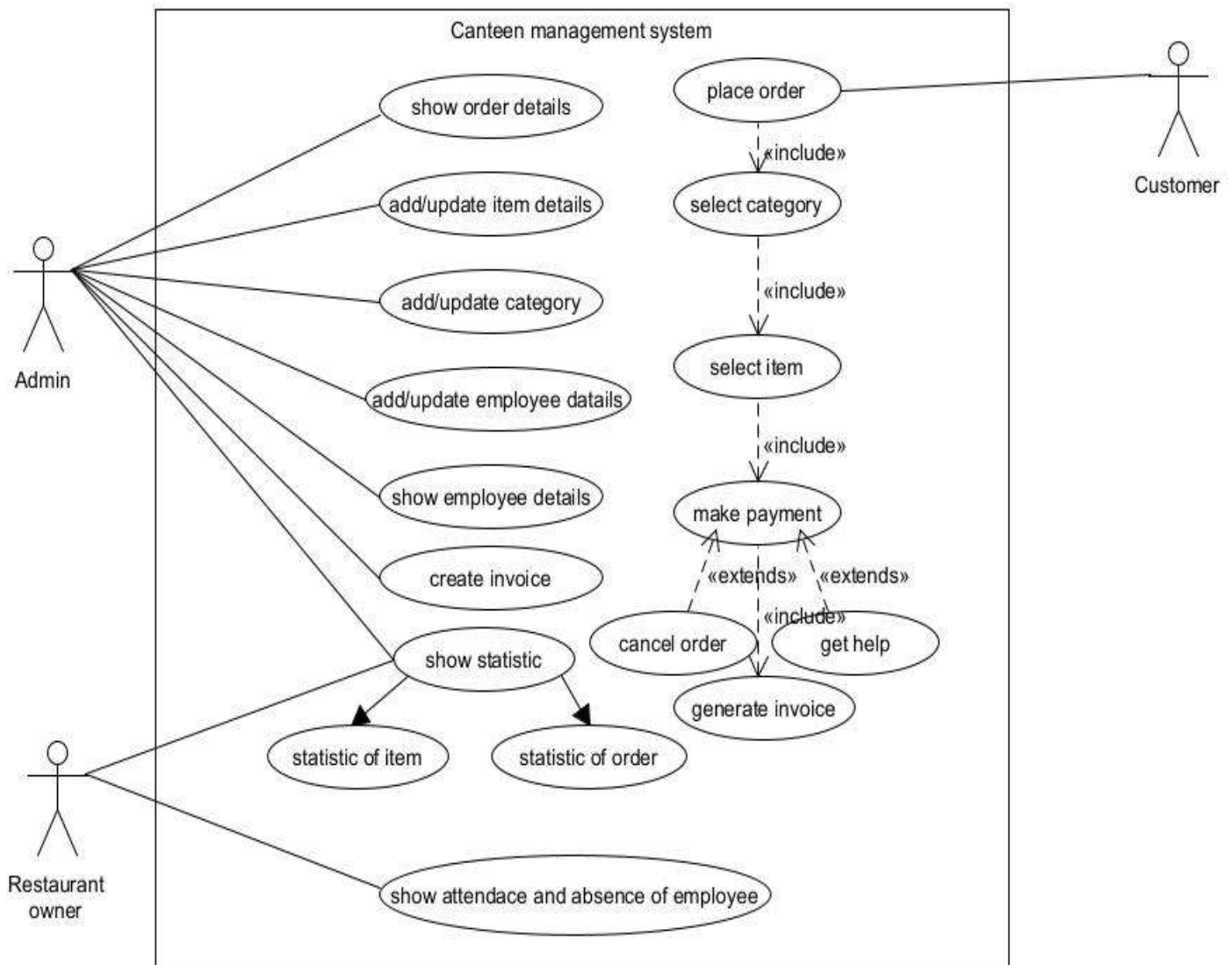
### **R.6.2: item statistic**

**Input:** choose one of the item.

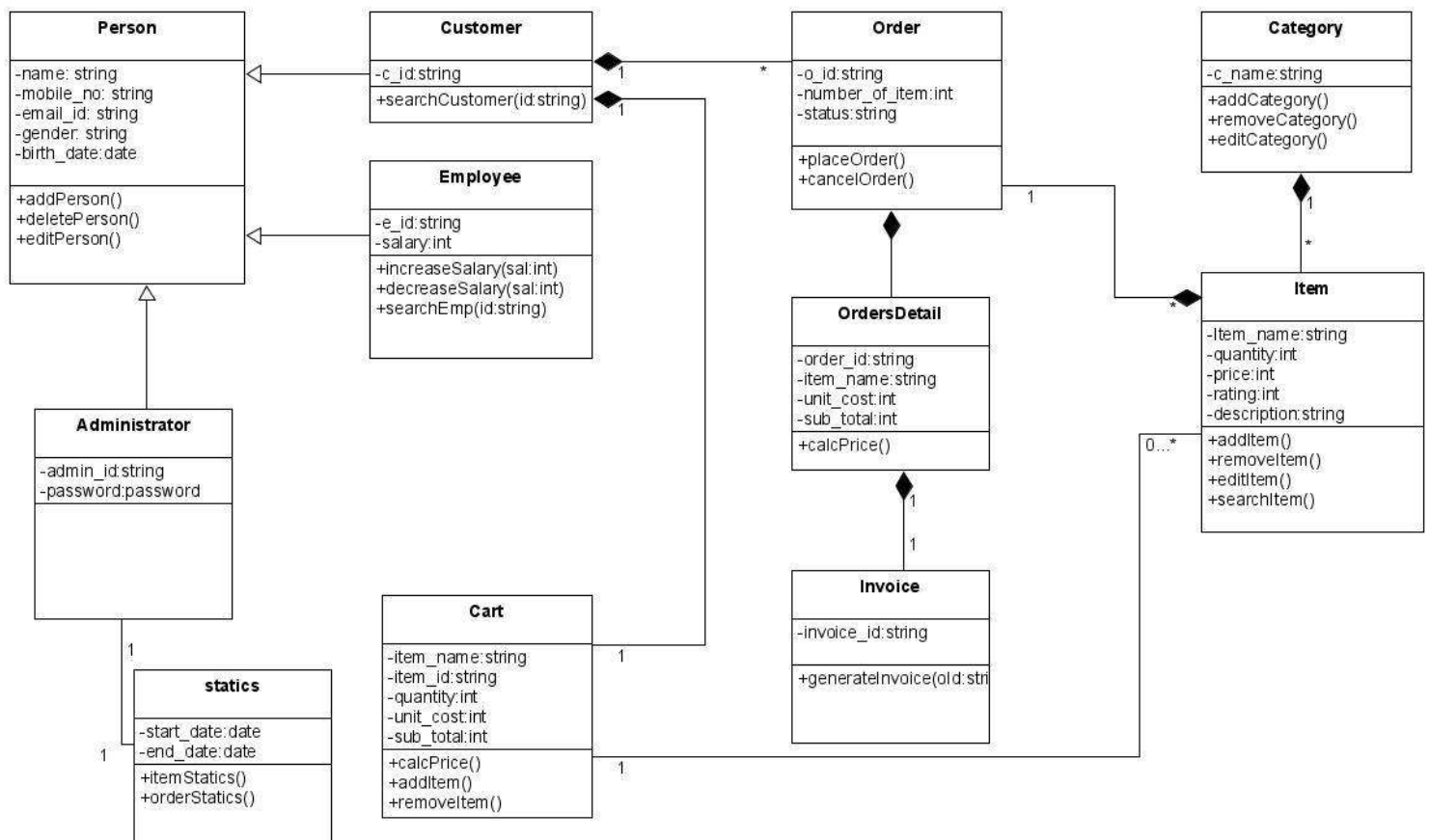
**Output:** shows number of item place by restaurant

## Design:

- Use Case diagram



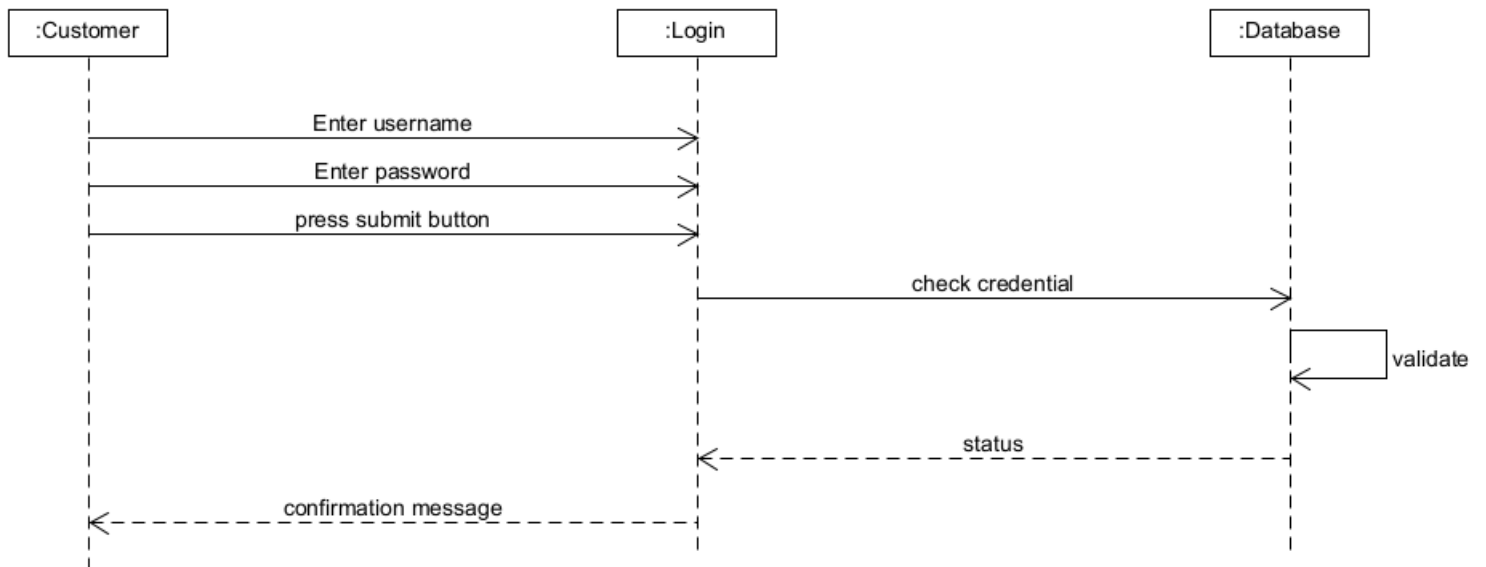
- Class Diagram



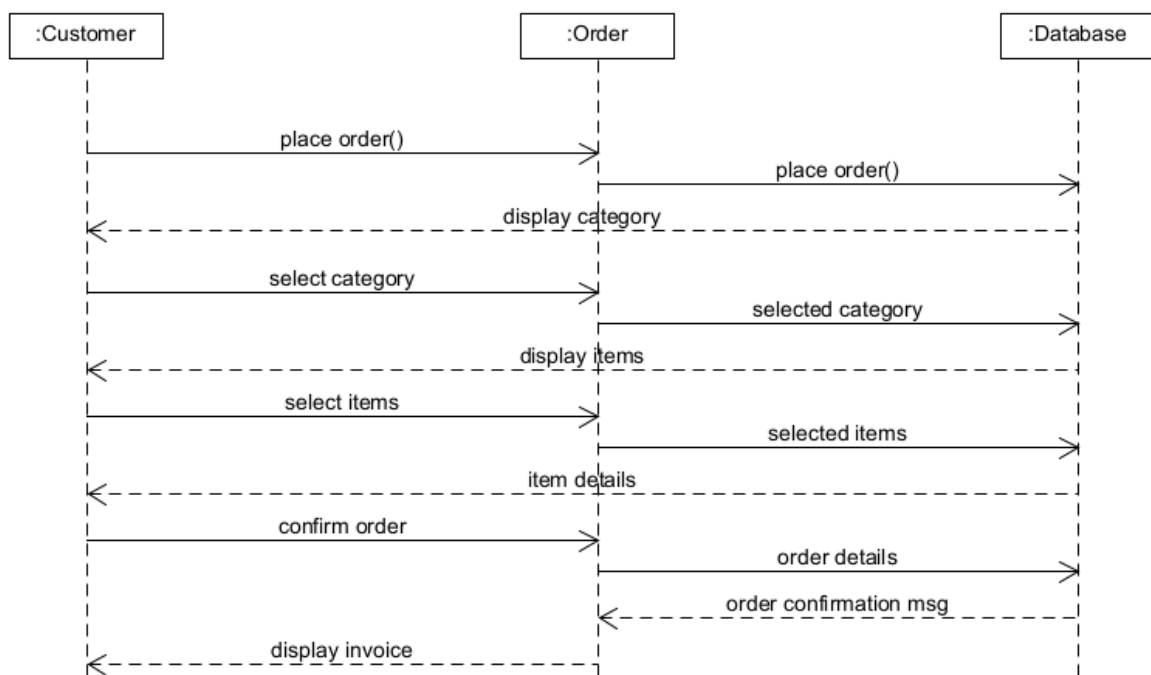


- Sequence Diagram

## 1. Login:

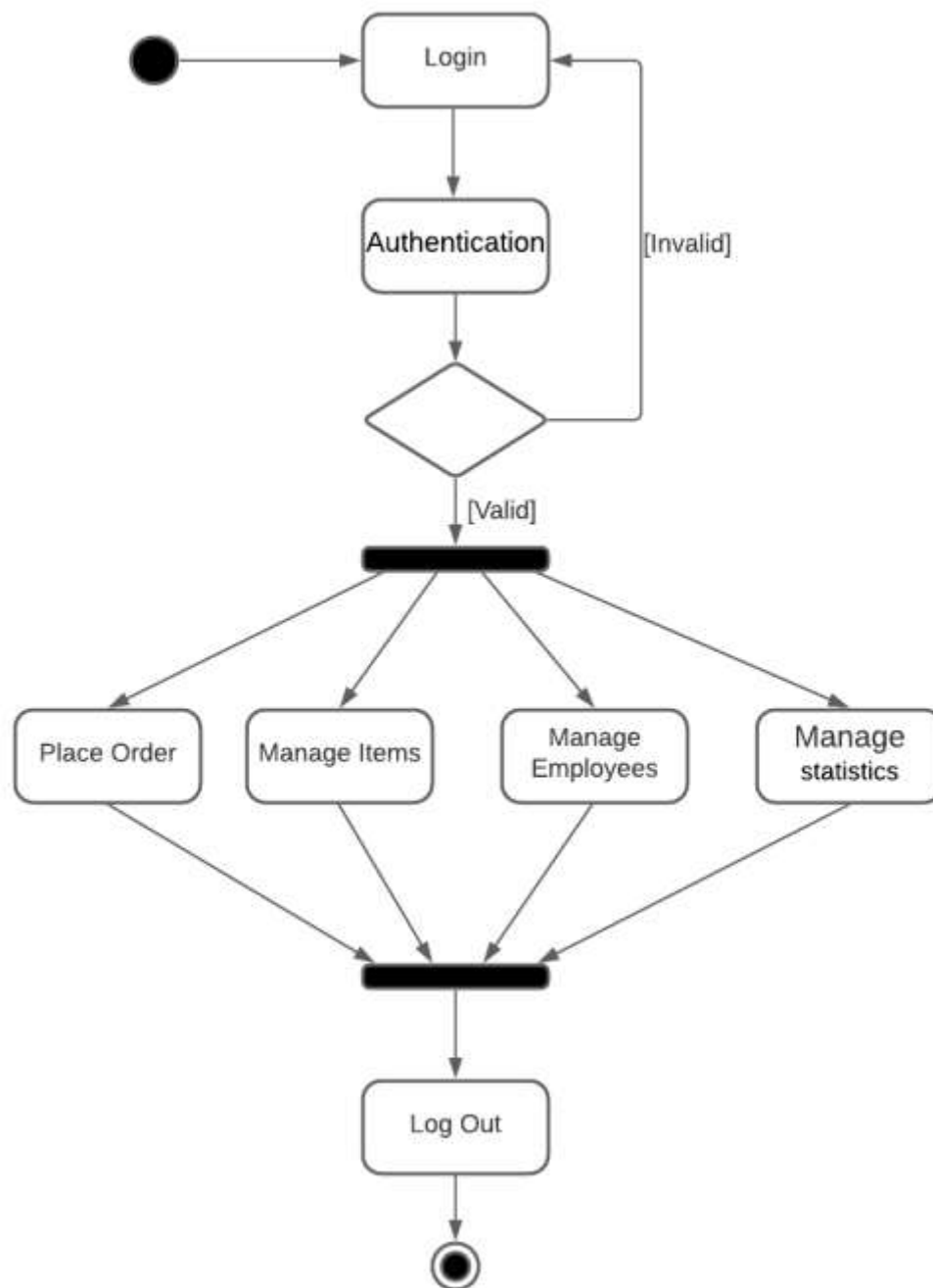


## 2. Place order:

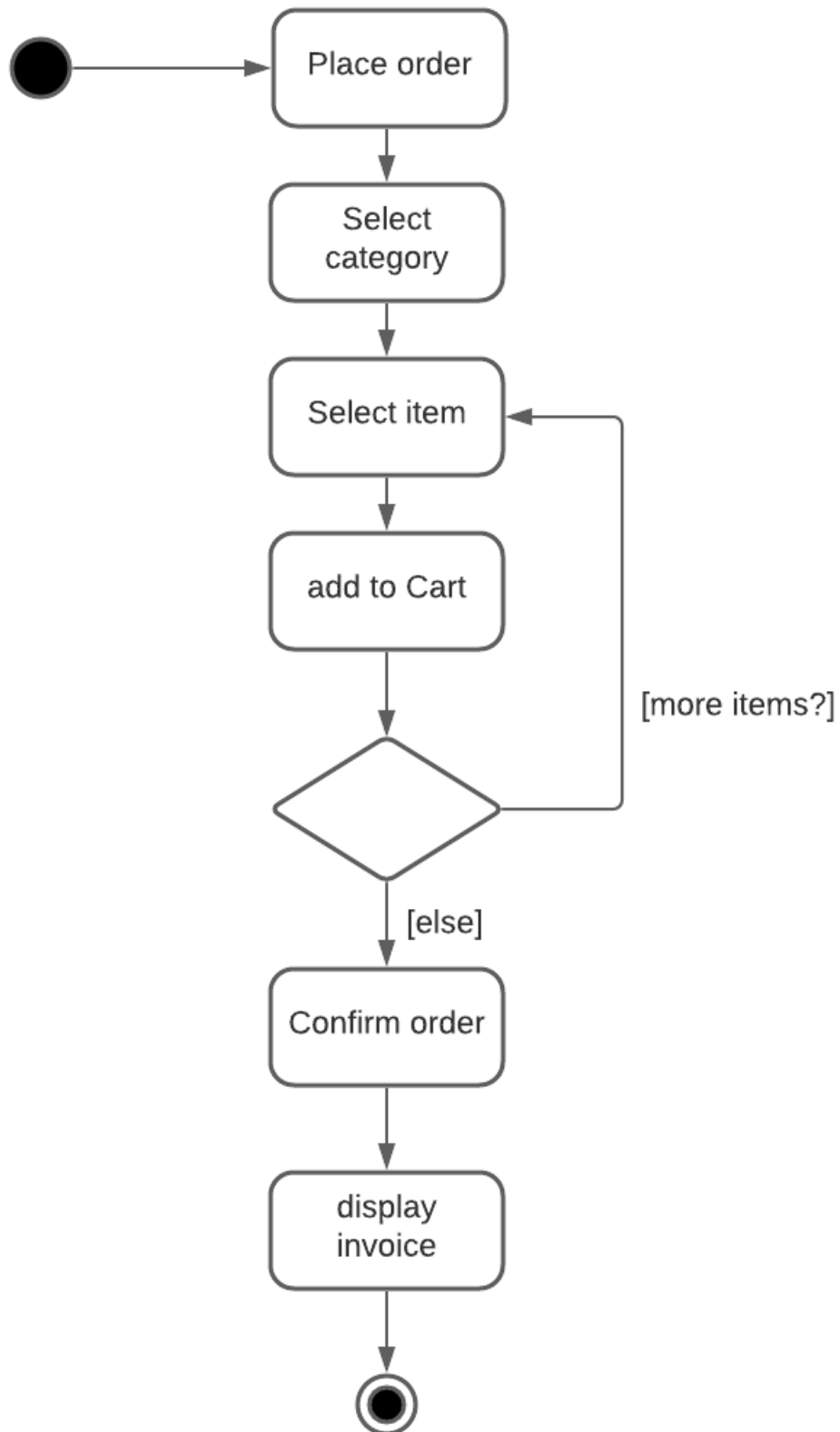


- Activity Diagram

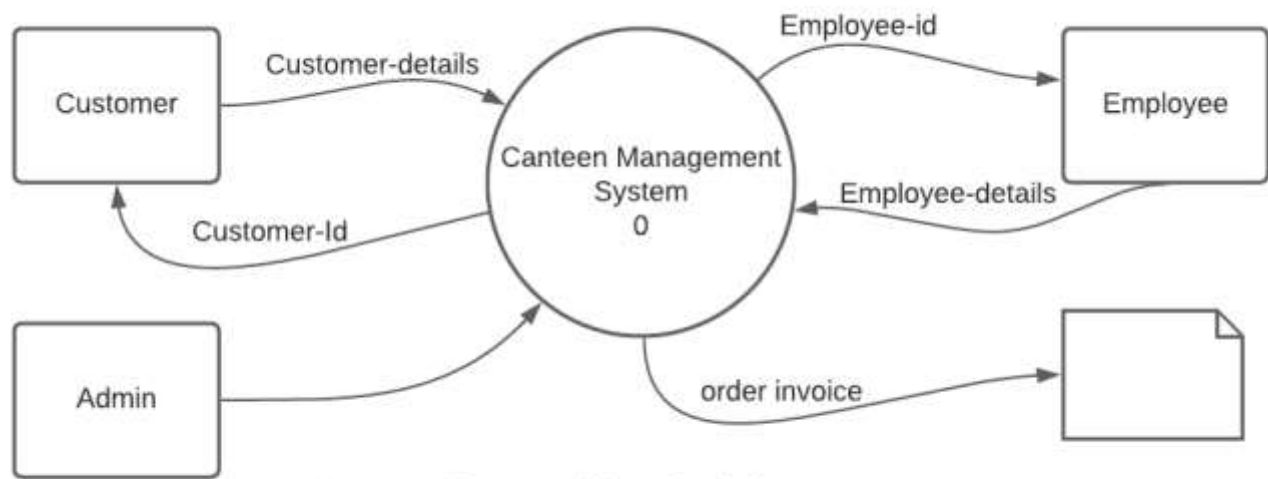
### 1.Login:



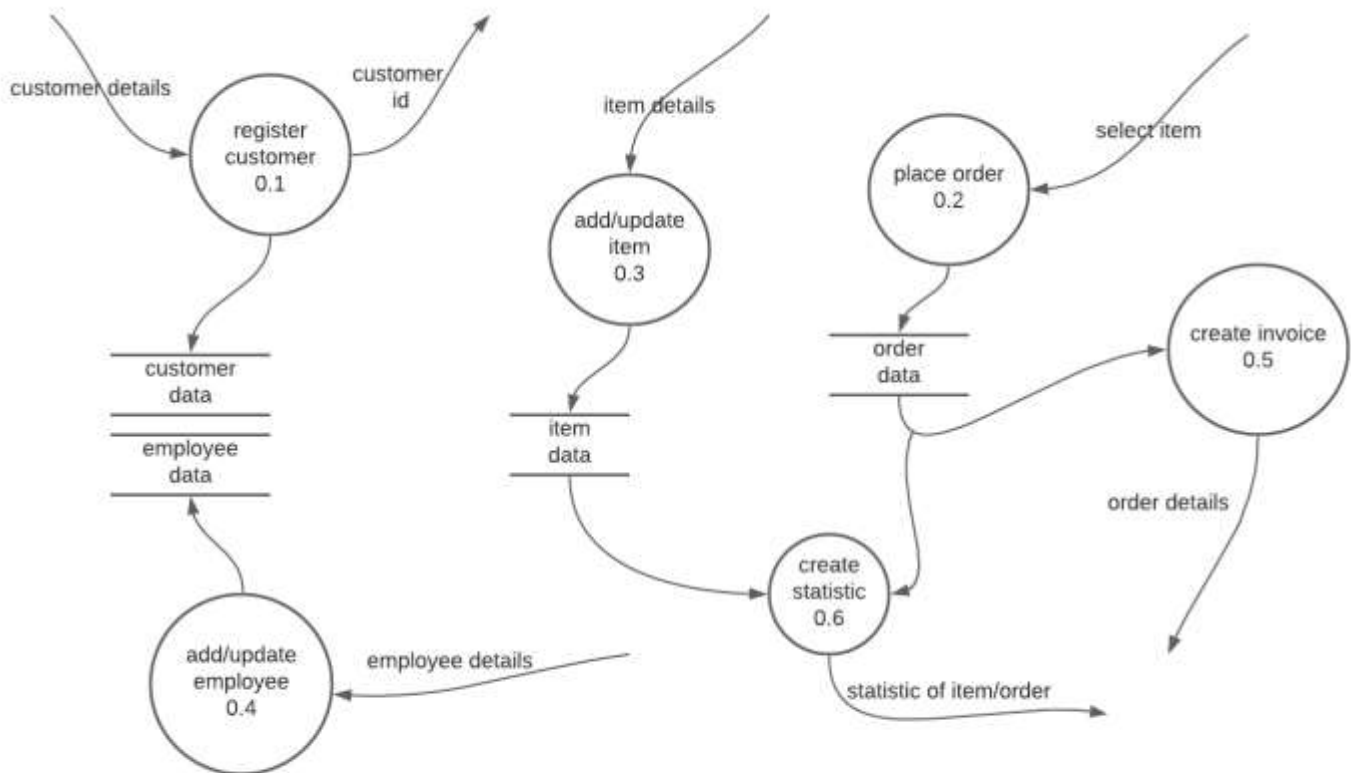
## 2.Place order:



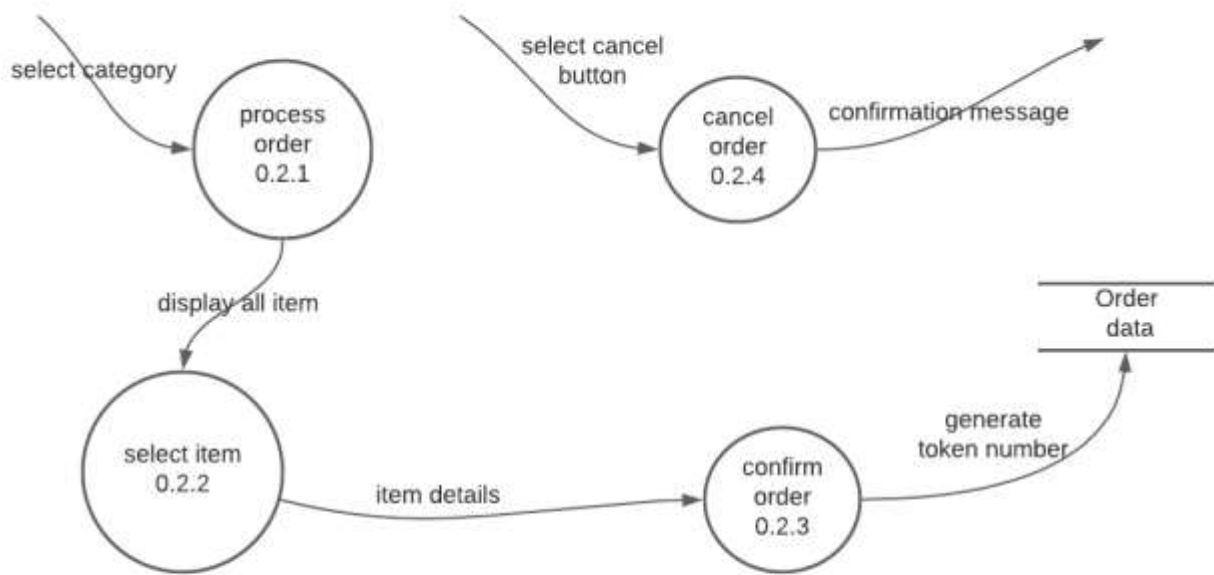
- Data Flow Diagram



**Context Diagram/ level 0 daigram**

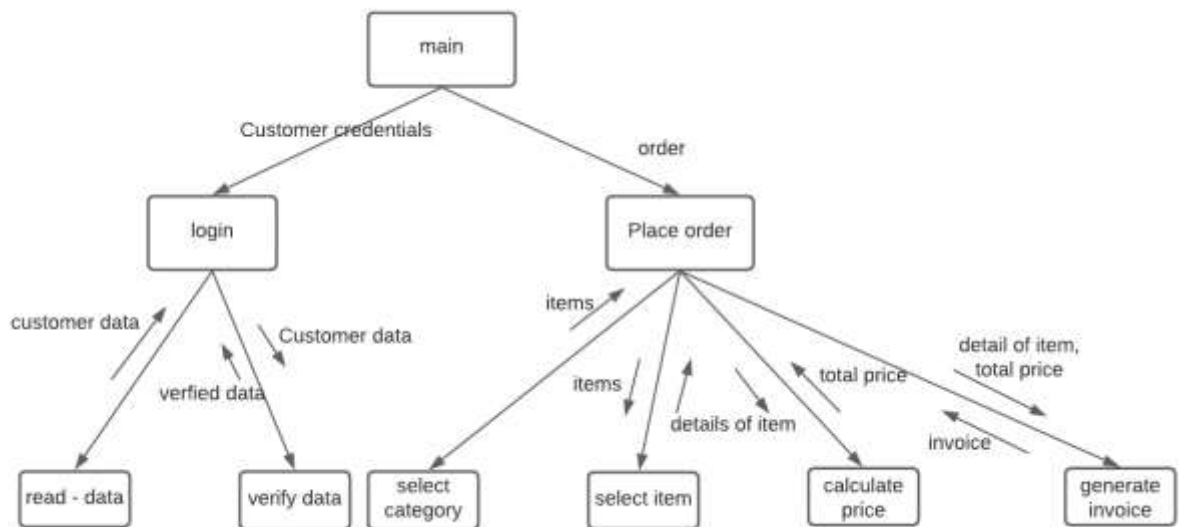


**level 1 diagram**



**level 2 diagram**

- Structure chart



# **Implementation Detail:**

## **1. Modules:**

In the following section a brief description of each module is given.

### **Register-module:**

Basic information of user is taken by system and stored in database.

### **Log in-module:**

Users are able to login themselves. System logs user in, then and only then user can use other functionalities of system.

### **Manage Food-item module:**

User have few option like veg., non-veg., cold things. Customer can choose appropriate categories of item. System shows the appropriate item which is related to that category

### **Customer management -module:**

Customer has two option sign up and log in if user is fresher for this site then it should choose sign up option otherwise take log in and selecting all items which is like to order then system generate token number and depend your token number system generate appropriate waiting time.

### **Canteen management -module:**

Admin can see order details and change status of order.

### **Bill management -module:**

If customer afford above condition like price, waiting time, etc. then it presses confirm button and system generate invoice otherwise presses cancel and it will move to home page and pay the money which is prefer payment mode and take order.

### **Sales management -module:**

this management only for restaurant purpose. And it content all order of day, week, month and year. And also display how many item sold by restaurant.

## **2. Major Functions prototypes**

### **1) Sign up and log in**

- User has two option sign up and log in if user is fresher for this site then it should choose sign up option otherwise take log in.

### **2) User has few option to customer like veg. , non-veg. , cold things etc..**

- User after login user has few option for he/she like to order like vegetarian, non-vegetarian , cold things, etc..

### **3) Category wise item**

- After customer choose her/him category System shows all item which is involved that category.

### **4) All details about item**

- After client choose item System show all details about item like price, extra things, related item.

### **5) System generate token number and appropriate waiting time.**

- User selecting all items which is like to order then system generate token number and depend your token number system generate appropriate waiting time.

## **6) Generate Invoice**

- If customer afford above condition like price, waiting time, etc. then it presses confirm button and system generate invoice otherwise presses cancel and it will move to home page.

## **7) Payment**

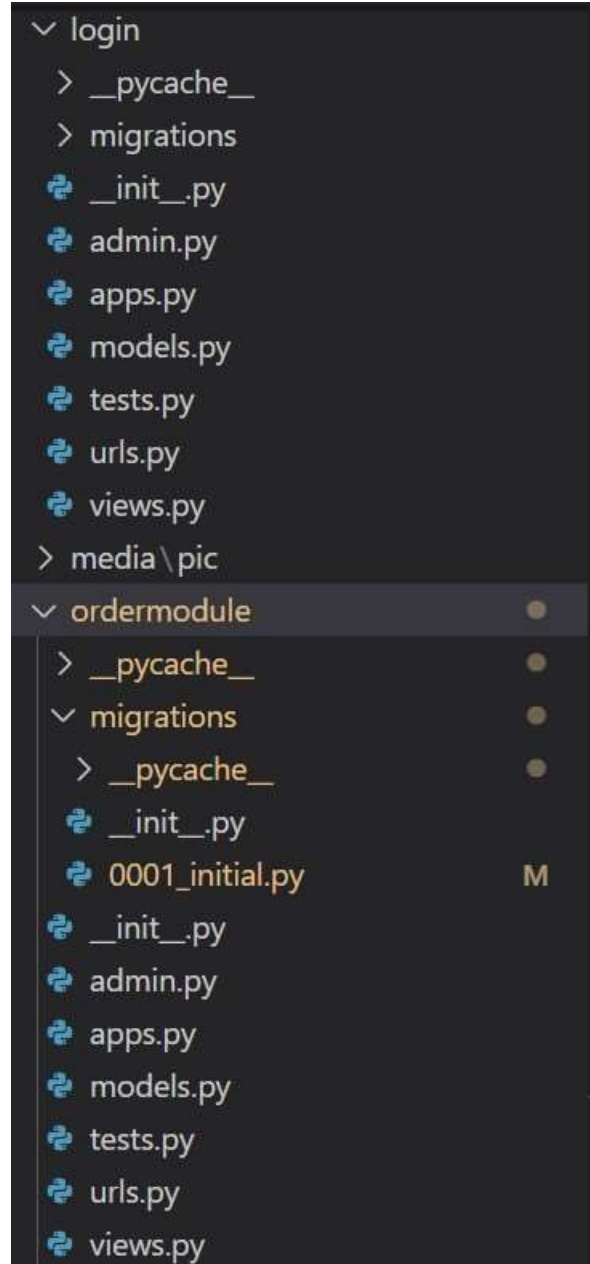
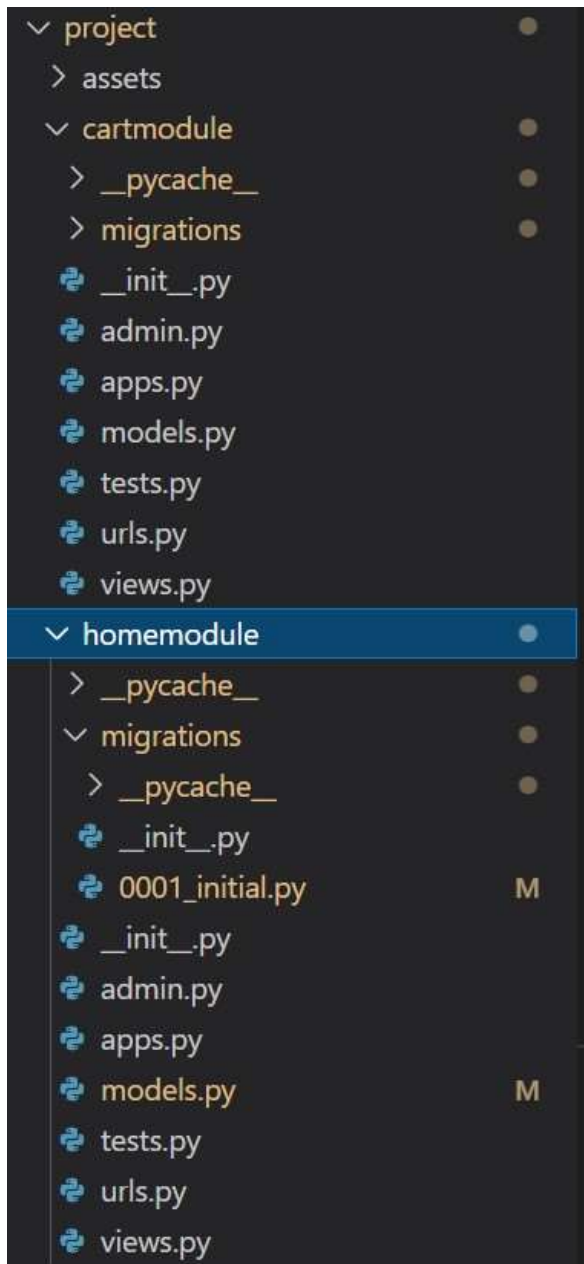
- customer shows the display of tv in restaurant when he/she shows their token number go to counter and pay the money which is prefer payment mode and take order.

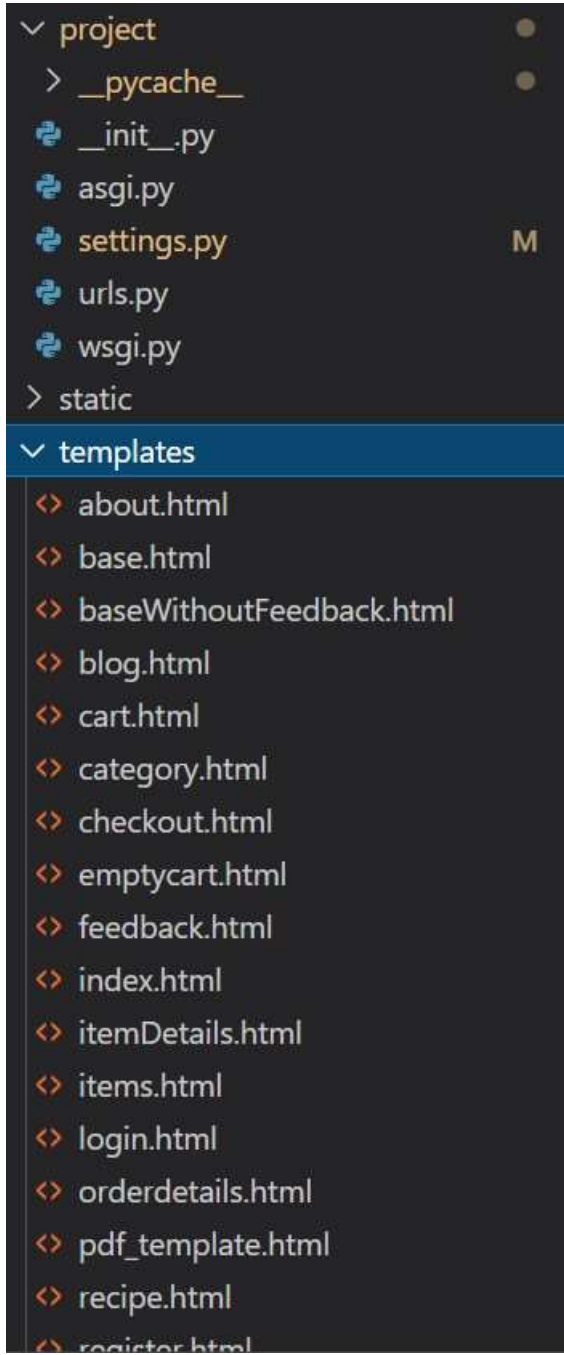


## Work Flow of the Project

### Project App: -

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## **Conclusion:**

Hence-forth in this project we have successfully implemented the Admin-side & Customer-side functionality, Admin will add the Category and item details in database. Admin can show all category and items. Customer place order and after that he/she see all orders and order status till that date. Admin can change status of order.

### **Limitations:**

- 1) This system suitable for only small canteens.
- 2) Online delivery is not available.
- 3) Online payment is not available in our system.

### **Future Extension:**

To take over the limitations we are planning this future extension in our system.

- 1) try to create for large restaurants.
- 2) we are trying to add online food delivery functionality.
- 3) we are trying to add online payment system.

# **Bibliography**

## **References/resources used for developing project:**

- <https://docs.python.org/3/>
- <https://docs.djangoproject.com/en/3.1/>
- <https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css>
- <https://netdna.bootstrapcdn.com/bootstrap/3.1.0/css/bootstrap.min.css>