

Lab Work

Course Title: Information System Design Lab

Course Code: IT 328

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Worked With: draw.io, Ms Word.

Submitted By

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Batch: 43

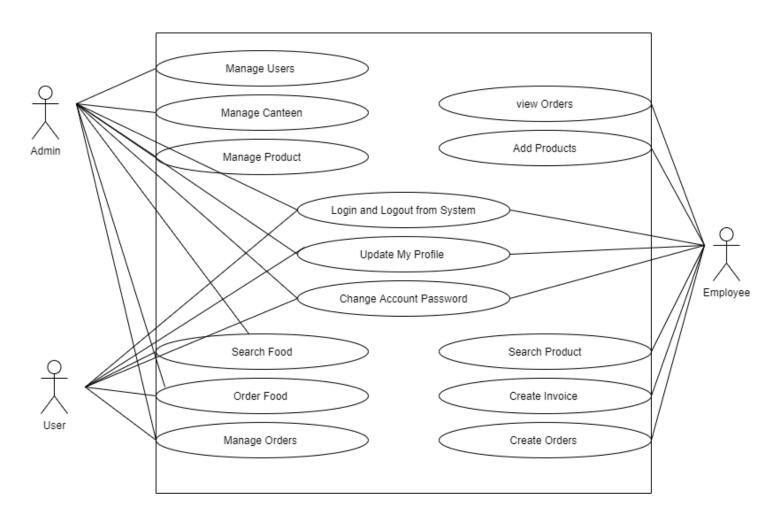
Department: IT

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User Stories:

- Create an account
- Manage account.
- Log into the system.
- Navigate the canteen's menu.
- Select an item to their current order.
- Review current order.
- Remove an item
- Provide payment details.
- Place an ode
- Receive confirmation

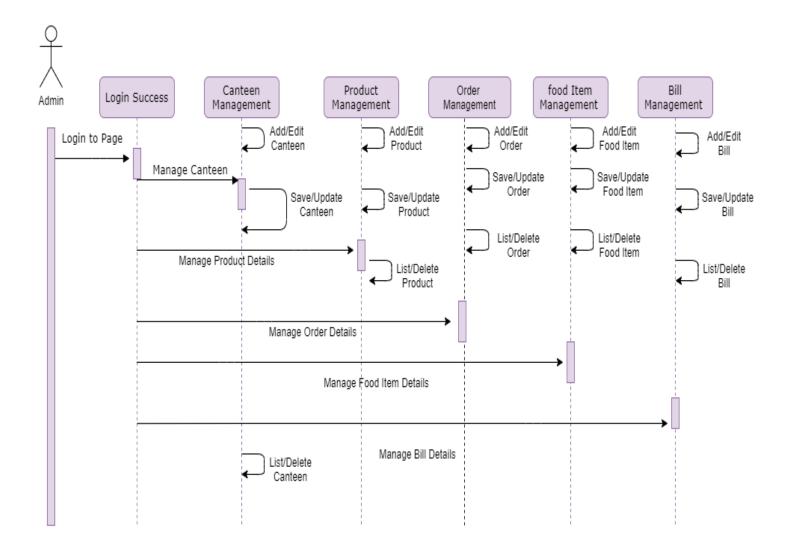
Use case Diagram:



Usecase Diagram of Canteen Management System

Sequence Diagram: In this UML Sequence Diagram of canteen Management System are as follow:

- Food Item Object
- Canteen Object
- Orders Object
- Bill Employee Object
- Products Object

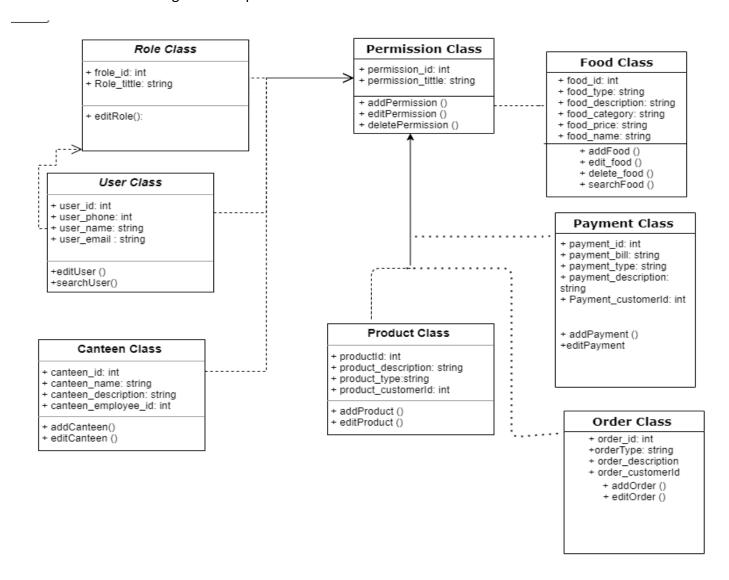


Sequence Diagram of Canteen Management System

Class Diagram:

Classes of Canteen Management System Class Diagram:

- Canteen Class: Manage all the Operations of canteen
- Sales Class: Manage all the Operations of sales
- **Product Class**: Manage all the Operations of Products
- Order Class: Manage all the Operations of orders
- Item Class: Manage all the Operations of item
- Food Class: Manage all the Operations of Food

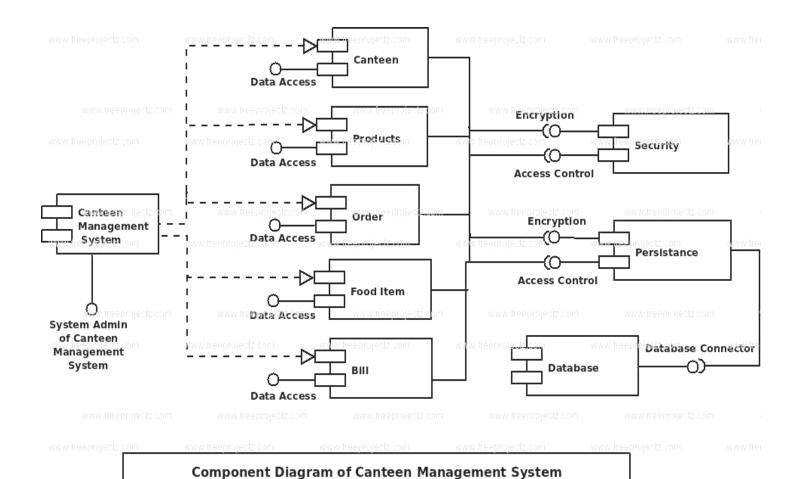


Class Diagram of canteen Management System

Component Diagram:

Features of Canteen Management System Component Diagram

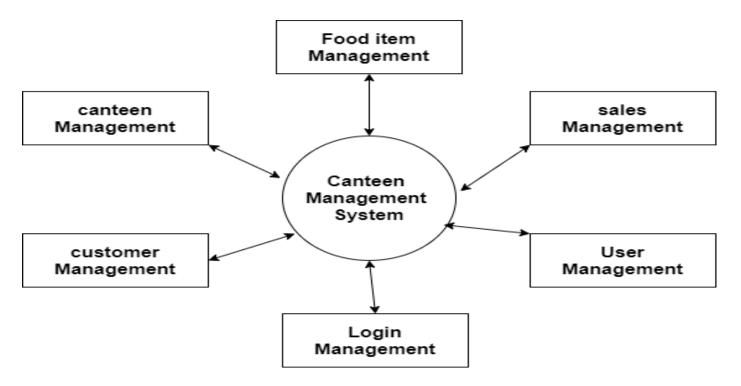
- I can show the models The components of Canteen Management System
- Model the database schema of Canteen Management System
- Model the executables of an application of Canteen Management System
- Model the system's source code of Canteen Management System



Data Flow Diagram (DFD):

Zero level DFD process flow

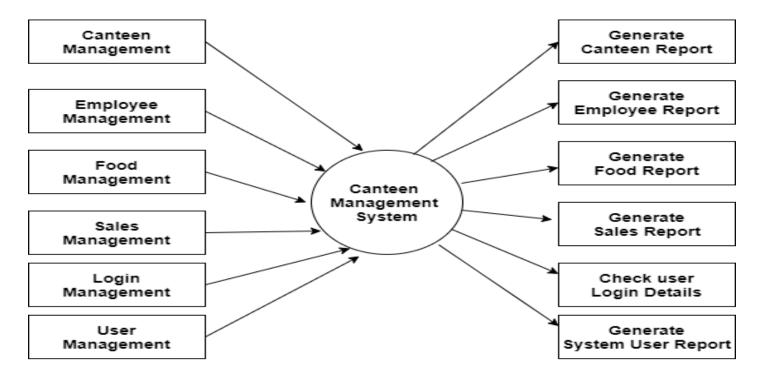
- Managing all the Food
- Managing all the Item
- Managing all the Category
- Managing all the Customer
- Managing all the Record
- Managing all the sales



Zero Levele DFD- Canteen Management System

Output of First level DFD:

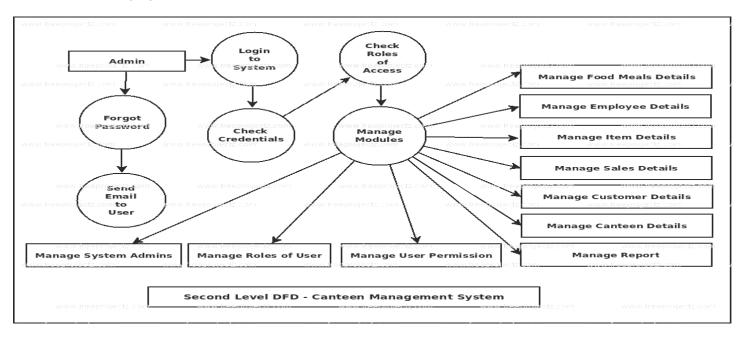
- Processing Food Records and generate report of all Food
- Processing Item Records and generate report of all Item
- Processing category Records and generate report of all category
- Processing Customer Records and generate report of all Customer
- Processing Canteen Employee Records and generate report of all Canteen Employee
- Processing Sales Records and generate report of all Sales



First Level DFD - Canteen Management System

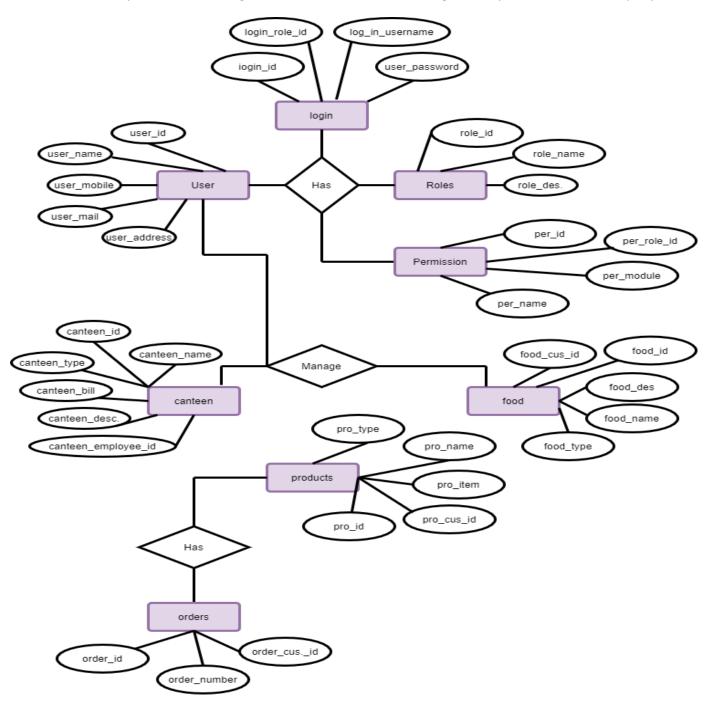
Low Level functionaries of Canteen Management System:

- Admin Login to the system and manage all functionalities of Canteen Manage System
- Admin can add, edit, delete and view the records of Food, category
- Admin can manage all the details of item, customer, and canteen record.
- Admin can also generate reports all o food, item, customer, and canteen record
- Admin can search the details, apply different level of filters, tracks the detailed of item, category, customer, canteen employee`



ER Diagram: Description of Canteen Management System Database:

- The details of Canteen is store into the Canteen tables respective with all tables
- Each entity (Food, Products, Items, Sales, Canteen) contains primary key and unique keys.
- The entity Products, Items has binded with Canteen, Sales entities with foreign key
- There is one-to-one and one-to-many relationships available between Items, Orders, Food, Canteen
- All the entities Canteen, Items, Products, Food are normalized and reduce duplicacy of records
- We have implemented indexing on each tables of Canteen Management System tables for fast query execution



ER Diagram for Canteen Management System

Work Proof: I drew all my Diagram with "Draw.io" website. Here is the Google drive link

- https://drive.google.com/file/d/1Kuv6Vsi0Pau_qhboMvhHR7My0zxEf1j/view?usp=sharing
- https://drive.google.com/file/d/18cdGPfwjhZB5gfcFwbGbY2VfyBsTYN-T/view?usp=sharing
- https://drive.google.com/file/d/1F428dB2TLPUJPAHR3wlw4i8siezqtmx/view?usp=sharing
- https://drive.google.com/file/d/13RzfWzJnVzTEWCK23yud4iXSBVP450rJ/view?usp=shar
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- https://drive.google.com/file/d/1NhA3HxV77hLtFffVtvNvIkLHz7JdE3TE/view?usp=sharing

Also some screenshot of my work is given below:

