

# Fundamentals of Software Engineering

## Project Title: CuisineCraft ERP

**Subtitle:** Restaurant Enterprise Resource Planning, Desktop Application

| Name             | Roll Number |
|------------------|-------------|
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**Deliverable Number: 2**

**Date of Submission:** 20th April, 2024

## 1. Project Title and Introduction:

The CuisineCraft ERP aims to develop a comprehensive desktop application for managing various aspects of restaurant operations. This system will streamline processes related to Menu, Orders, and various other essential functions in a restaurant setting. Deliverable 2 focuses on the modules of the application, including Menu, Orders, and Tables.

## 2. User Stories:

### ● Menu:

- As a restaurant manager, I want to maintain a comprehensive food menu with a variety of different cuisines.
  - Sub-User Stories:
    - View current menu
    - Ability to add a new menu item to the system.
    - Ability to update the information of an existing menu item.
    - Ability to delete a menu item from the system.
- And I know I am done when I can perform the CRUD operation on menu.

### ● Orders:

- As a restaurant manager, I want to effectively manage all the orders, online and dine in orders from the customers.
  - Sub-User Stories:
    - View all the orders, completed and pending
    - Add a new order with details such as items, quantity, price, and category.
    - Update order information such as status.
    - Delete an order from the system
- And I know I am done when I can perform these operations on the orders.

### ● **Tables:**

- As a restaurant manager, I want to efficiently manage the tables in my restaurant.
  - Sub-User Stories:
    - Ability to create and view tables with details such as number of persons, category, reservation date and time, etc.
    - Record reservation date, time, and associated details like order description.
    - Update table information of existing tables.
    - Delete an existing table.
- And I know I am done when I can save the information of my tables and I have a data that shows the details of all the tables.

## **3. Structured Specifications:**

### ● **Menu:**

Specification: Record Menu Items

- Description: Store all the menu cuisines and items in the relational database.

Specification: Update Menu Items

- Description: Any information about a menu item such as price can be updated.

### ● **Orders:**

Specification: Record Orders Data

- Description: All orders are recorded and maintained in a relational database

Specification: Update Orders Data

- Description: Update the status of an order or change the details

Specification: Update Orders Data

- Description: Update the status of an order or change the details

## ● Tables:

### Specification: Record Table Data

- Description: All the tables' data will be recorded and maintained properly in a database.

### Specification: Update Table Data

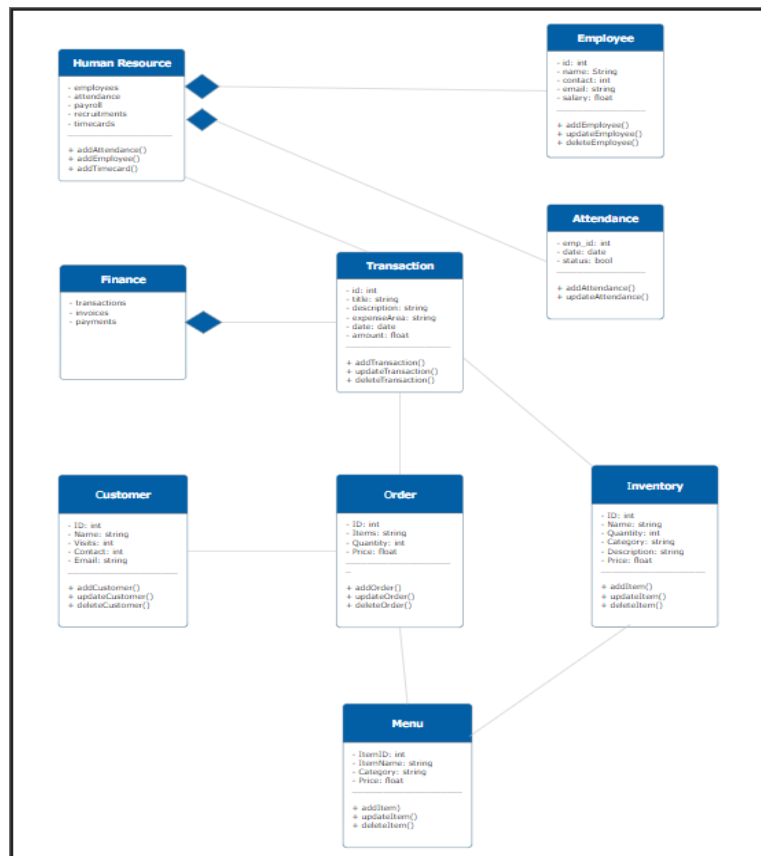
- Description: Update any attribute of the tables in the Tables relation.

### Specification: Delete Table Data

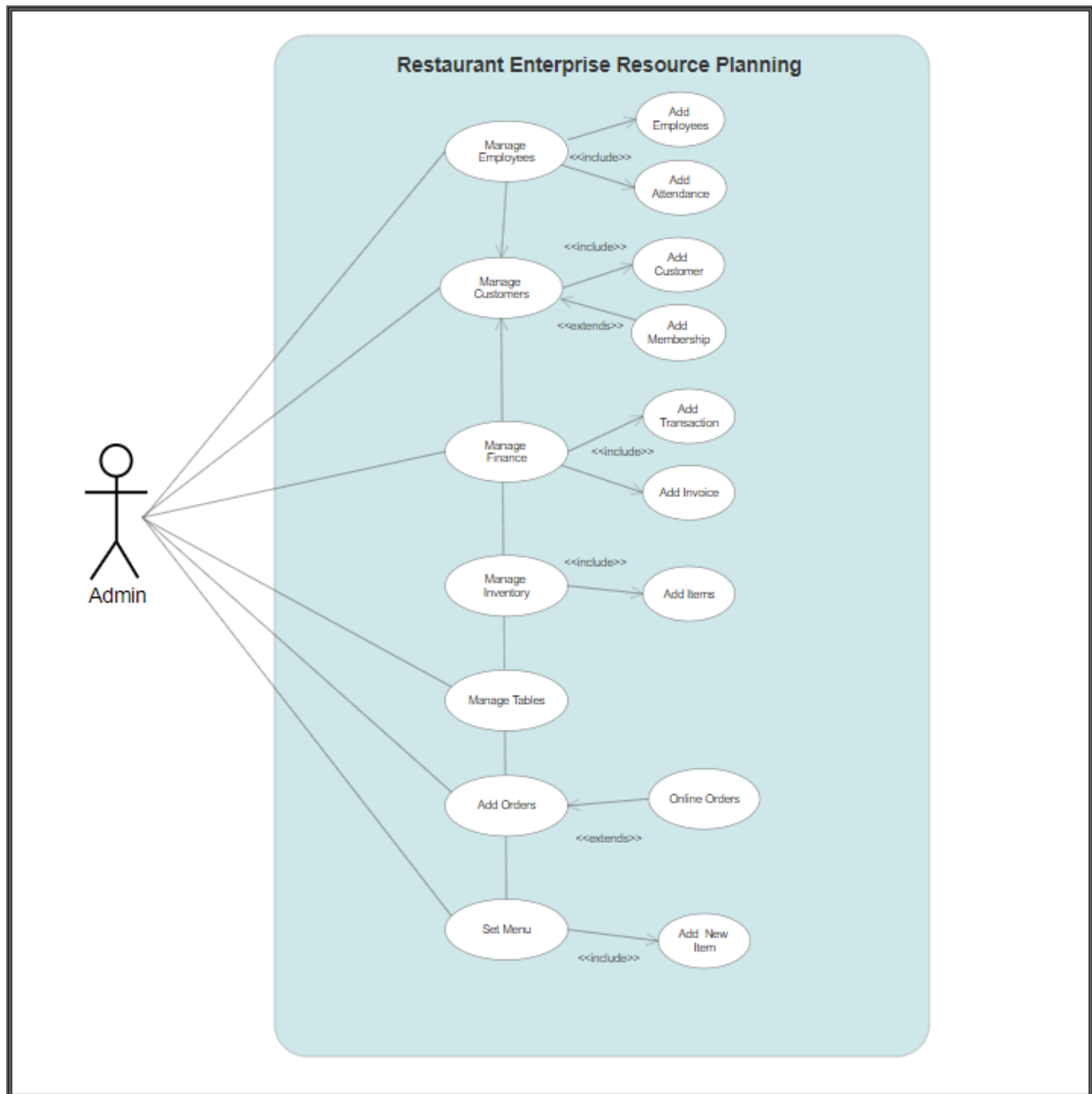
- Description: Delete a record from the Tables relation in the database.

## 4. Design (Diagrams):

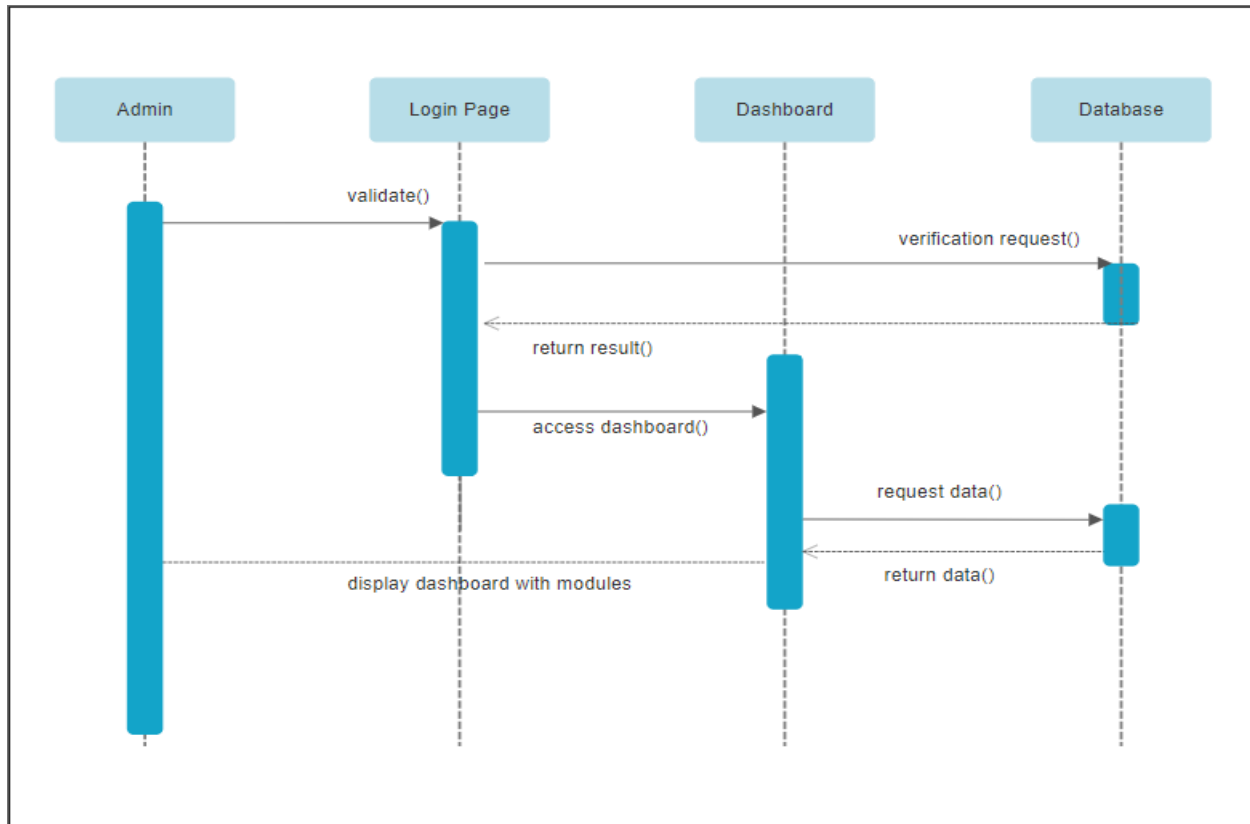
### ➤ Class Diagram:



➤ Use Case Diagram:

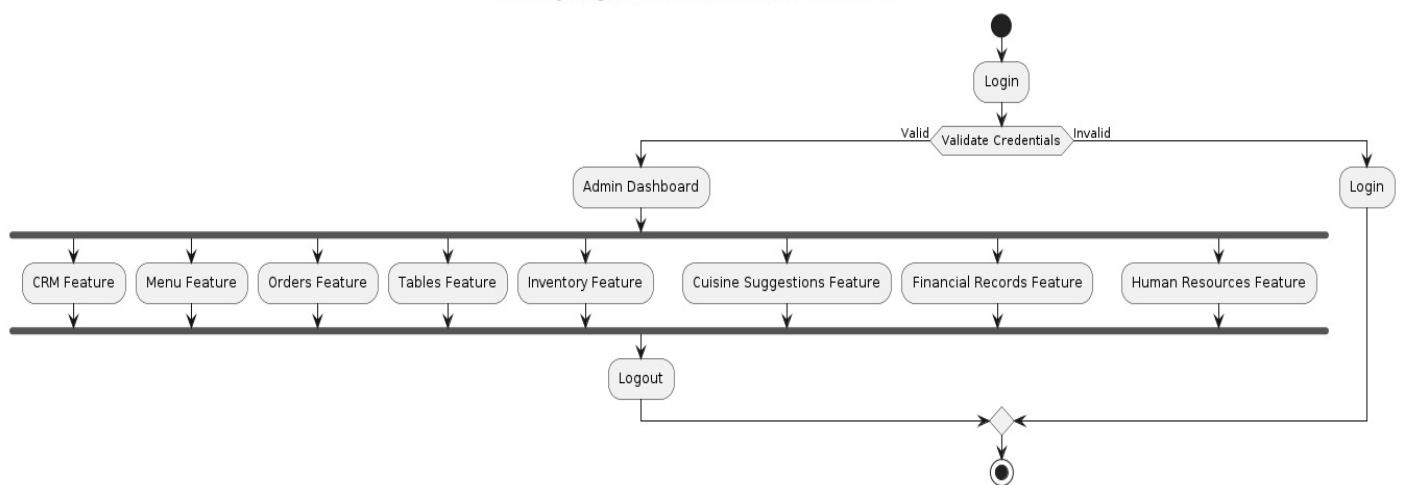


➤ Sequence Diagram:



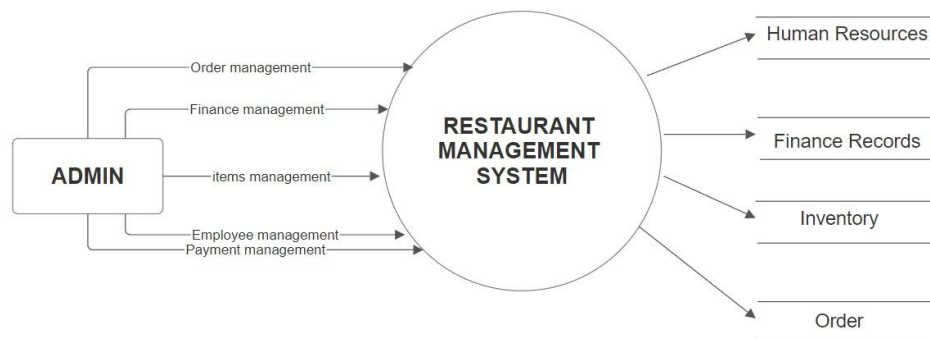
## ➤ Activity Diagram:

Activity Diagram for Restaurant Admin Features

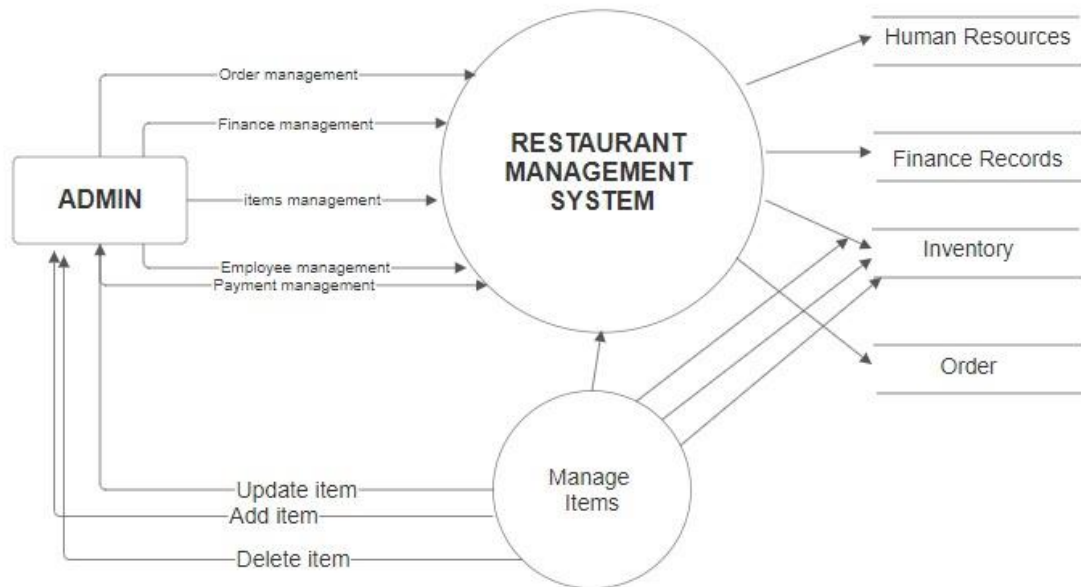


## ➤ Data Flow Diagrams:

Level 0:

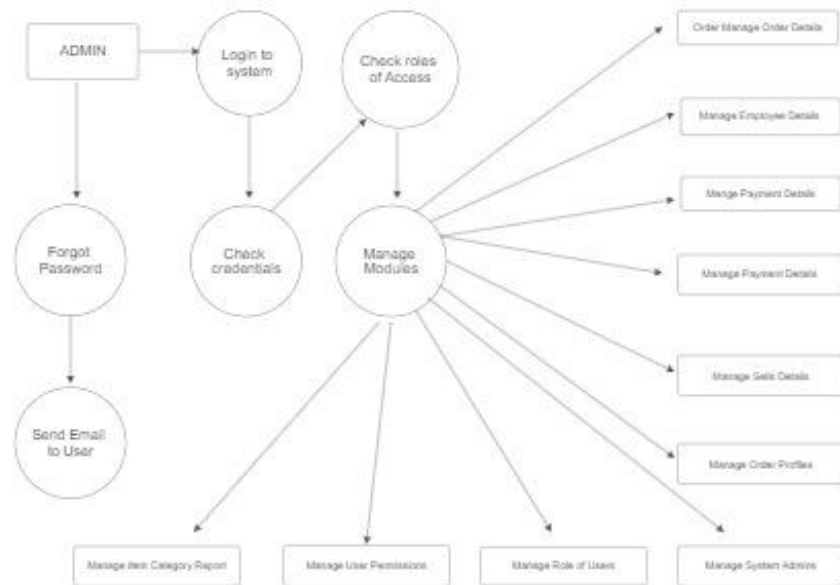


Level 1:



Level2:





## 5.Scrum Board:

Sprint 2

☆

Workspace visible

Board

▼

To do

...

design menu page

menu item add

menu item delete

menu item update

design table page

add a table

update information of table

delete a table

show status of tables

insert customer orders

update information of order

see status of order

delete an order

+ Add a card

Doing

...

+ Add a card

Done

...

+ Add a card

Sprint 2

☆

Workspace visible

Board

▼

To do

...

update information of table

delete a table

show status of tables

insert customer orders

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+ Add a card

Doing

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menu item delete

design table page

add a table

+ Add a card

Done

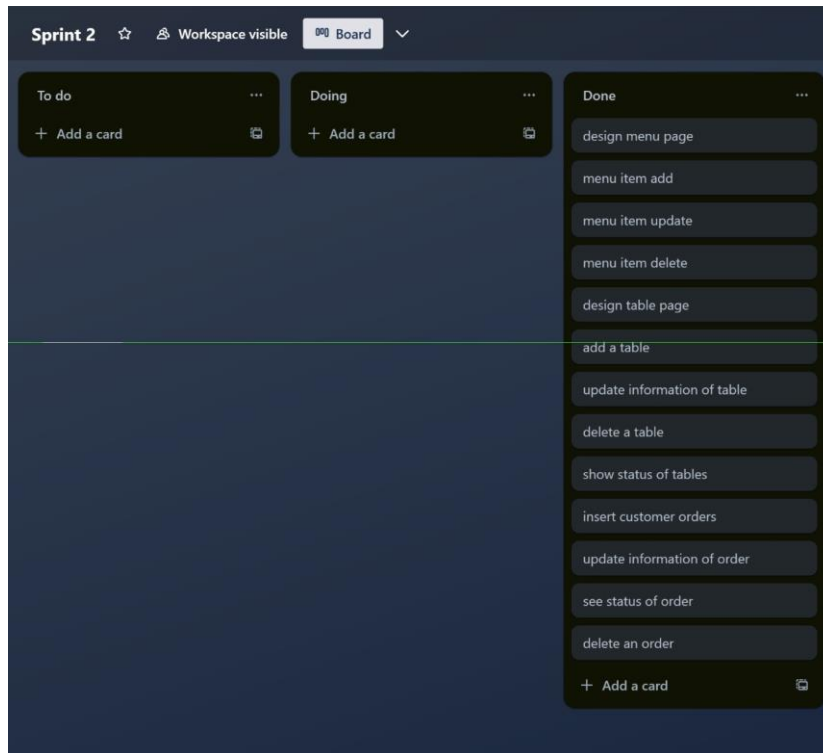
...

design menu page

menu item add

menu item update

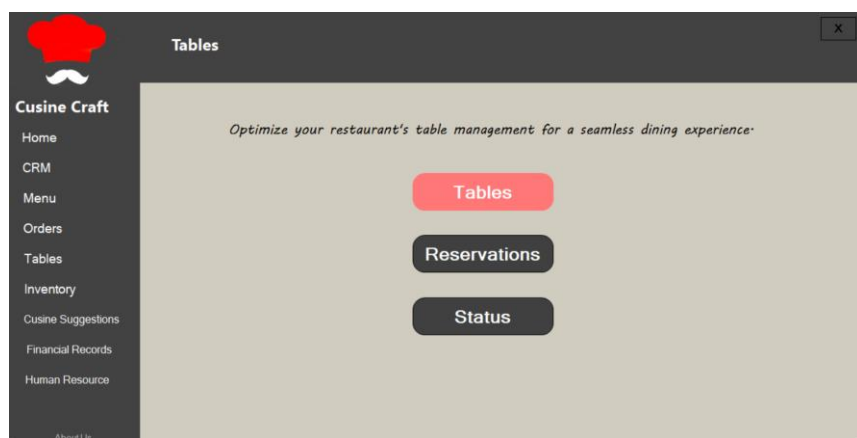
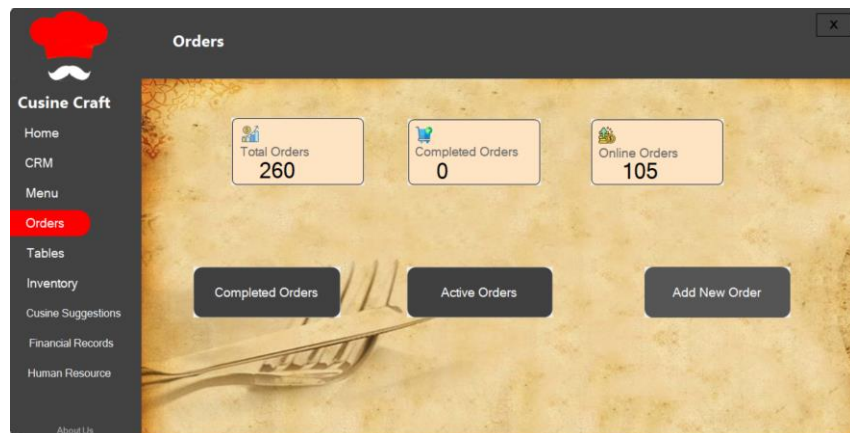
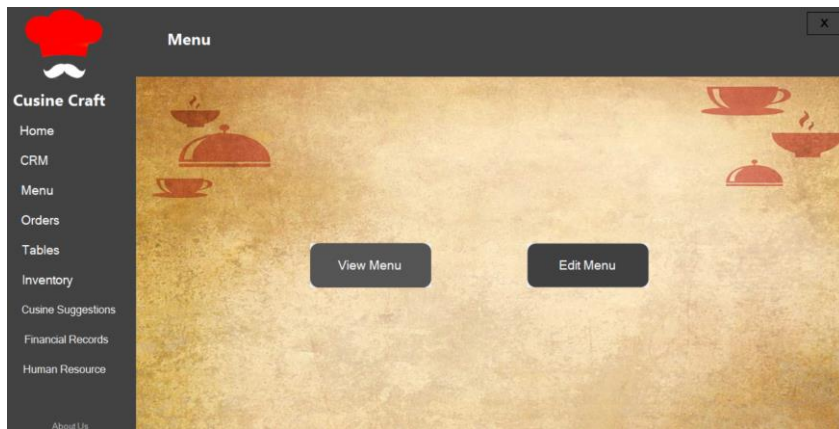
+ Add a card



## 5. NFR Specification:

- **Performance:** The system should perform efficiently without delays in displaying data or performing operations.
- **Security:** User authentication and authorization should be implemented using UserName and Password verification.
- **Usability:** The user interface should be intuitive and easy to navigate, requiring minimal training for new users.
- **Reliability:** The system should have a system uptime of at least 99.9% and it should be capable of data recovery from unexpected failures.
- **Maintainability:** The codebase should follow coding standards and best practices to facilitate easy maintenance and future enhancements.

## 6. Iteration 1 Implementation Screenshots:



## **7. Work Division:**

Menu: Hafiz Hashir

Orders: Abdullah and Hashir

Tables: Bilal and Shahzad