

# ASSIGNMENT #3

Restaurant Management System

**Advance Programming Techniques (CS-303)**

Submitted To:

**Dr. Usman Ali**

- 01 | Anas Majeed (21011519-019)
- 02 | Muneeb Shahzad (21011519-121)
- 03 | Zain Ali (21011519-152)

## **Introduction:**

A Restaurant Management System (RMS) developed using Windows Forms in C# serves as an indispensable tool for enhancing the efficiency and organization of restaurant operations. Its significance lies in streamlining processes, facilitating seamless communication between staff members, and providing real-time insights into various aspects of the restaurant business. The advantages of such a system include improved order accuracy, enhanced customer service, efficient staff management, and data-driven decision-making. Now, let's delve into the key features of this RMS:

### **1. Login:**

Enables secure access control, ensuring only authorized personnel can interact with the system.

### **2. Dashboard**

- Serves as a centralized hub for managing and monitoring all restaurant activities.
- Provides a comprehensive overview, allowing quick navigation to different functionalities.

### **3. Categories:**

- Organizes menu items into logical groups for easy navigation and management.
- Enhances menu clarity and simplifies updates or additions.

### **4. Products:**

- Facilitates the addition, modification, and removal of menu items.
- Enables quick adaptation to changing customer preferences and seasonal offerings.

### **5. Tables:**

- Manages table reservations, occupancy status, and aids in efficient seating arrangements.
- Optimizes table turnover and enhances the overall dining experience.

### **6. Staff:**

- *Importance:* Handles employee information, roles, and schedules.
- *Advantage:* Improves staff management, leading to better coordination and service.

### **7. POS (Point of Sale):**

- Processes customer orders, handles transactions, and generates receipts.
- Streamlines the ordering process, reduces errors, and accelerates transaction speed.

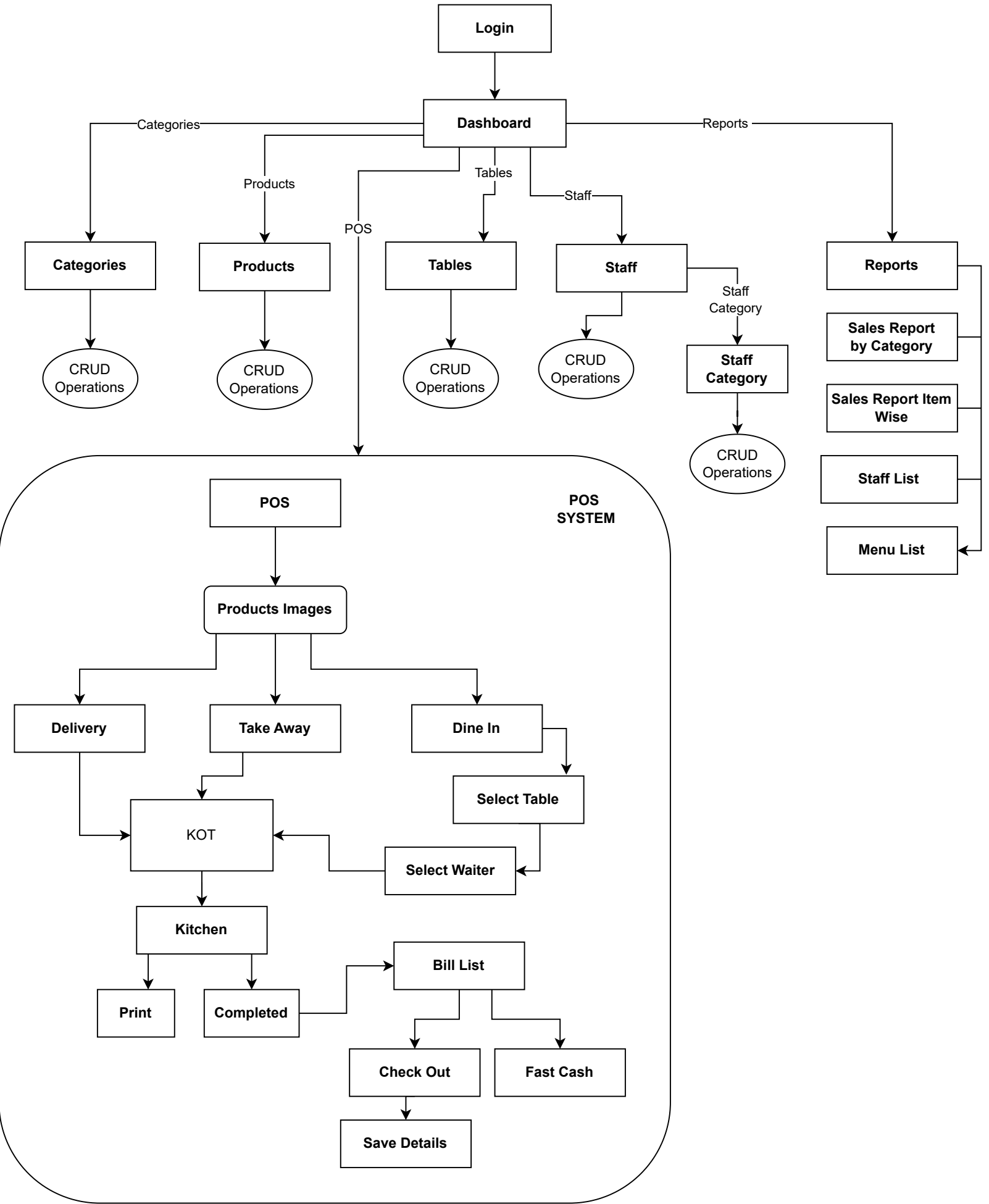
### **8. Kitchen:**

Communicates orders to the kitchen staff, ensuring timely and accurate preparation.

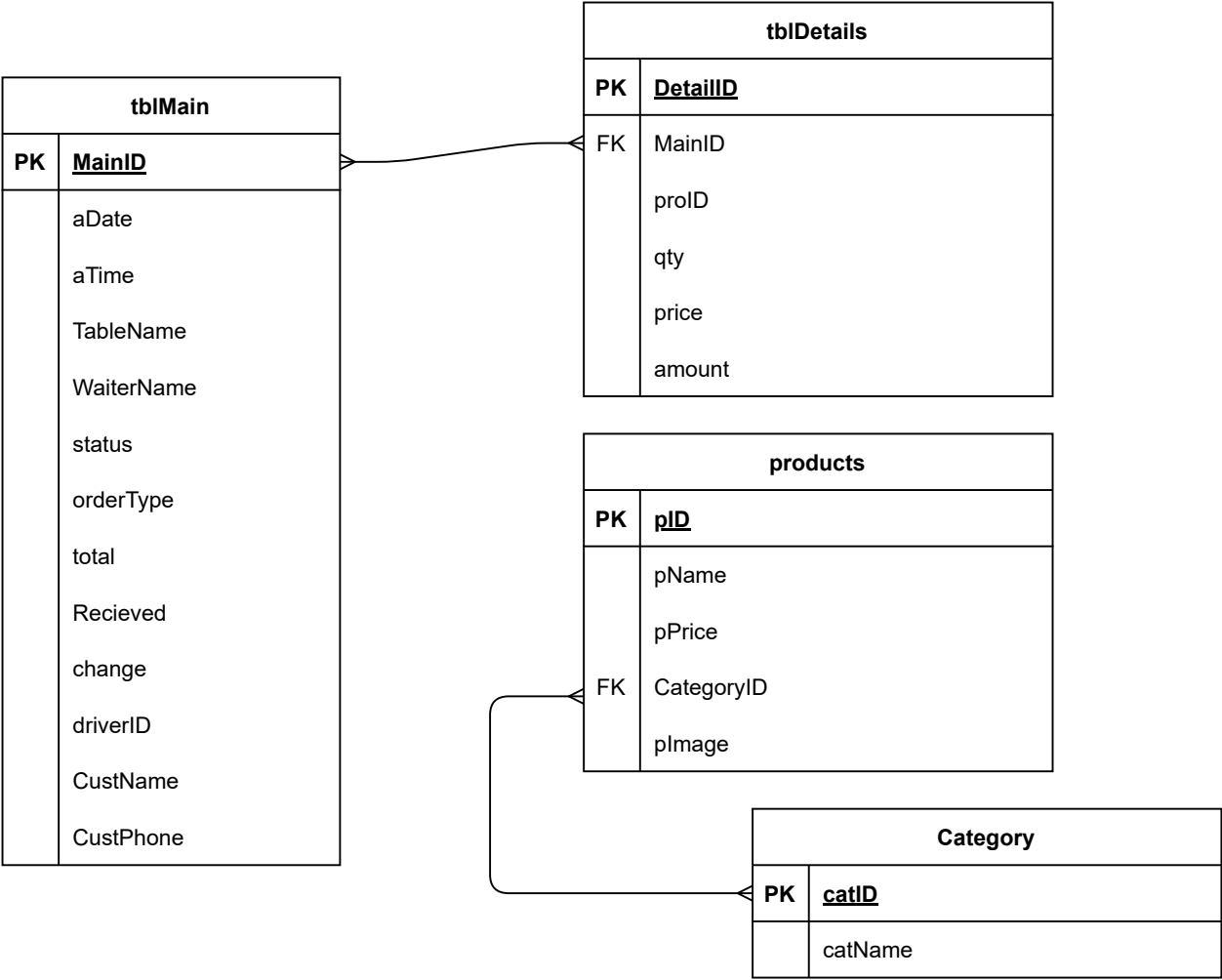
### **9. Reports:**

- Generates insightful reports on sales, inventory, and other key metrics.
- Informs data-driven decision-making, helping optimize business strategies and resource allocation.

# Navigation Diagram




# Database Schema



## Forms

### 1. Login



Please Enter User information


Username

Password

Login

Exit

### 2. Dashboard



Resturant  
Management System

- Home
- Categories
- Products
- Tables
- Staff
- POS
- Kitchen
- Reports
- Settings

label2

### 3. Categories:

Category List

+

Search

Search Here

Sr#	Name
-----	------

Add Category


Name

SAVE


CLOSE

#### 4. Products:


Product List



Search

 Search Here


Sr#	Name	Price	Category
-----	------	-------	----------

 Product Details

Name

Price

Category



Browse

SAVE

CLOSE

## 5. Tables:

Table List

Search

Search Here

Sr#	Name
-----	------

Table Details

Name


SAVE

CLOSE




## 6. Staff:


Staff List



Search

 Search Here

Sr#	Name	Phone	Role
-----	------	-------	------

 Staff Details

Name

Phone

Role

SAVE

CLOSE

## 7. POS

The screenshot displays the POS application interface. At the top, there is a dark blue header bar with a navigation menu. The menu items are: POS (with a fork and knife icon), New, Hold, Bill List, KOT, Delivery, Take Away, Din In, and Table Waiter. Below the header bar is a light gray search bar with the placeholder text "Search Here". The main area is divided into two sections. The left section is a large, empty table with a dashed border. The right section is a smaller table with a white background and a light gray header. The header has five columns: Sr#, Name, Qty, Price, and Amount. The bottom bar is dark blue and shows "Total 0.00".

## 8. Reports:

## Reports

**Some Contents are Missing in Forms which would show on runtime after we complete our code and perform CRUD Operation**