Introduction:

A restaurant management system is basically a software toolbox that helps run a restaurant more smoothly. It tackles a variety of tasks, from taking orders and keeping tabs staff's details and analyzing sales data. A restaurant management system can be a lifesaver for any restaurant owner, especially for new businesses. With the restaurant management system owner can trac all sells details, manage employee, see customer details and food items availability and also can add or remove items. With the system employees can take order in a smooth way and can take eye on food items availability. A restaurant management system is a way to automate a bunch of tedious tasks so you can focus on what really matters: keeping customers happy and restaurant profitable.

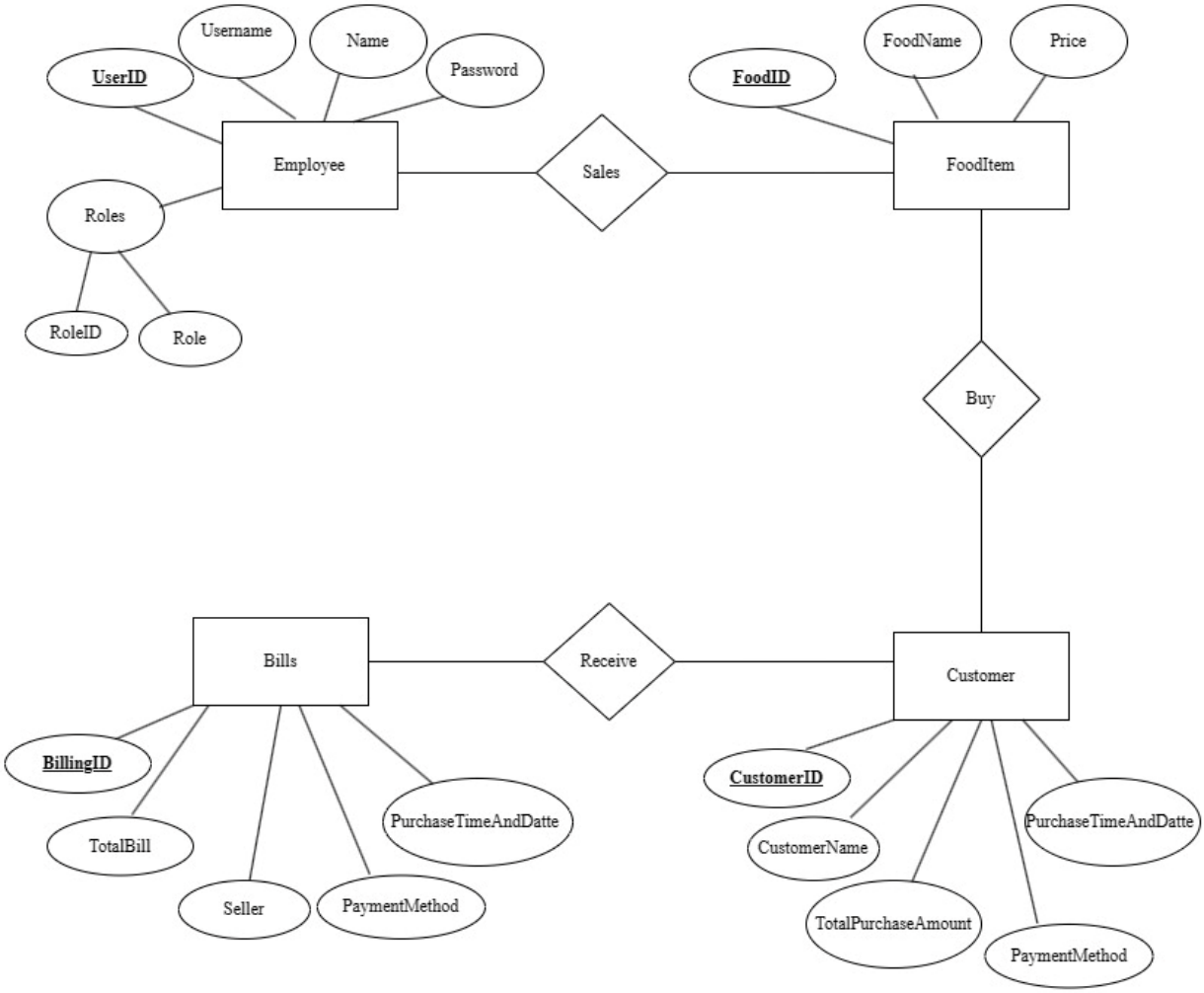
User Story: As an Admin, Employee

Admin Perspective:

As an admin, this restaurant management system's desktop dashboard allows admin to oversee and manage all aspects of restaurant operations. This includes monitoring employee details, managing employee accounts, and accessing their information. Also, can manage food items, track sells, and get informed about customers.

Seller Perspective:

As a seller, this restaurant management system's desktop application with a user-friendly interface for efficiently managing food items , create order and billings.



Entities

Employee	
PK	UserID
	Username
	Password
	Role

FoodItem	
PK	FoodID
	FoodName
	Price

Customer	
PK	CustomerID
	CustomerName
	TotalPurchaseAmount
	PaymentMethod
	PurchaseTimeAndDatte

Bill	
PK	BillingID
	TotalBill
	Seller
	PaymentMethod
	PurchaseTimeAndDatte

Roles	
PK	RoleID
	Role

Normalization:

Sales:
UNF: UserID, Username, Password, RoleID, Role, FoodID, FoodName, Price
1NF: UserID, Username, Password, RoleID, Role, FoodID, FoodName, Price
2NF: 1st: UserID, Username, Password, RoleID
2nd: FoodID, FoodName, Price
3rd: RoleID, Role

Buy:
UNF: FoodID, FoodName, Price, CustomerID, CustomerName, TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte
1NF: FoodID, FoodName, Price, CustomerID, CustomerName, TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte
2NF: 1st: FoodID, FoodName, Price
2nd: CustomerID, CustomerName,TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte

Receive:
UNF: CustomerID, CustomerName, TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte , BillingID, TotalBill, Seller, PaymentMethod, PurchaseTimeAndDatte
1NF: CustomerID, CustomerName, TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte , BillingID, TotalBill, Seller, PaymentMethod, PurchaseTimeAndDatte
2NF: 1st: CustomerID, CustomerName, TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte
2nd: BillingID, TotalBill, Seller, PaymentMethod, PurchaseTimeAndDatte

Final Table:
1st: UserID, Username, Password, RoleID
2nd: FoodID, FoodName, Price
3rd : RoleID, Role
4th : CustomerID, CustomerName,TotalPurchaseAmount, PaymentMethod, PurchaseTimeAndDatte
5th : BillingID, TotalBill, Seller, PaymentMethod, PurchaseTimeAndDatte

SQL Queries:

```
USE [Resturent]
GO
/****** Object:  Table [dbo].[Bills]    Script Date: 14-May-24 2:12:18 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [dbo].[Bills](
	[BillingID] [int] IDENTITY(1,1) NOT NULL,
	[TotalBill] [float] NULL,
	[Seller] [varchar](80) NULL,
	[PaymentMathod] [varchar](50) NULL,
	[PurchaseTimeAndDate] [varchar](60) NULL
) ON [PRIMARY]

GO
SET ANSI_PADDING OFF
GO
/****** Object:  Table [dbo].[Customer]    Script Date: 14-May-24 2:12:18 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [dbo].[Customer](
	[CustomerID] [int] IDENTITY(1,1) NOT NULL,
	[CustomerName] [varchar](70) NULL,
	[TotalPurchaseAmount] [float] NULL,
	[PaymentMathod] [varchar](50) NULL,
	[PurchaseTimeAndDate] [varchar](60) NULL,
 CONSTRAINT [PK_Customer] PRIMARY KEY CLUSTERED
(
	[CustomerID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY
= OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
SET ANSI_PADDING OFF
GO
/****** Object:  Table [dbo].[Employee]    Script Date: 14-May-24 2:12:18 AM ******/
```

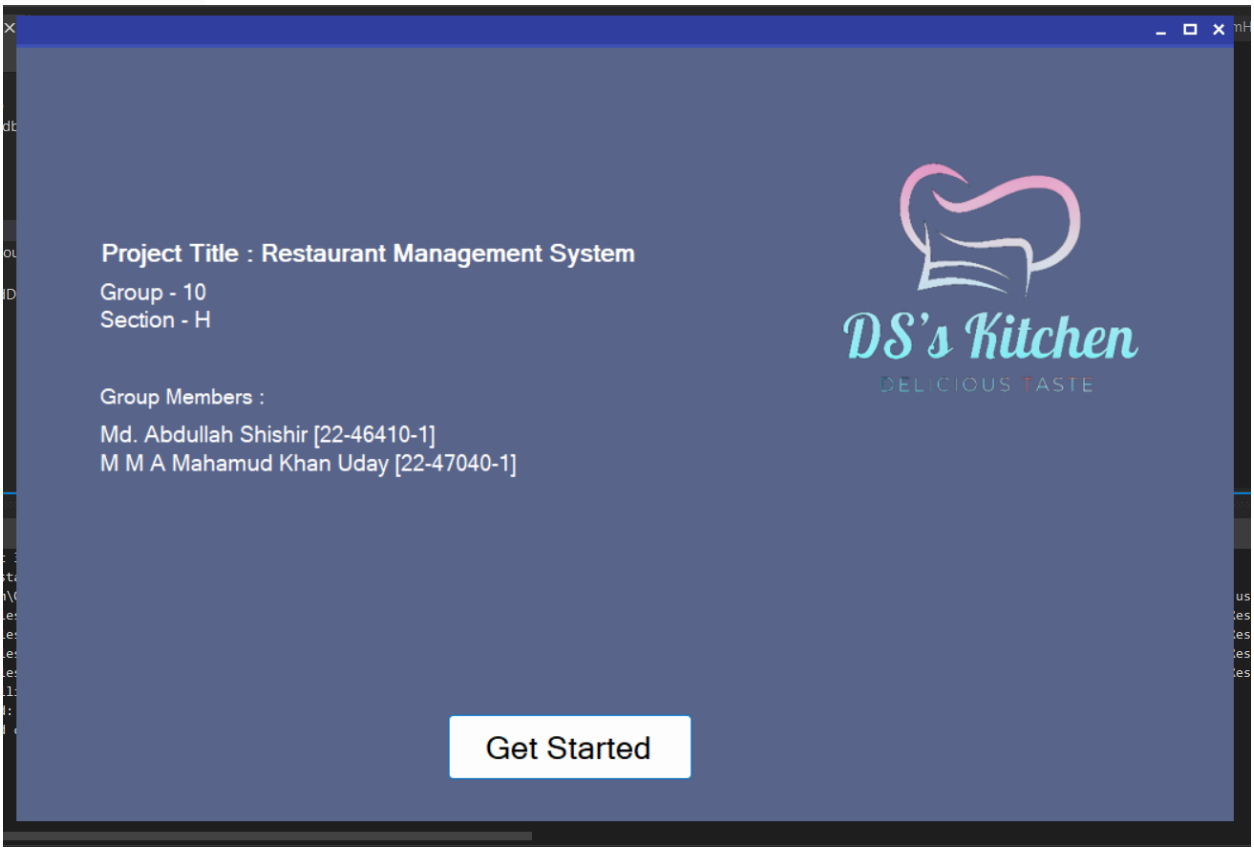
```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [dbo].[Employee](
	[UserID] [varchar](30) NOT NULL,
	[UserName] [varchar](70) NULL,
	[Password] [varchar](50) NULL,
	[EmpName] [varchar](80) NULL,
	[RoleID] [int] NULL,
 CONSTRAINT [PK_Employee] PRIMARY KEY CLUSTERED
(
	[UserID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY
= OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
SET ANSI_PADDING OFF
GO
/****** Object:  Table [dbo].[FoodItem]    Script Date: 14-May-24 2:12:18 AM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [dbo].[FoodItem](
	[FoodID] [int] IDENTITY(1,1) NOT NULL,
	[FoodName] [varchar](80) NULL,
	[Price] [float] NULL,
 CONSTRAINT [PK_FoodItem] PRIMARY KEY CLUSTERED
(
	[FoodID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY
= OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
SET ANSI_PADDING OFF
GO
/****** Object:  Table [dbo].[Roles]    Script Date: 14-May-24 2:12:18 AM ******/
SET ANSI_NULLS ON
GO
```

```
SET QUOTED_IDENTIFIER ON
GO
SET ANSI_PADDING ON
GO
CREATE TABLE [dbo].[Roles](
	[RoleID] [int] NOT NULL,
	[Role] [varchar](25) NULL,
 CONSTRAINT [PK_Roles] PRIMARY KEY CLUSTERED
(
	[RoleID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY
= OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]

GO
SET ANSI_PADDING OFF
GO
SET IDENTITY_INSERT [dbo].[Bills] ON

INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (1, 512, N'ds', N'Cash', N'12-May-24 9:09:48 PM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (2, 570, N'SA', N'Card', N'12-May-24 9:09:48 PM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (3, 346, N'SA', N'Mobile Banking', N'12-May-24 9:09:48
PM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (4, 496, N'SA', N'Card', N'12-May-24 9:09:48 AM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (5, 300, N'SA', N'Card', N'12-May-24 9:09:48 PM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (6, 346, N'SA', N'Mobile Banking', N'12-May-24 7:09:48
PM')
INSERT [dbo].[Bills] ([BillingID], [TotalBill], [Seller], [PaymentMathod],
[PurchaseTimeAndDate]) VALUES (7, 946, N'SA', N'Cash', N'13-May-24 9:09:48 PM')
SET IDENTITY_INSERT [dbo].[Bills] OFF
SET IDENTITY_INSERT [dbo].[Customer] ON

INSERT [dbo].[Customer] ([CustomerID], [CustomerName], [TotalPurchaseAmount],
[PaymentMathod], [PurchaseTimeAndDate]) VALUES (1, N'RJ', 512, N'Cash', N'12-May-24
9:10:48 PM')
INSERT [dbo].[Customer] ([CustomerID], [CustomerName], [TotalPurchaseAmount],
[PaymentMathod], [PurchaseTimeAndDate]) VALUES (2, N'RJ', 300, N'Card', N'12-May-24
10:09:48 PM')
```

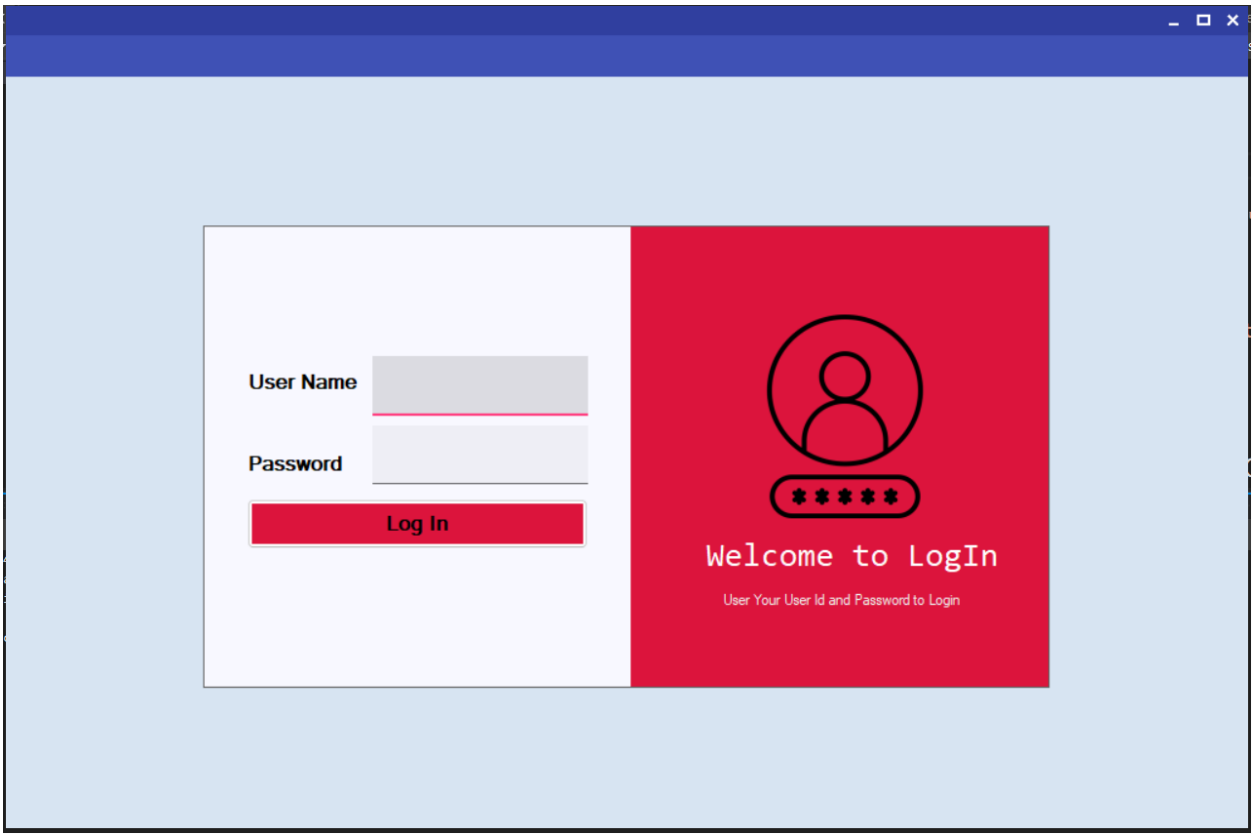
INSERT [dbo].[Customer] ([CustomerID], [CustomerName], [TotalPurchaseAmount], [PaymentMathod], [PurchaseTimeAndDate]) VALUES (3, N'AA', 346, N'Mobile Banking', N'13-May-24 9:09:48 AM')
INSERT [dbo].[Customer] ([CustomerID], [CustomerName], [TotalPurchaseAmount], [PaymentMathod], [PurchaseTimeAndDate]) VALUES (4, N'Kuddus', 946, N'Cash', N'13-May-24 9:09:48 PM')
SET IDENTITY_INSERT [dbo].[Customer] OFF
INSERT [dbo].[Employee] ([UserID], [UserName], [Password], [EmpName], [RoleID]) VALUES (N's-001', N'ds', N'786', N'Abdullah Shishir', 1)
INSERT [dbo].[Employee] ([UserID], [UserName], [Password], [EmpName], [RoleID]) VALUES (N's-002', N'a', N'001', N'SA', 2)
SET IDENTITY_INSERT [dbo].[FoodItem] ON

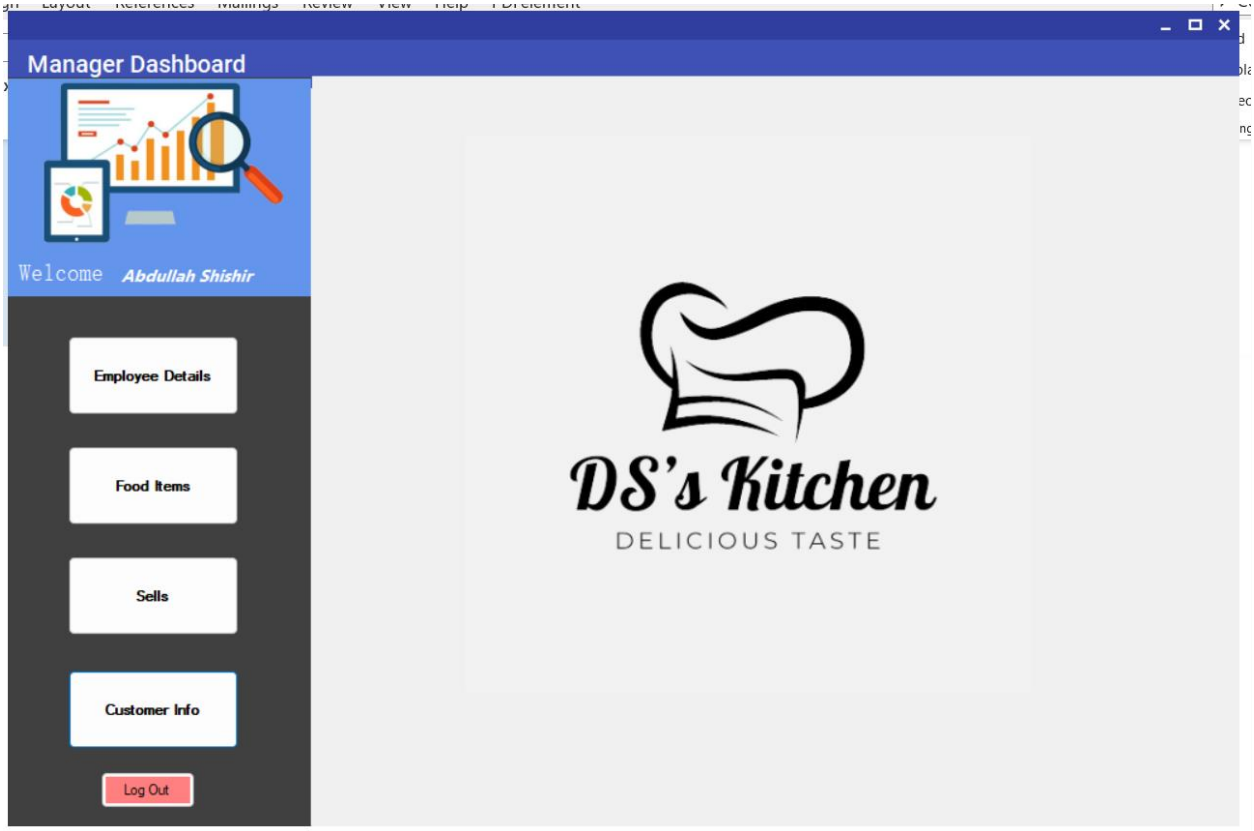
INSERT [dbo].[FoodItem] ([FoodID], [FoodName], [Price]) VALUES (1, N'Pizza', 480)
INSERT [dbo].[FoodItem] ([FoodID], [FoodName], [Price]) VALUES (2, N'Burger', 270)
INSERT [dbo].[FoodItem] ([FoodID], [FoodName], [Price]) VALUES (3, N'Sandwitch', 173)
INSERT [dbo].[FoodItem] ([FoodID], [FoodName], [Price]) VALUES (5, N'Nachos', 150)
SET IDENTITY_INSERT [dbo].[FoodItem] OFF
INSERT [dbo].[Roles] ([RoleID], [Role]) VALUES (1, N'Manager')
INSERT [dbo].[Roles] ([RoleID], [Role]) VALUES (2, N'Seller')

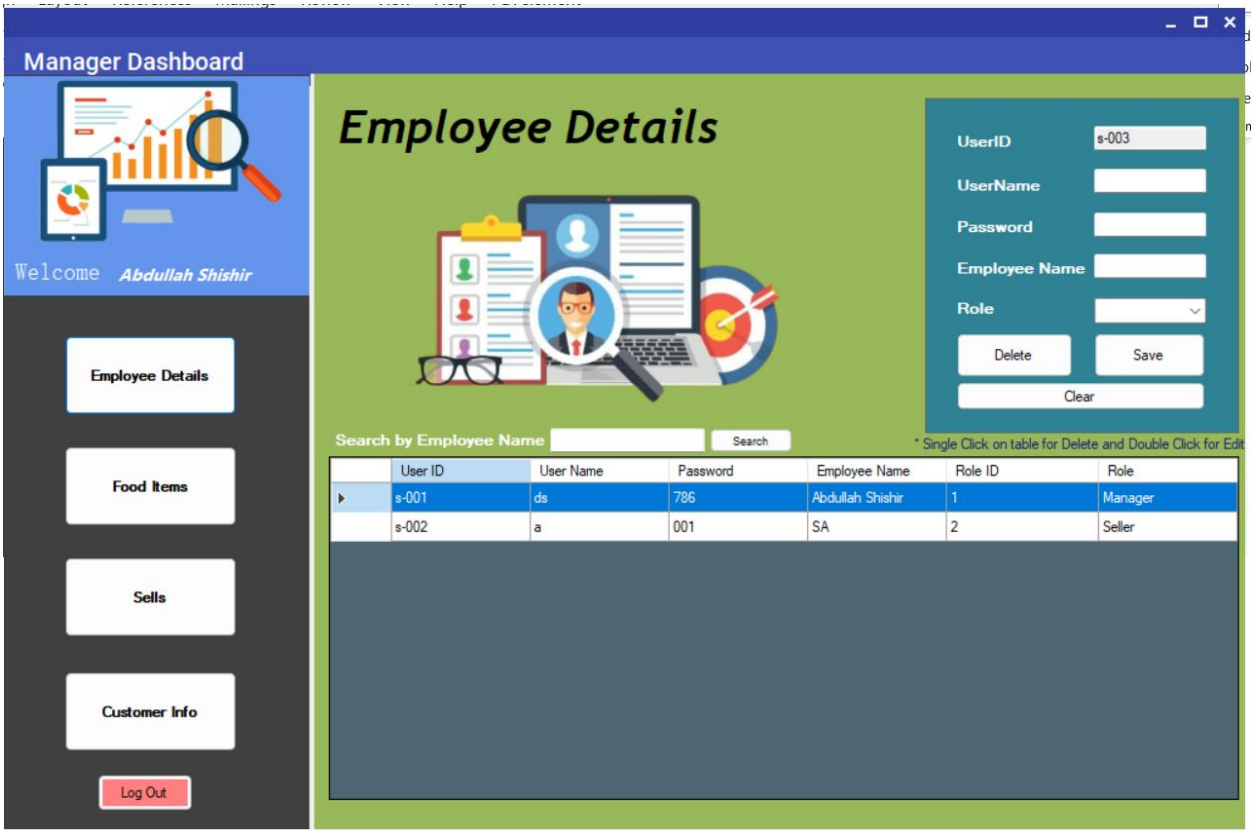
Screenshots:

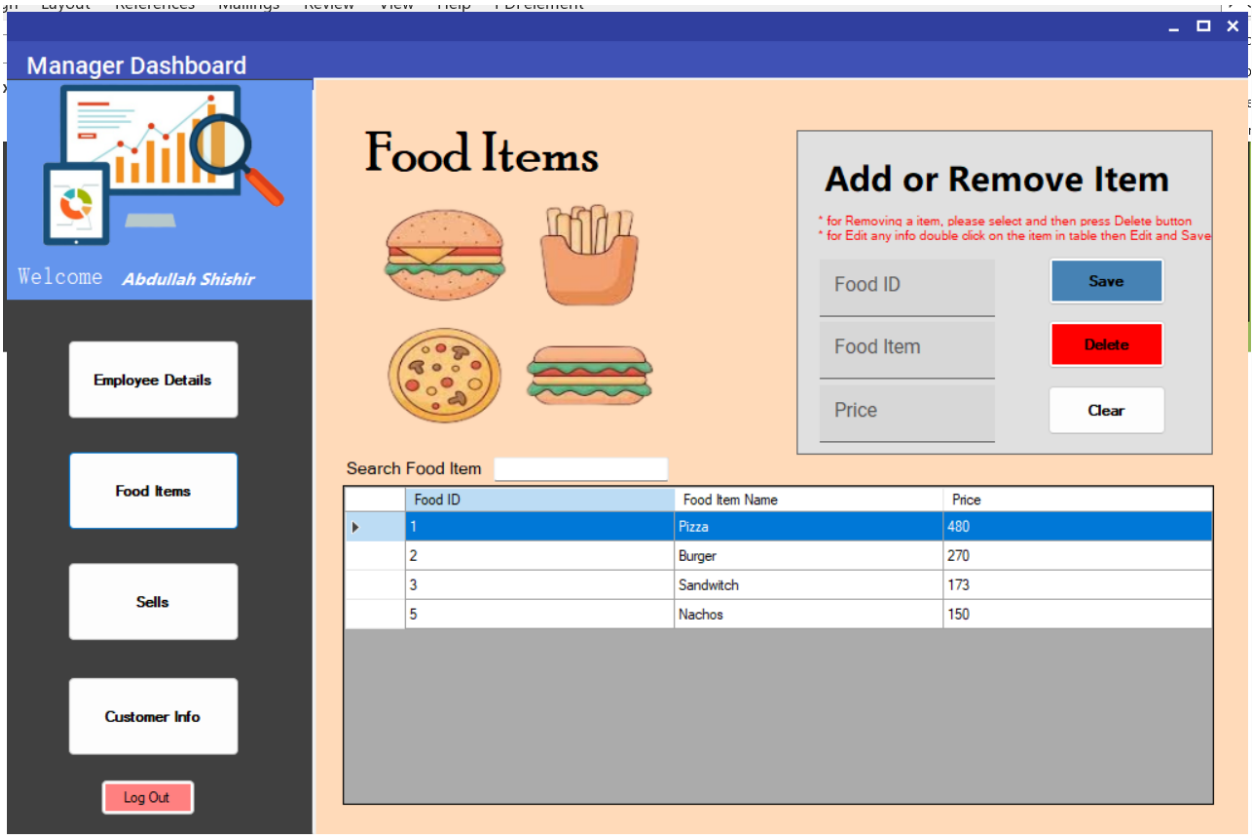


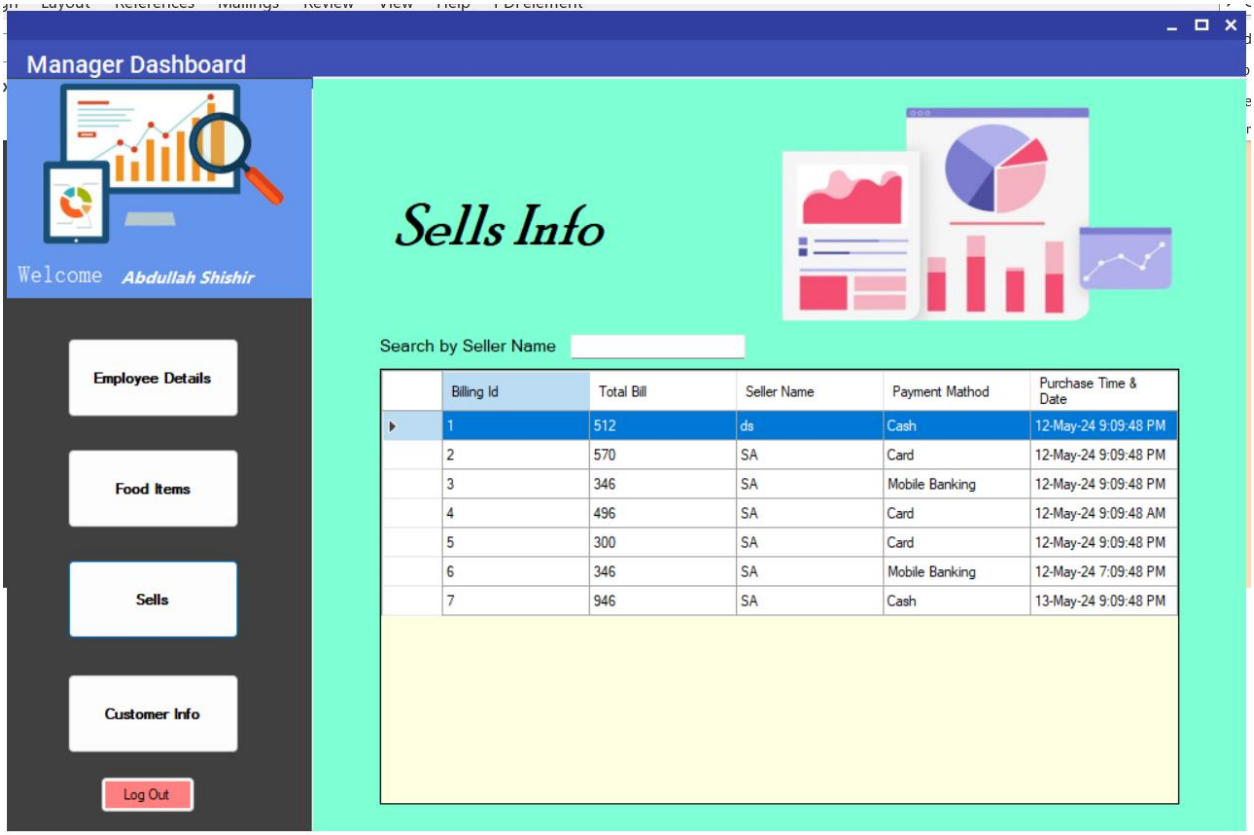

Project Title : Restaurant Management System
Group - 10
Section - H
Group Members :
Md. Abdullah Shishir [22-46410-1]
M M A Mahamud Khan Uday [22-47040-1]
DS's Kitchen
DELICIOUS TASTE
Loading....

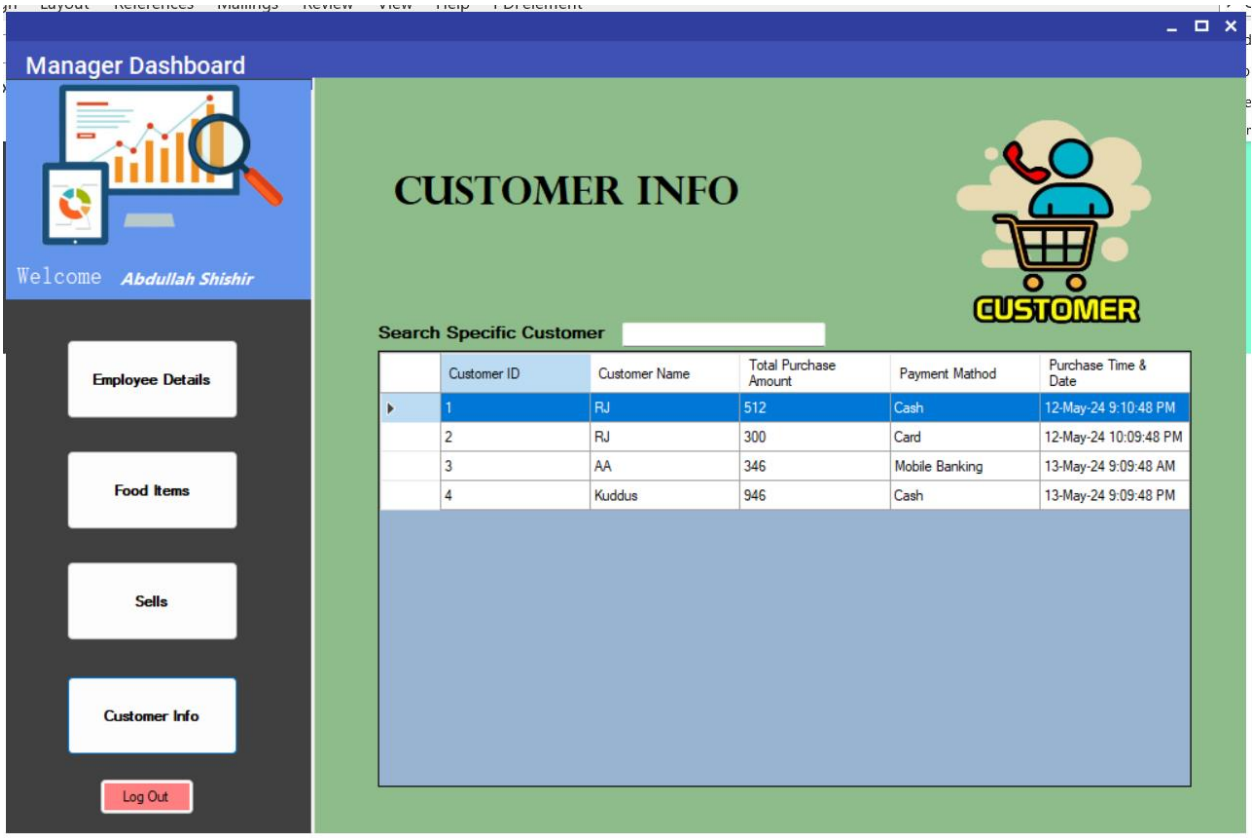

User Name
Password
Log In
Welcome to LogIn
User Your User Id and Password to Login


Manager Dashboard
Welcome
Abdullah Shishir
Employee Details
Food Items
Sells
Customer Info
Log Out
DS's Kitchen
DELICIOUS TASTE

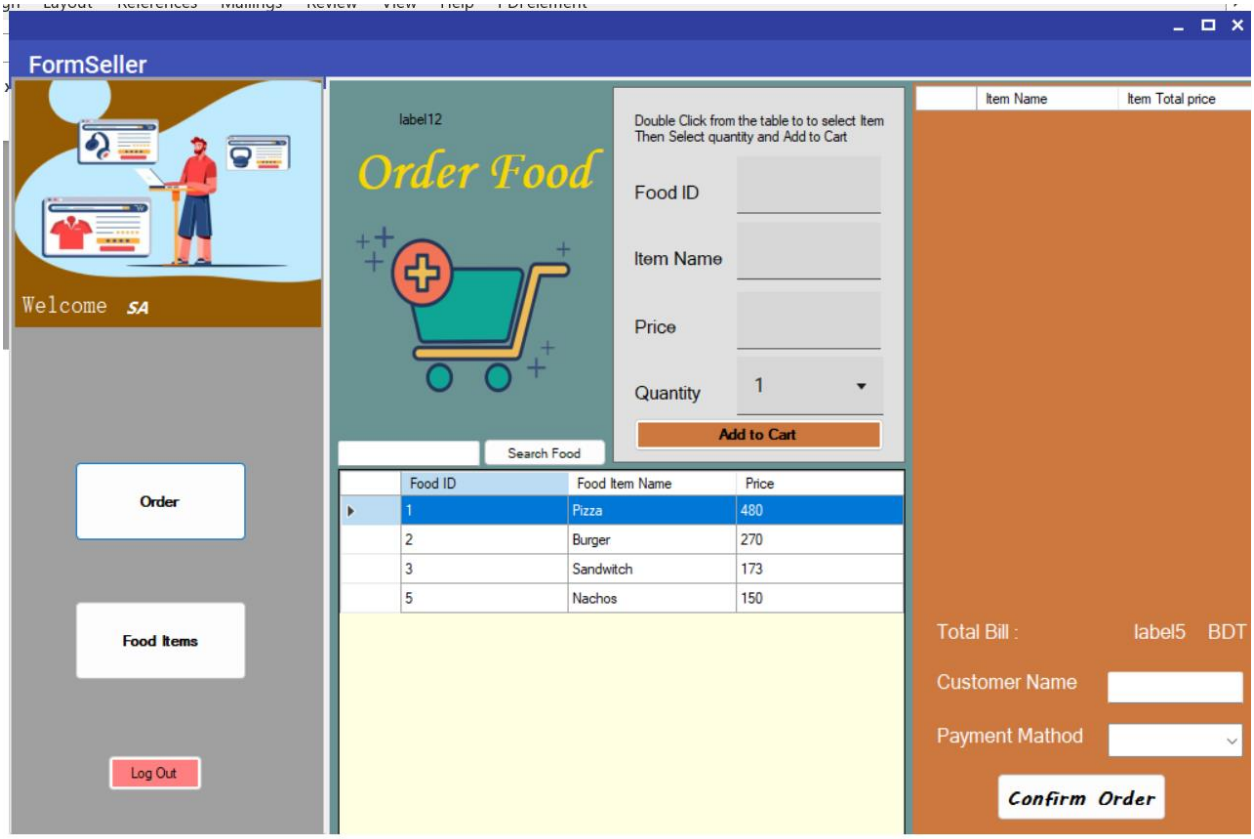

Manager Dashboard
Welcome
Abdullah Shishir
Employee Details
Food Items
Sells
Customer Info
Log Out
Employee Details
UserID
s-003
UserName
Password
Employee Name
Role
Delete
Save
Clear
Search by Employee Name
Search
* Single Click on table for Delete and Double Click for Edit
User ID
User Name
Password
Employee Name
Role ID
Role
s-001
ds
786
Abdullah Shishir
1
Manager
s-002
a
001
SA
2
Seller

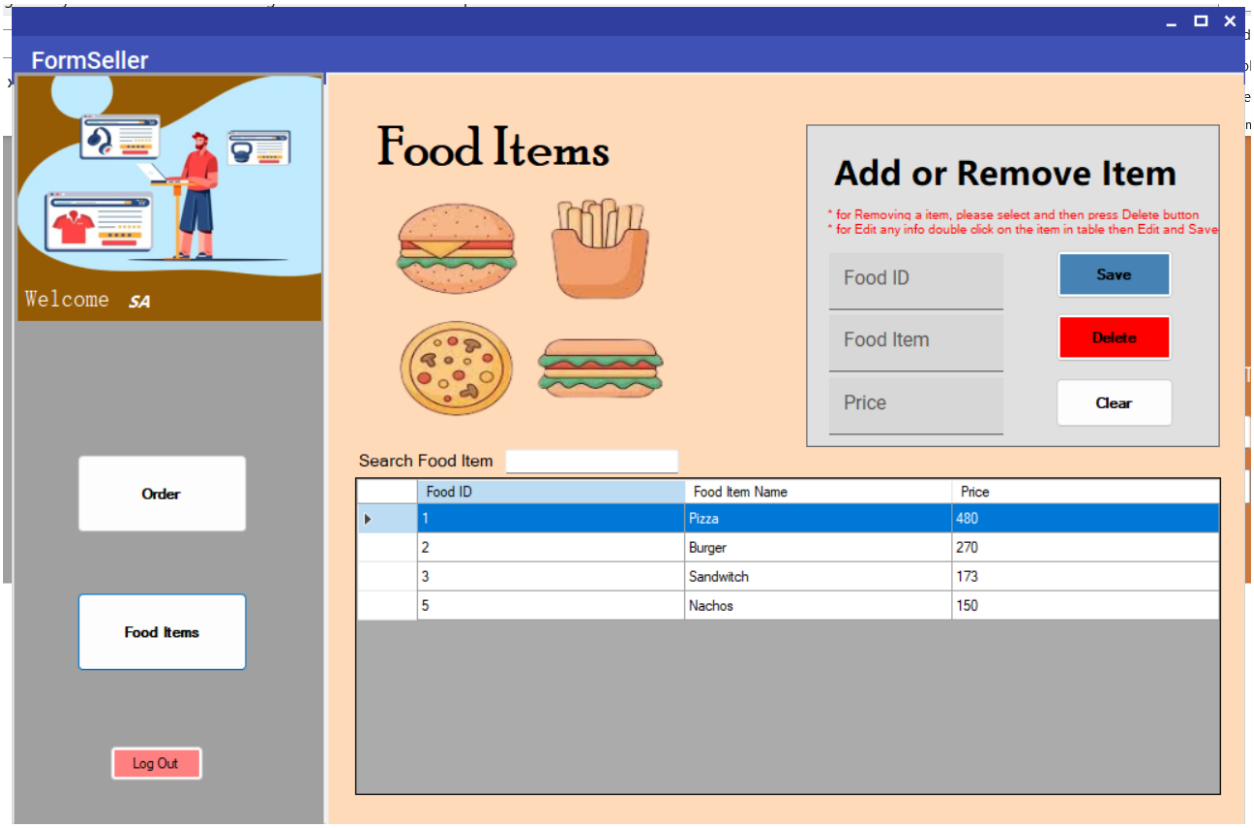

Manager Dashboard
Welcome
Abdullah Shishir
Employee Details
Food Items
Sells
Customer Info
Log Out
Food Items
Add or Remove Item
* for Removing a item, please select and then press Delete button
* for Edit any info double click on the item in table then Edit and Save
Food ID
Food Item
Price
Save
Delete
Clear
Search Food Item
Food ID
Food Item Name
Price
1
Pizza
480
2
Burger
270
3
Sandwitch
173
5
Nachos
150


Manager Dashboard
Welcome
Abdullah Shishir
Employee Details
Food Items
Sells
Customer Info
Log Out
Sells Info
Search by Seller Name
Billing Id
Total Bill
Seller Name
Payment Mathod
Purchase Time & Date
1
512
ds
Cash
12-May-24 9:09:48 PM
2
570
SA
Card
12-May-24 9:09:48 PM
3
346
SA
Mobile Banking
12-May-24 9:09:48 PM
4
496
SA
Card
12-May-24 9:09:48 AM
5
300
SA
Card
12-May-24 9:09:48 PM
6
346
SA
Mobile Banking
12-May-24 7:09:48 PM
7
946
SA
Cash
13-May-24 9:09:48 PM


Manager Dashboard
Welcome Abdullah Shishir
Employee Details
Food Items
Sells
Customer Info
Log Out
CUSTOMER INFO
CUSTOMER
Search Specific Customer
Customer ID
Customer Name
Total Purchase Amount
Payment Mathod
Purchase Time & Date
1 RJ 512 Cash 12-May-24 9:10:48 PM
2 RJ 300 Card 12-May-24 10:09:48 PM
3 AA 346 Mobile Banking 13-May-24 9:09:48 AM
4 Kuddus 946 Cash 13-May-24 9:09:48 PM


FormSeller
Welcome SA
Order
Food Items
Log Out
DS's Kitchen
DELICIOUS TASTE


FormSeller
Welcome SA
Order
Food Items
Log Out
label12
Order Food
Double Click from the table to to select Item
Then Select quantity and Add to Cart
Food ID
Item Name
Price
Quantity
1
Add to Cart
Search Food
Food ID
Food Item Name
Price
1
Pizza
480
2
Burger
270
3
Sandwitch
173
5
Nachos
150
Item Name
Item Total price
Total Bill :
label5
BDT
Customer Name
Payment Mathod
Confirm Order


FormSeller
Welcome SA
Order
Food Items
Log Out
Food Items
Add or Remove Item
* for Removing a item, please select and then press Delete button
* for Edit any info double click on the item in table then Edit and Save
Food ID
Food Item
Price
Save
Delete
Clear
Search Food Item
Food ID
Food Item Name
Price
1
Pizza
480
2
Burger
270
3
Sandwitch
173
5
Nachos
150

Conclusion: To conclude, a restaurant management system is a digital toolbox that streamlines all aspects of running your restaurant. It helps you improve efficiency, boost profits, and free up your time to focus on what matters most - creating a good experience for customers.