Restaurant Management System

A-The scope of project: Restaurant Management System.

B-The mandatory object: Admin, Customer, Menu Items, Staff.

C-The software type and the functionality follow in the system: Customize software.

The functionality:

(Admin):

0- Admin should be available before anything by (Name, Email, Password).

1-Admin will login to the system by(Name, Email, Password).

2-Admin should be able to add items in the menu by (Category, Name, Price, IsAvailable, Discounts? image?).

3- Admin should be able to explore menu items by (Category, Name, Price, IsAvailable, Discounts?, Image?).

4-Admin should be able to explore menu items details by (Category, Name, Price, IsAvailable, Discounts?, Image?, Bio).

5- Admin should be able to activate or deactivate items.

6- Admin should be able to edit menu items (Category, Name, Price, IsAvailable, Discounts? image?).

7- Admin should be able to add staff by (Roles , Shifts timing, Attendance, Name, Contact Details).

8- Admin should be able to explore staff by (Roles , Shifts timing, Attendance, Name, Contact Details).

9- Admin should be able to explore staff details by (Roles , Shifts timing, Attendance, Name, Contact Details).

10- Admin should be able to edit staff (Roles , Shifts timing, Attendance, Name, Contact Details).

11-Admin should be able to activate or deactivate staff.

12-Admin should be able to generate reports on

(Discounts, staff performance, Reservation).

(Customer)

13-Customer should be able to login by (Name, Email, Password).

14-Customer should be able to explore the menu items by (Category, Name, Price, IsAvailable, Discounts?, image?)

15- Customer should be able to explore the menu items details by (Category, Name, Price, IsAvailable, Discounts?, image? ,Bio).

16-Customer should be able to place orders by (Table Number, Customer Name? , Order Date, Status(pending/completed) ,Total Amount,Quantity).

17-Customer should be able to make a reservation by (Customer Name ,Contact Details ,Number Of Guests ,Reservation Date, Table Number).

18-Customer should be able to provide a feedback.

19-Customer should be able to give a rate.

20-Customer should be able to logout.

(Staff)

21-Staff should be able to login by (Name, Email, Password).

22-Staff should be able to registration his/her attendance.

23- Staff should be able to explore his/her performance reports (staff efficiently).

24- Staff should be able to logout.

D-Summarize System Objects.

Shared attribute: (Id, CreateBy ,UpdateBy,IsActive,UpdateDate,CreationDate).

A-Admin (FullName, Email, Password).

B-Menu Items (Category\_Id, Name, Price, IsAvailable, Discounts?, Image?, Bio).

C-Customer (FullName?, Email, Password ,Phone Number ,Address ).

D-Rate (Description, Rate amount, OrderID,Costumer Name,RateDate).

E-Order (Table Number, Customer Name?, Order Date,Total Amount, Serial Number,Quantity).

F-Staff (FullName, Email, Password, Role, Shifts timing, Attendance, Employment date , Employment type, Phone Number).

G-Reservation (Customer Name, Number of Guests, Reservation Date, Table Number, Table Capacity ).

H-Report (Discounts, staff performance, Reservation ,ReportDate ,StaffId,ReservationId).

I- Status(Pending, Completed, OrderId).

G-User Super class for (Admin,Customer,Staff).

F-Category >>LookUp

E-Generalization /Specialization.

Generalization:

User (Super Class)>>Customer, Admin, Staff (Sub Classes).

Specialization:

Status(Parent Class)>> Pending/Completed(Sub Classes).

F-Define Relationship:

1-Inheritance:

Create Child and add shared element in each child.

Such as:

User (Email ,Password)>>Customer, Admin, Staff (each child contain the attribute that are in the parent and the attribute that specialize to each one ).

2-Composition:

Admin: (1:M)Menu Items /(1:M)Staff /(1:M)Reports.

Menu Items: (M:M)Order.

Staff: (M:1) Reports.

Customer: (1:M)Order /(1:M)Reservation/ (1:M)Rate .

Rate: .

Status: .

Report: .

Order: )1:M)Rate/(M:1)Status.

Reservation: (1:M)Rate/(1:M)Status/(1:M)Report.

Rate>>Weak Entity .

Category >>Lookup (M:1)Menu Items

3-Association:I didn’t find any association relation.

7-Implement ER diagram.

I sent it.