DBMS Lab Assignment

K. Priyam

19BCS052

TOPIC: - ER Diagram of Hotel Database

GROUP: - 2

1)Customer Information

Column Name	Data Type	Allow Nulls
🔑 Name	nchar(10)	☐
CustomerID	int	☐
[Phone Number]	int	☐
City	nchar(10)	☐
State	nchar(10)	☐
[Zip Code]	nchar(10)	☐
[Reservation Number (if any)]	int	☐
Email	nvarchar(50)	☐

2)Services available

Column Name	Data Type	Allow Nulls
🔑 ServiceID	int	☐
[Service Name]	nchar(10)	☐
[Service Charge]	int	☐
[Reservation Number]	int	☐

3)Room details

Column Name	Data Type	Allow Nulls
🔑 [Room Number]	int	☐
[Room Type]	varchar(50)	☐
[Number of beds]	int	☐
CustomerID	int	☐
▶ [Extra Matress]	varchar(50)	☐

4)Customer Address

Column Name	Data Type	Allow Nulls
🔑 CustomerID	int	☐
[House Number]	nvarchar(50)	☐
Street	nvarchar(50)	☐
City	nchar(10)	☐
State	nchar(10)	☐
[Zip-Code]	int	☐

5)Billing Details

Column Name	Data Type	Allow Nulls
🔑 BillingID	int	☐
[Room Charges]	int	☐
[Payment Date]	date	☐
CustomerID	int	☐
[Payment(Cash/Card)]	nvarchar(50)	☐

6)Reservations (if any)

Column Name	Data Type	Allow Nulls
🔑 [Reservation Number]	int	☐
CustomerID	int	☐
[Check-in Date]	date	☐
[Number of Members]	int	☐
[Reservation Date]	date	☐
[Room Number]	int	☐
[Check-out Date]	date	☐

ER Diagram of Hotel Database
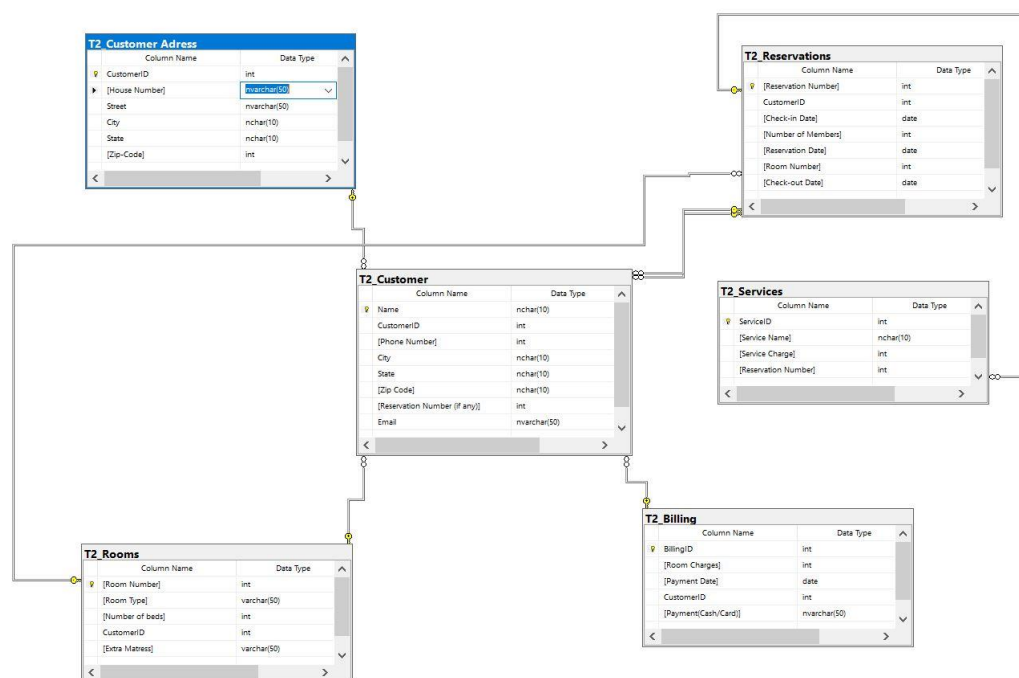
- In the ER diagram, the Customer Address is a weak entity because it can't be uniquely identified with its own attributes.

- There is no separate primary key for the Customer Address entity. The CustomerID key acts as primary key and foreign key for the Customer Address entity.
- So, the entity Customer Address is the weak entity and the relation it shares with the Customer entity is the weak rela

Table Name	Primary key	Foreign key
T2_Rooms	Room number	Customer ID
T2_Customer	Customer ID	Reservation number
T2_Reservation	Reservation number	Room number, Customer ID
T2_Services	Service ID	Reservation number
T2_Billing	Billing #	Customer ID
T2_Customer Address	Customer ID	Customer ID