 Logo, company name

Description automatically generated

**“ Hotel Reservation System “**

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# Project functional View

# Maintain Basic Data:

✓ Hotel ( H\_id , H\_name , H\_location)

✓ Employees ( E\_id, E\_name, phone, Hob\_title, salary, BDate, hotel\_id)

✓ Guests (Acc\_Number, F\_name, L\_name, phone, Email, Nationality, hotel\_id )

✓ Rooms (Room\_Number, R\_view, R\_level, G\_id)

✓ Beds (B\_id, B\_type, R\_No )

✓ Room\_Type ( R\_type, Rtype, R\_No)

✓ Reservation (Res\_Number, check\_in, Check\_out, R\_No, G\_id)

✓ Bill (Bill\_id, G\_name, Amount, A\_Date, G\_id, Type)

# Issue query subsystems:

✓ Search by Employee id

✓ Search by room number

✓ Search by guest id

✓ Search by Room\_Number

✓ Search by Hotel\_id

✓

# Perform transaction:

✓ Add, delete and update (all entities) ✓ Hotel Name

✓ Guest reservation

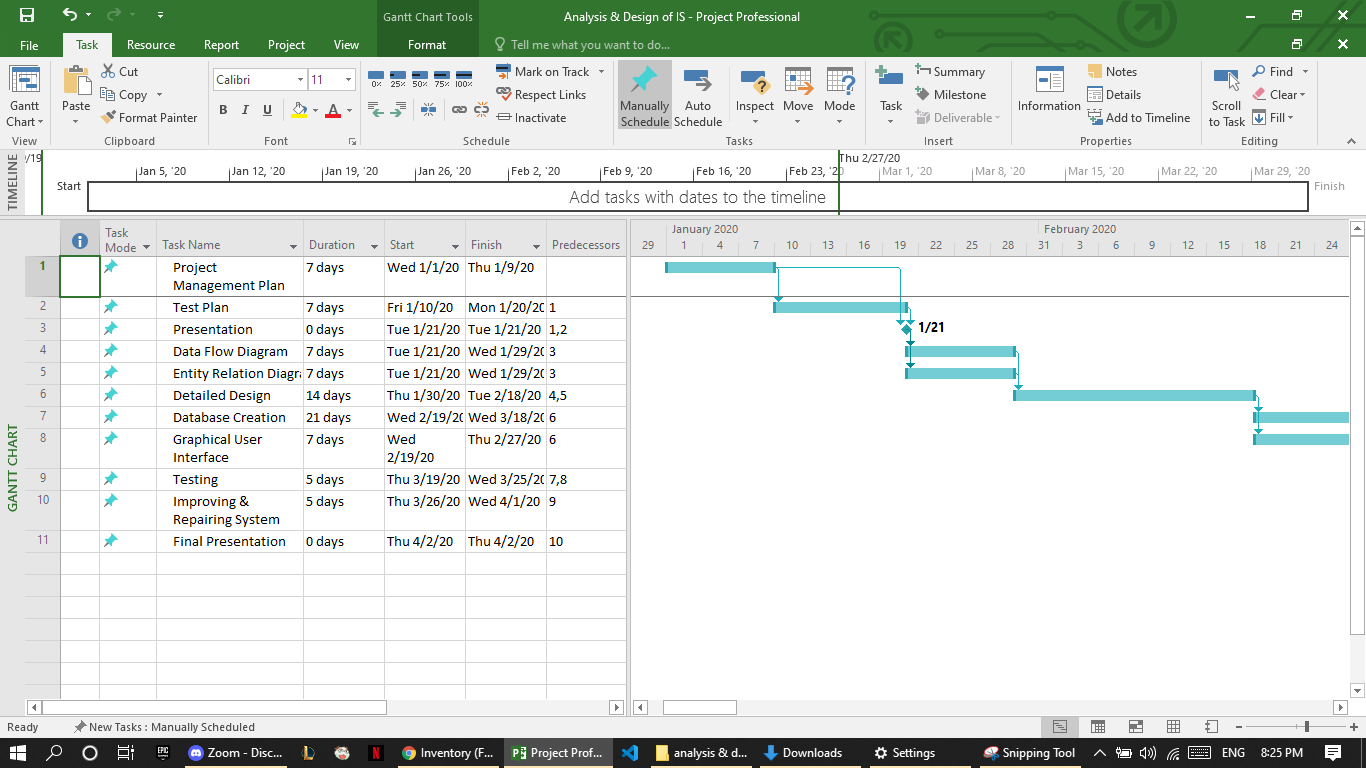
# Generate reports:

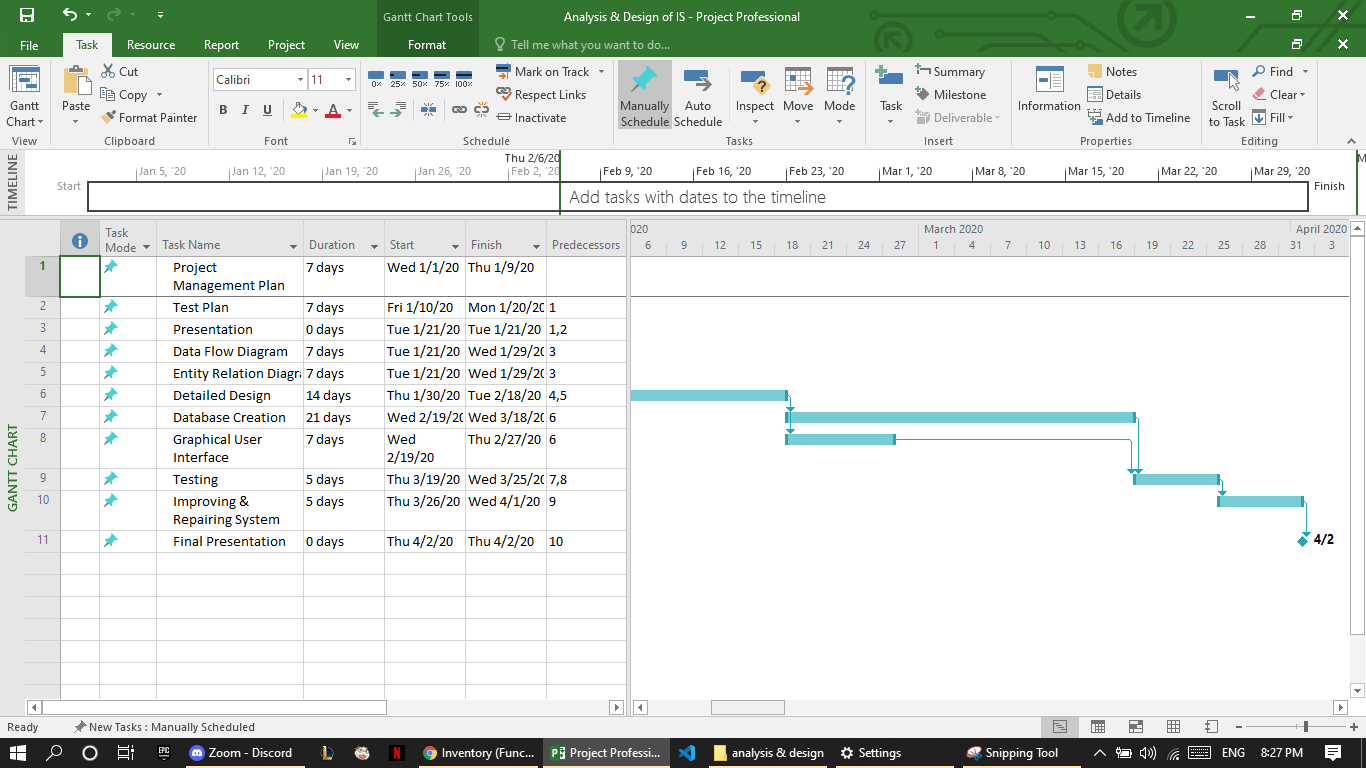
The Hotels Name

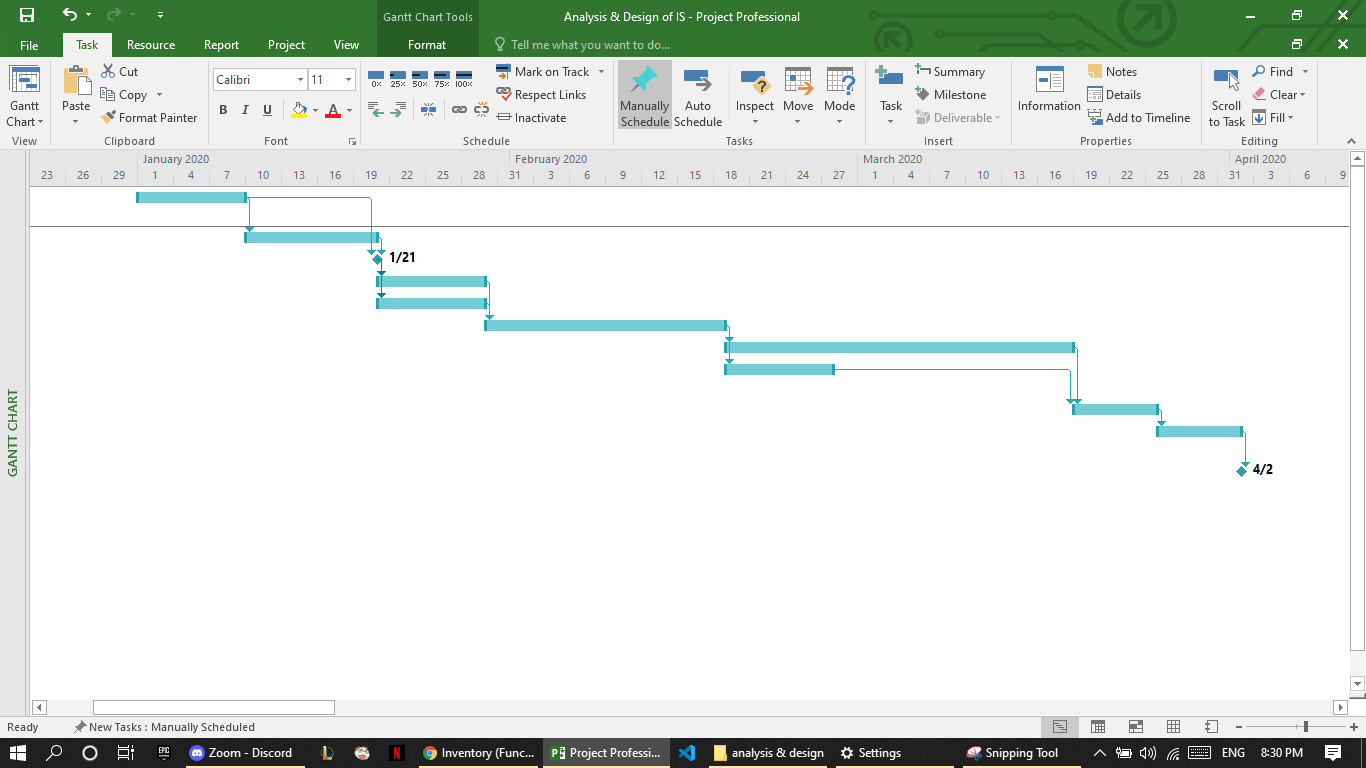
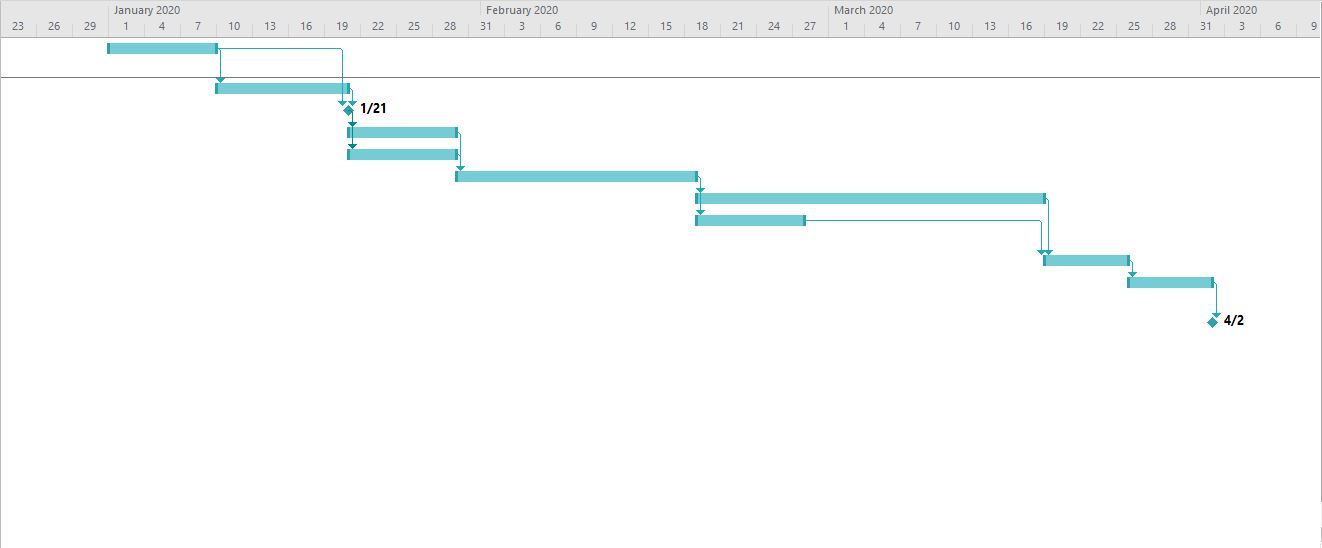
The Guests

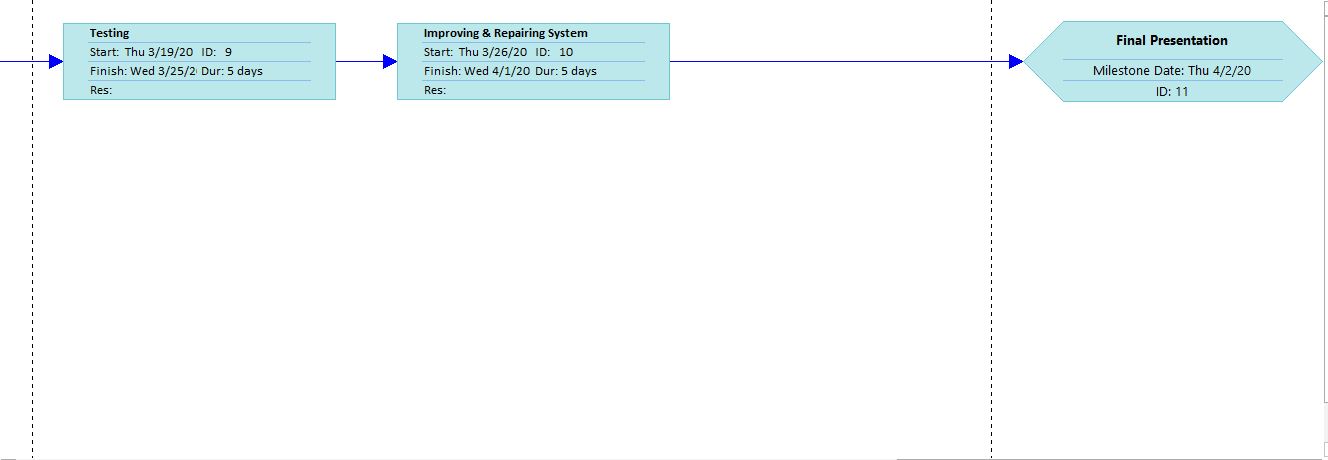
The all Guests Reservation

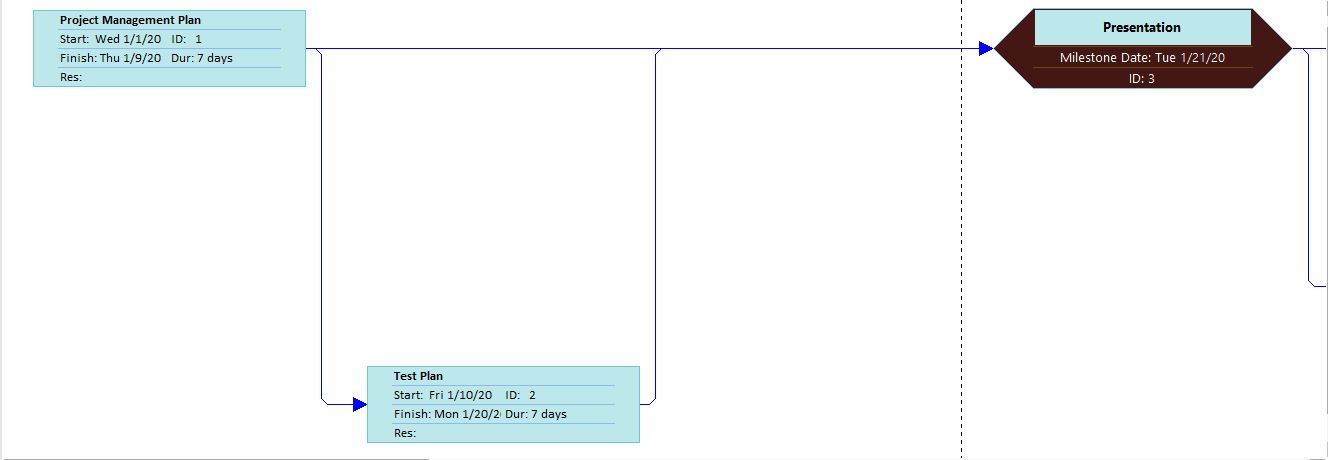
# Planning

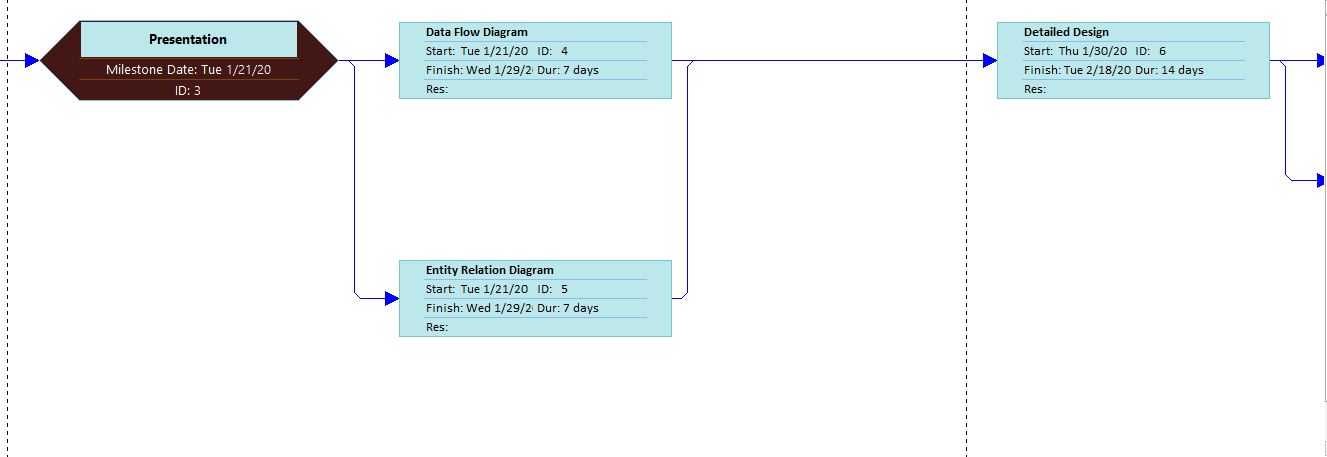


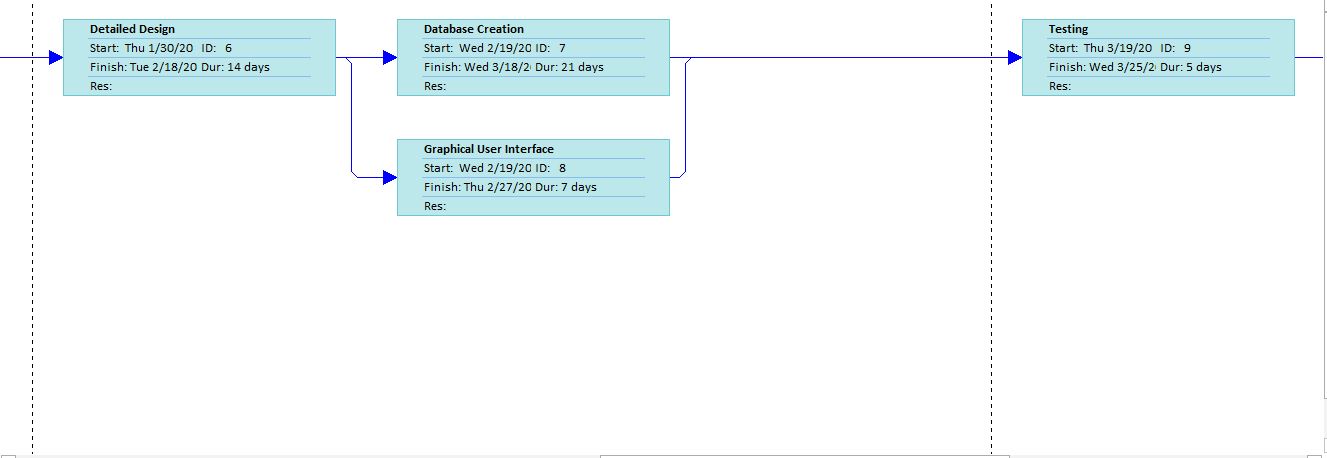


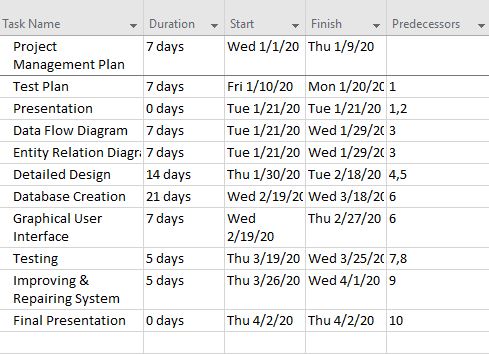




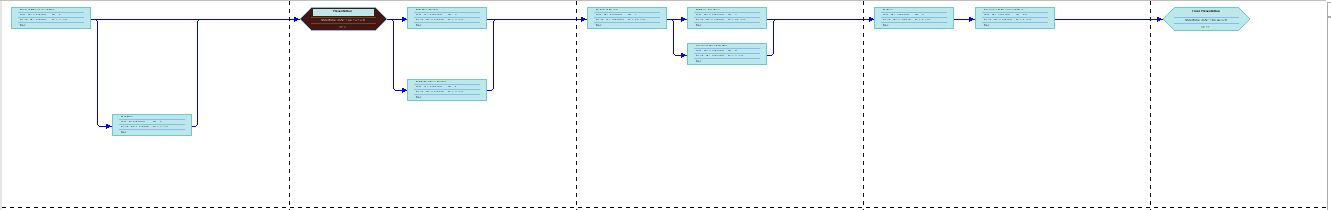




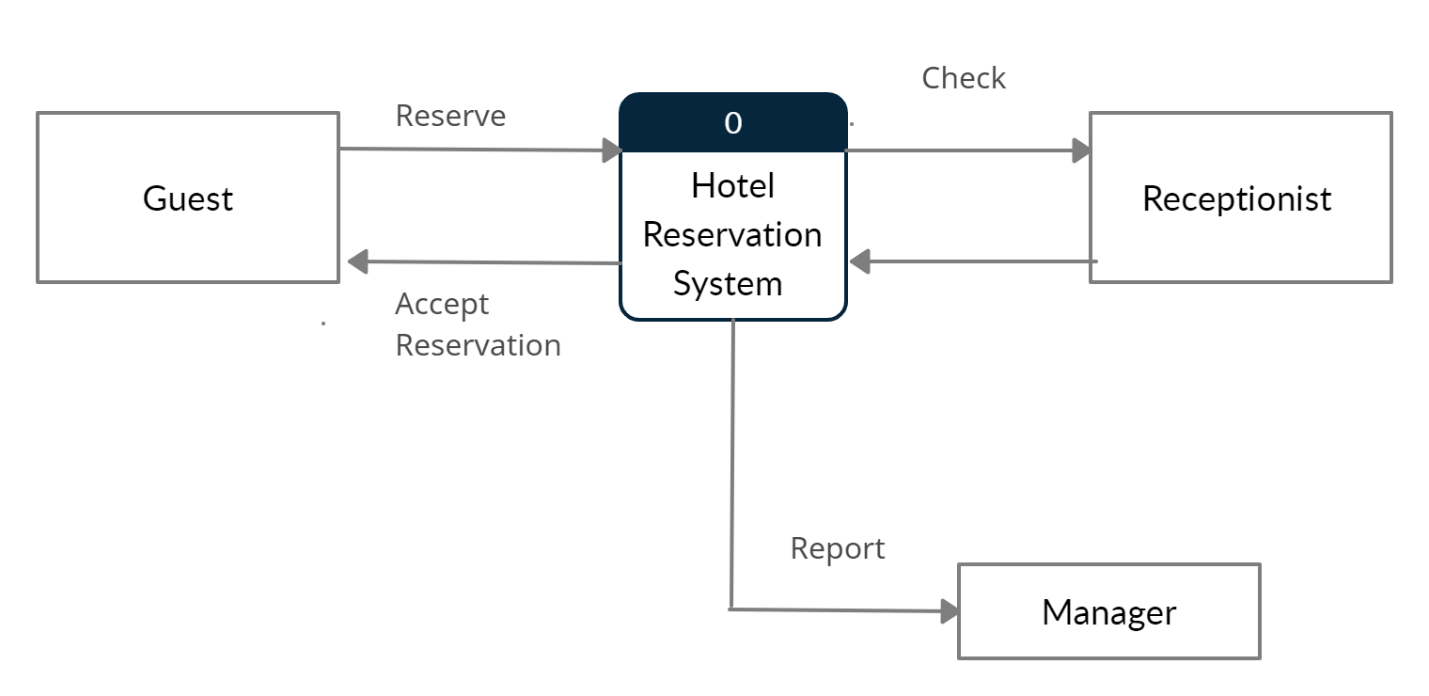




# Network diagram:



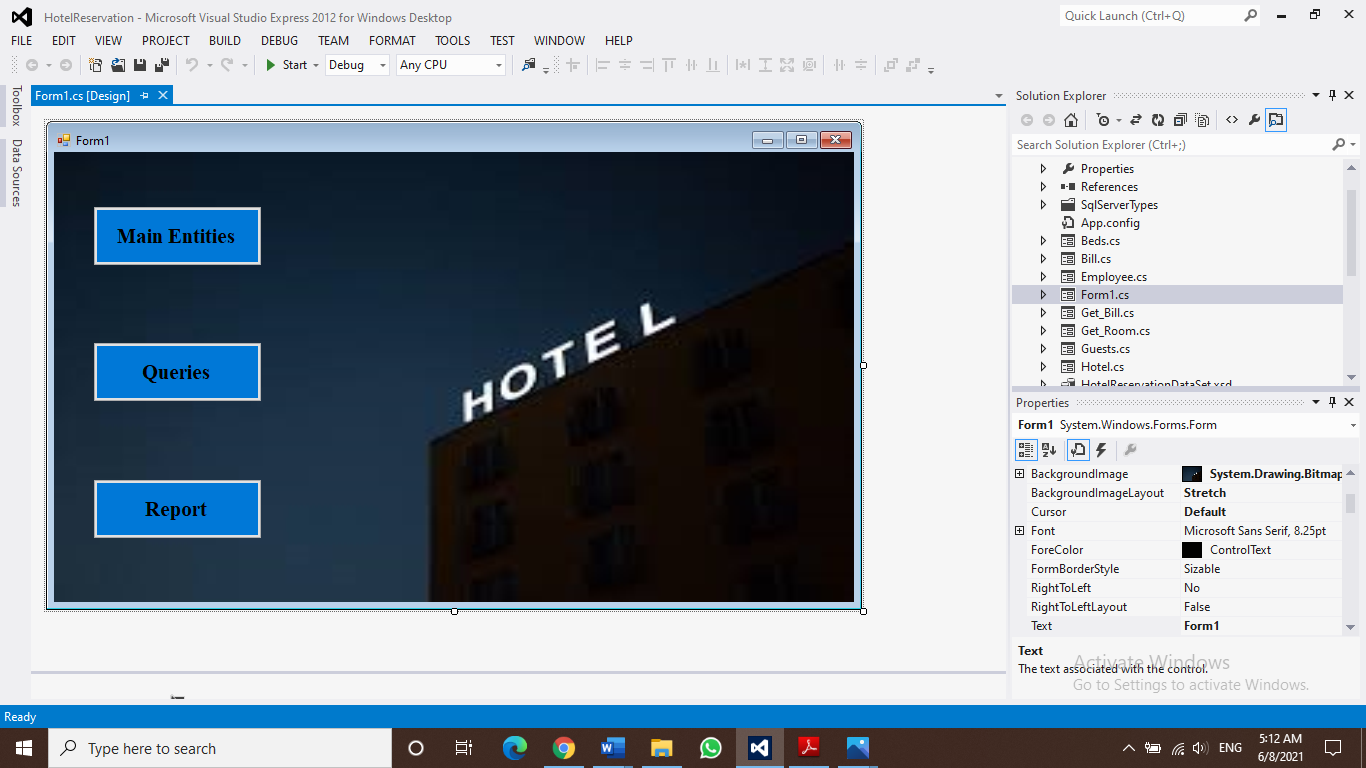
# Context diagram



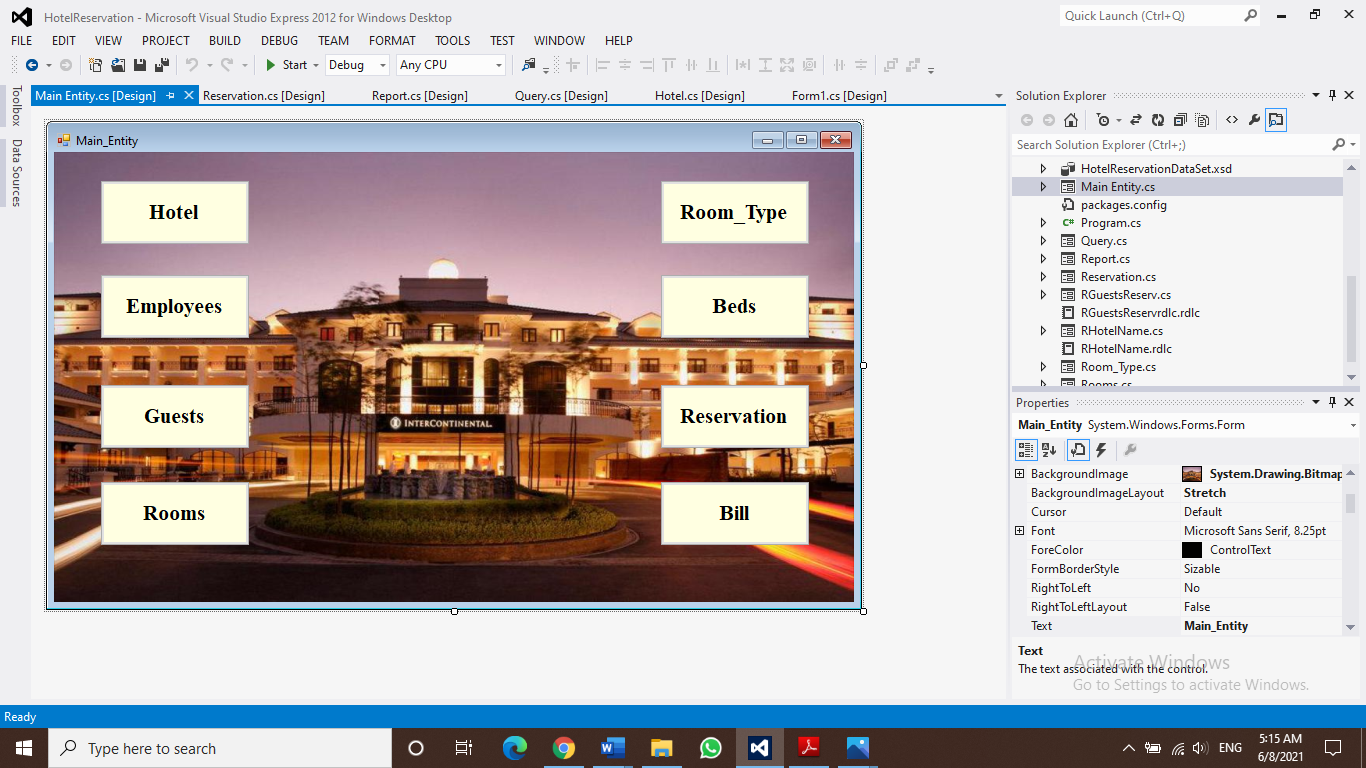
# DFD

# 

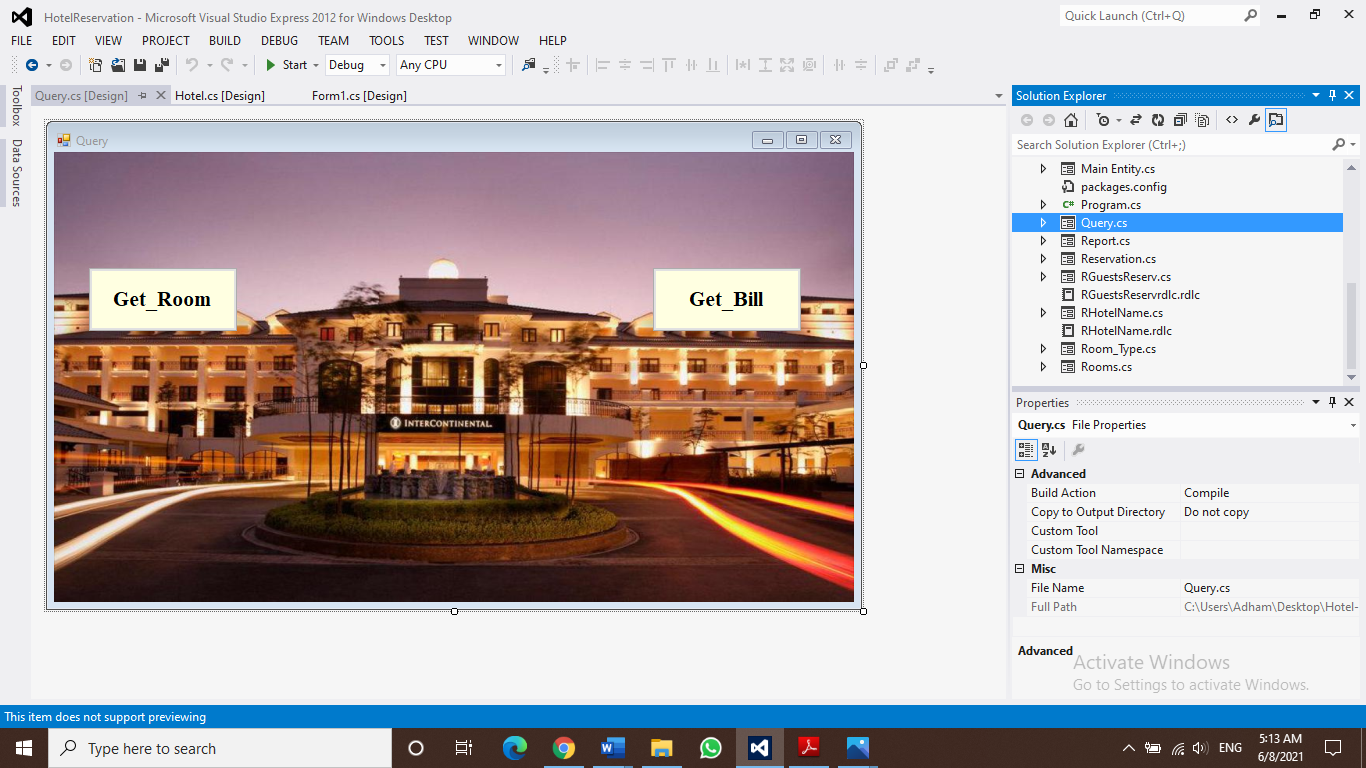
# Gui description



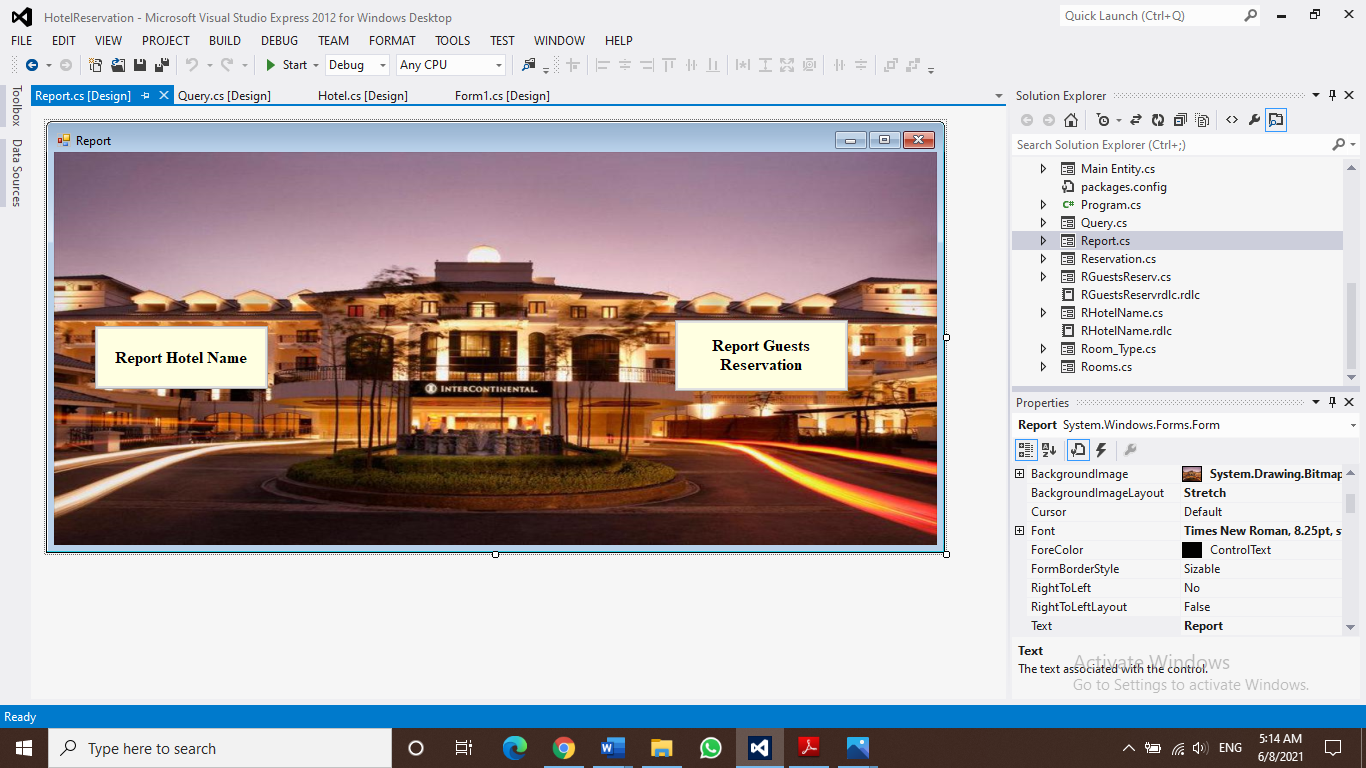
First form that user chooses the step to be done.



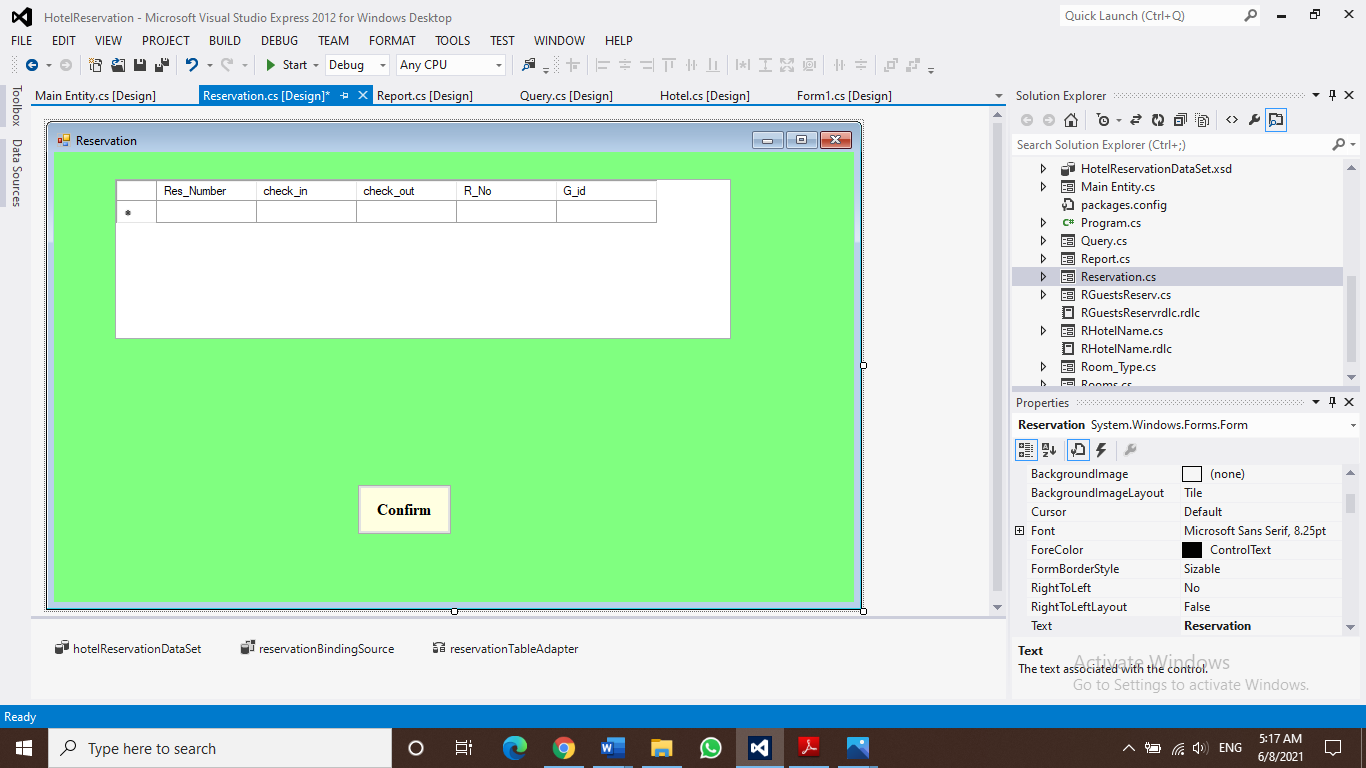
Main Entity form that user chooses which database to add in a new data



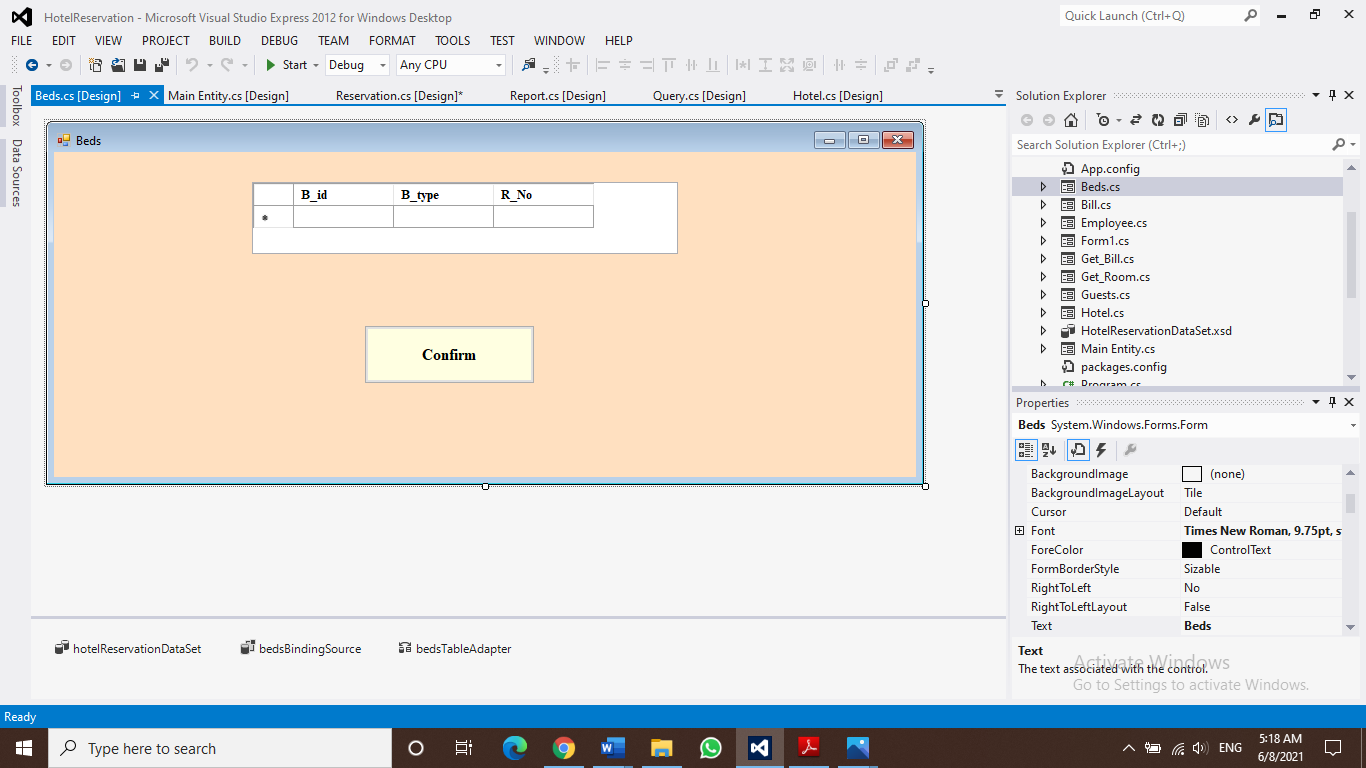
Query form where user gets room data or bill of the guest



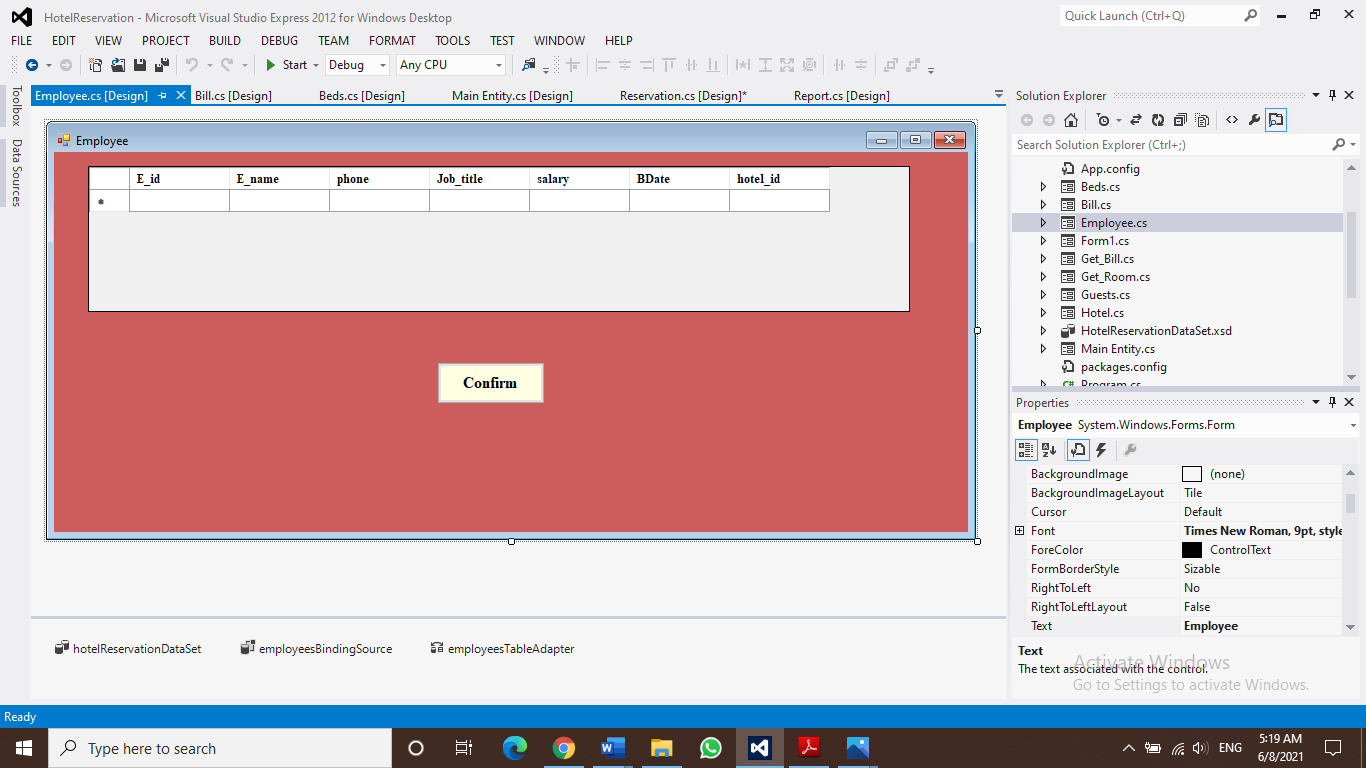
**Report form**



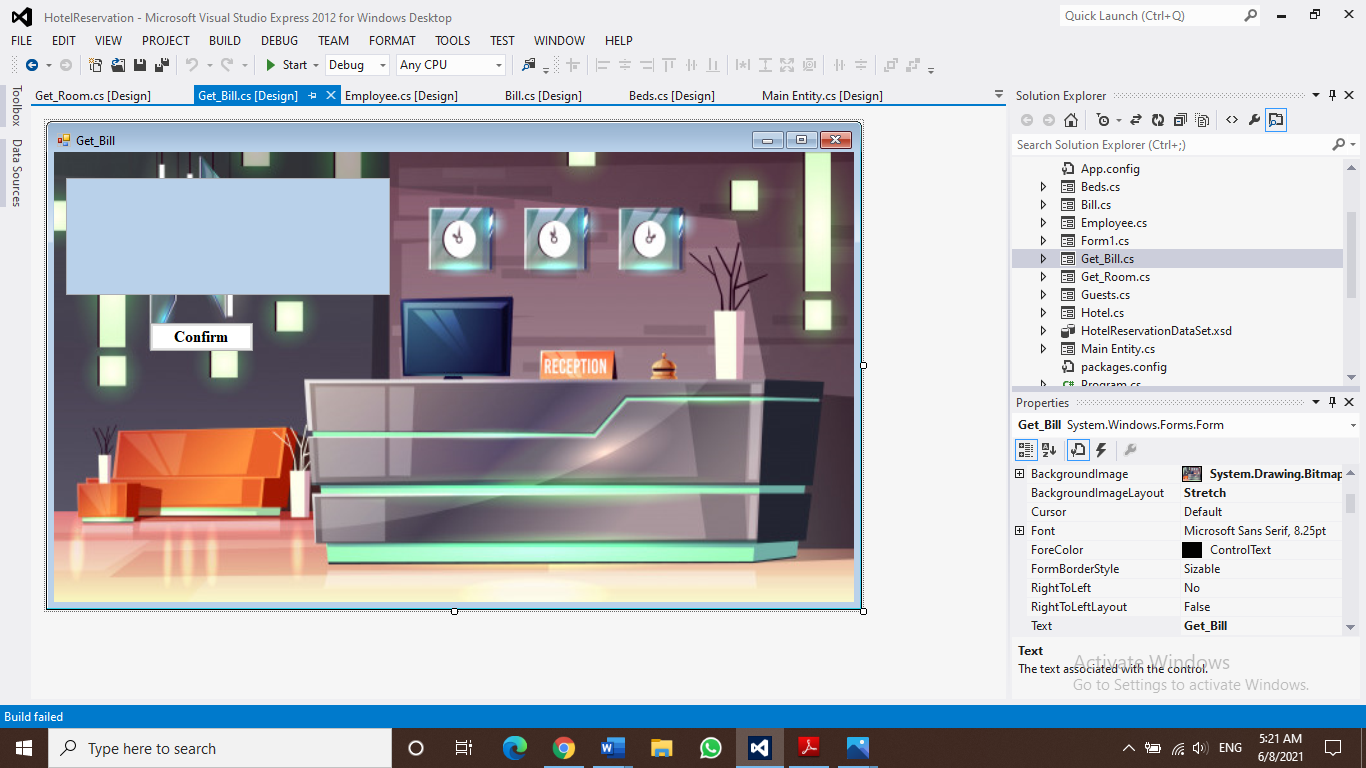
Reservation form to enter reservation data.



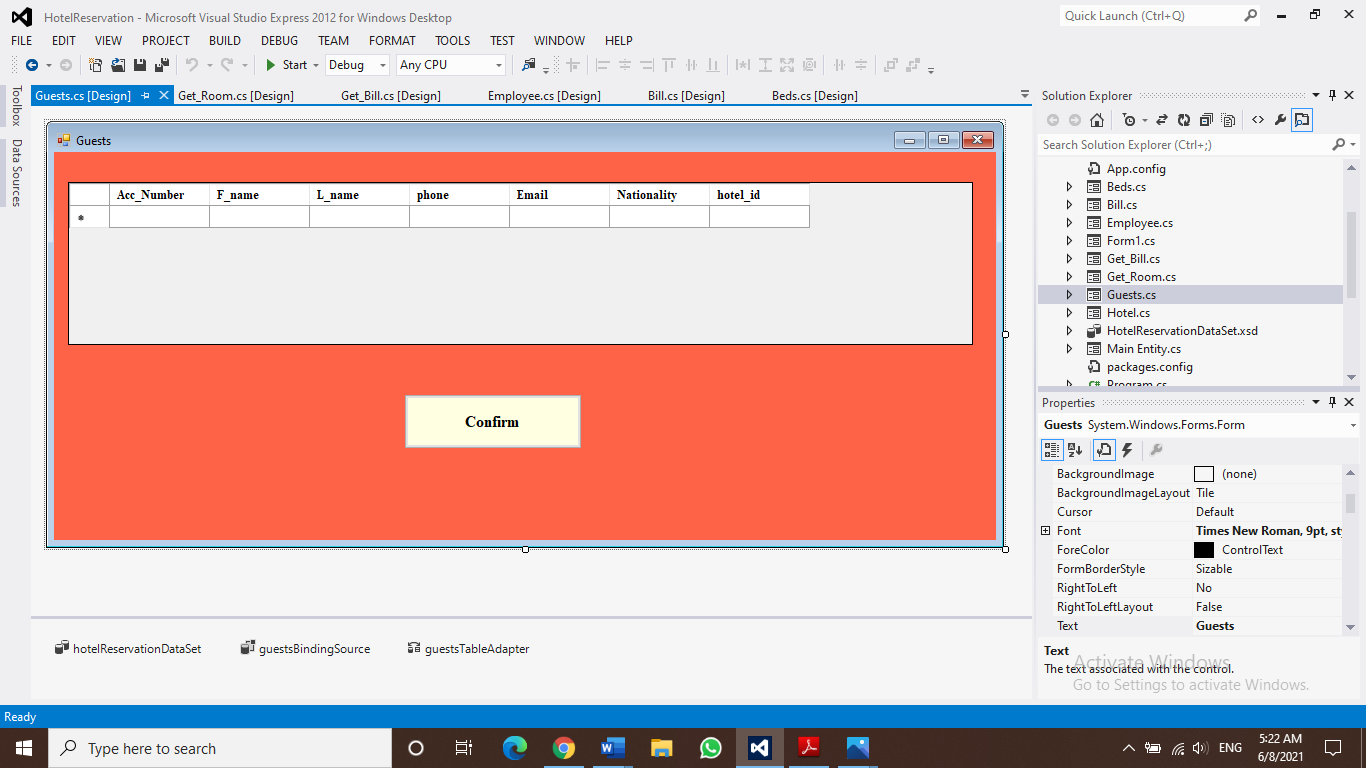
Beds form to enter beds data.



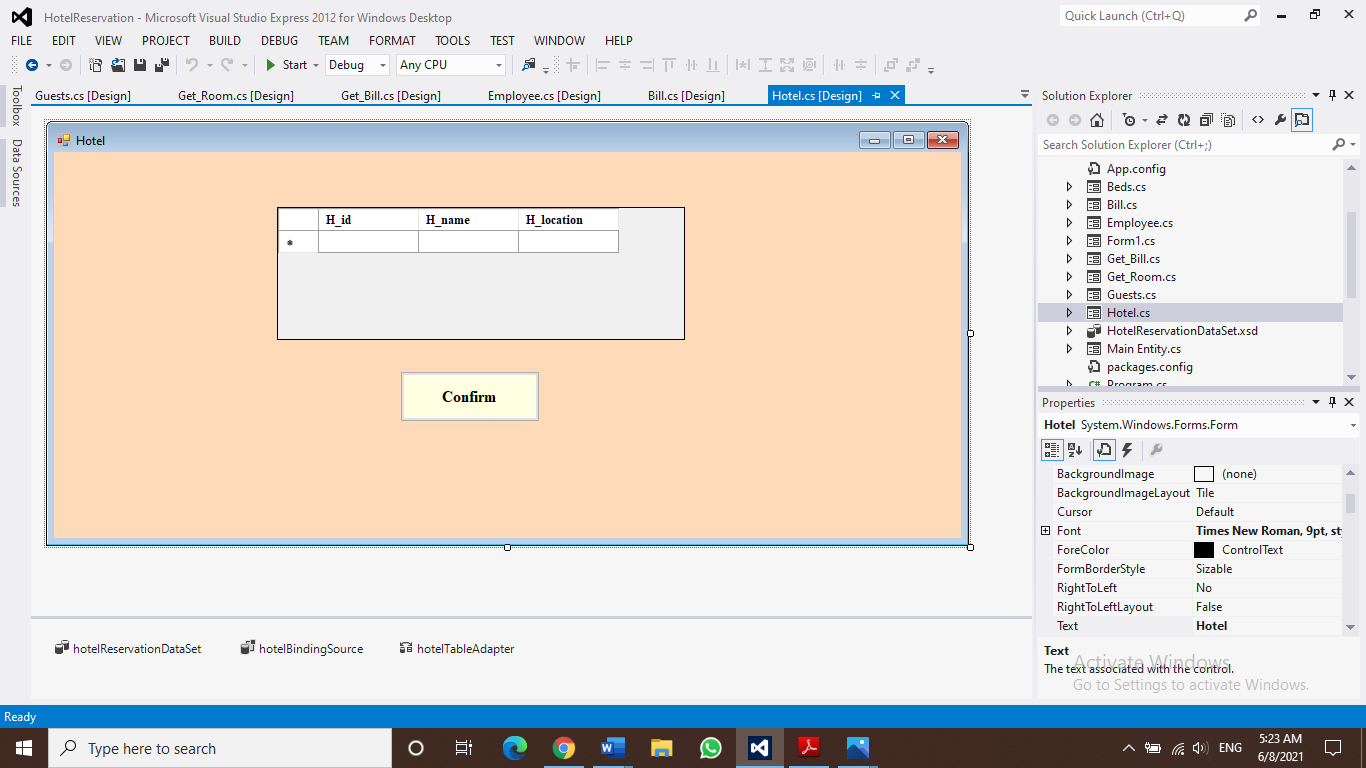
Employee form to enter employee data.



Get bill form to get bill for the guest.



Guests form to enter guests data.



Hotel form to enter hotel data.

# Database design

# Tables:

create table Hotel( H\_id int IDENTITY(1,1),H\_name varchar(50) not null,H\_location varchar(50) not null, constraint pk\_Hotel primary key (H\_id));

create table Employees ( E\_id int identity(1,1), E\_name varchar(50) not null,Job\_title varchar(50) not null,phone int not null,salary int not null,H\_id int i,constraint pk\_Employees primary key (E\_id),constraint fk\_Hotel foreign key (H\_id) references Hotel(H\_id));

create table Guests(Acc\_Number int identity(1,1),F\_name varchar(50) not null,L\_name varchar(50) not null, phone int not null, Email varchar(50) not null,Nationality varchar(50) not null,H\_id int , constraint pk\_Guests primary key(Acc\_Number),constraint fk\_Hotel foreign key (H\_id) references Hotel(H\_id));

create table Bill( Bill\_id int identity(1,1),G\_name varchar(50) not null, Amount int not null, B\_Date date, B\_type varchar(50) not null, Acc\_Number int, constraint pk\_Bill primary key (Bill\_id), constraint fk\_Guests foreign key (Acc\_Number) references Guests(Acc\_Number));

create table Rooms ( Room\_Number int identity(1,1), R\_view varchar(50) not null, R\_level varchar(50) not null, Acc\_Number int , constraint pk\_Rooms primary key (Room\_Number), constraint fk\_Guests foreign key (Acc\_Number) references Guests(Acc\_Number));

create table Room\_Type( R\_type int identity(1,1), Rtype varchar(50) not null, Room\_Number int , constraint pk\_Room\_Type primary key (R\_type), constraint fk\_Rooms foreign key (Room\_Number) references Rooms(Room\_Number));

create table Beds(B\_id int identity(1,1),B\_type varchar(50) not null, Room\_Number int, constraint pk\_Beds primary key (B\_id),constraint fk\_Rooms foreign key (Room\_Number) references Rooms(Room\_Number));

create table Reservation(Res\_Number int identity(1,1),check\_in varchar(50) not null, check\_out varchar(50) not null, Room\_Number int , Acc\_Number int , constraint pk\_Reservation primary key (Res\_Number), constraint fk\_Rooms foreign key (Room\_Number) references Rooms(Room\_Number), constraint fk\_Guests foreign key (Acc\_Number) references Guests(Acc\_Number));

# Mapping:

Hotel(H\_id,H\_name,H\_location)

Employees(E\_id,E\_name,job\_title,phone,salary,H\_id)

Guests(Acc\_number,F\_name,L\_name,phone,Email,Nationality,H\_id)

Reservation(Res\_number,check\_in,check\_out,R\_No,G\_id)

Bill(Bill\_id,G\_name,Amount,B\_Date,G\_id,Type)

Room\_type(R\_type,Rtype,R\_no)

Rooms(Room\_number,R\_view,R\_level,G\_id)

Beds(B\_id,B\_type,R\_No)

# E R diagram:

# 

# Relational Model :

