“ Hotel Reservation System “

Adham Tarek Mohamed

Bassel saleh moustafa

Presented To :

Prof. Dr. Hanafy Mahmoud

Dr. Mohamed Ezzat

Dr. Hazem Omar

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

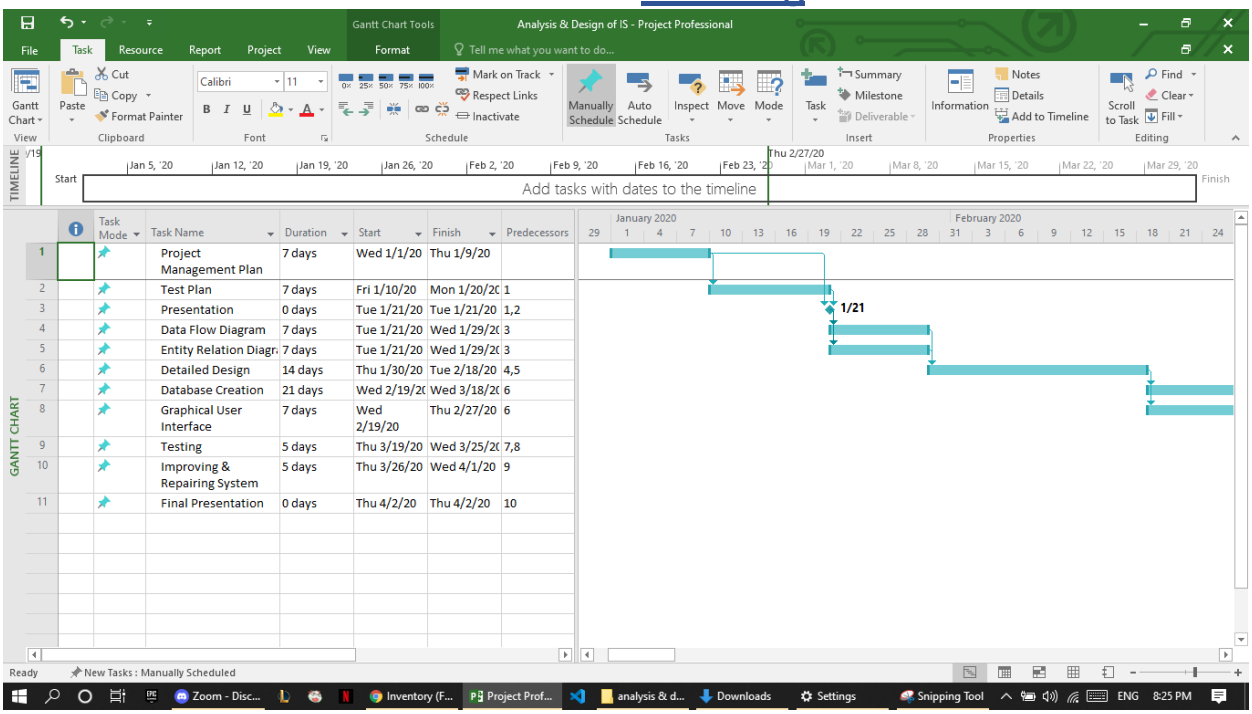
Generate reports:

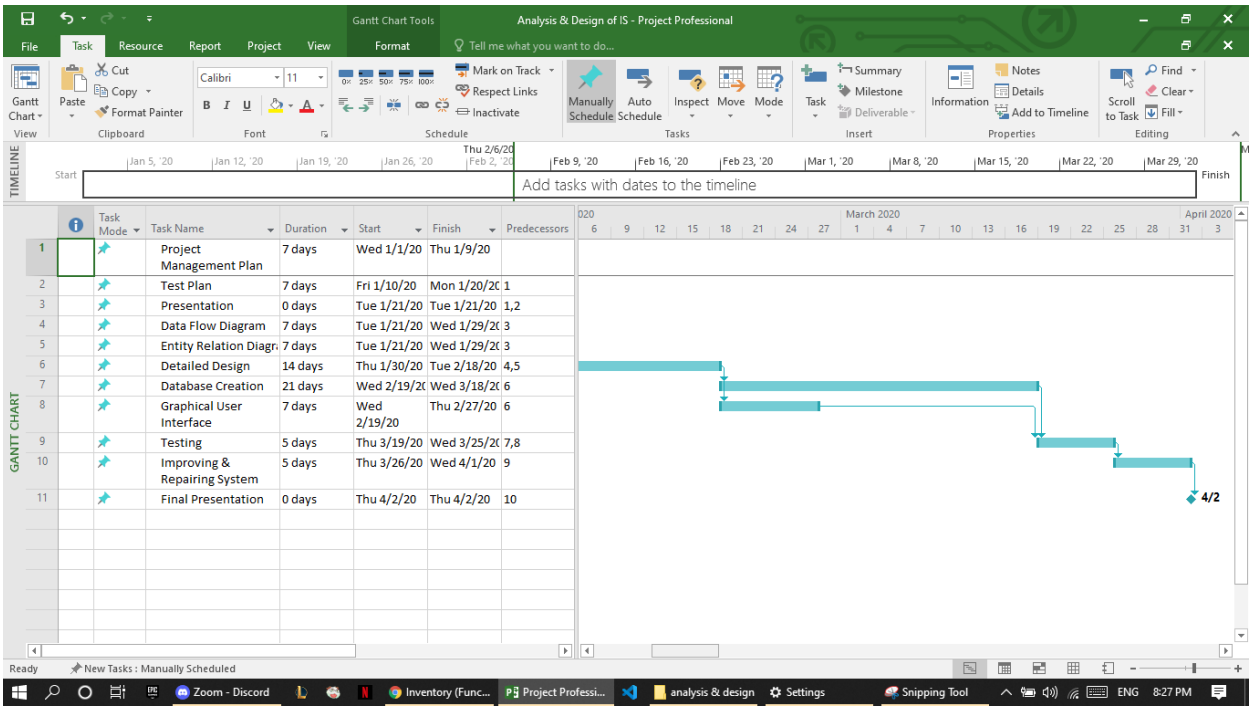
The Hotels Name

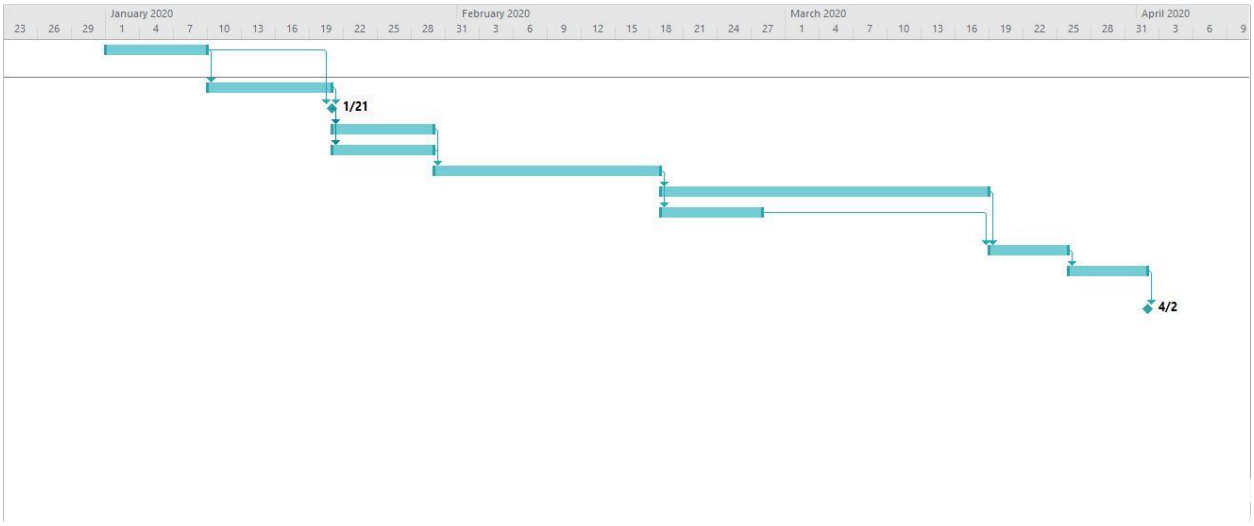
The Guests

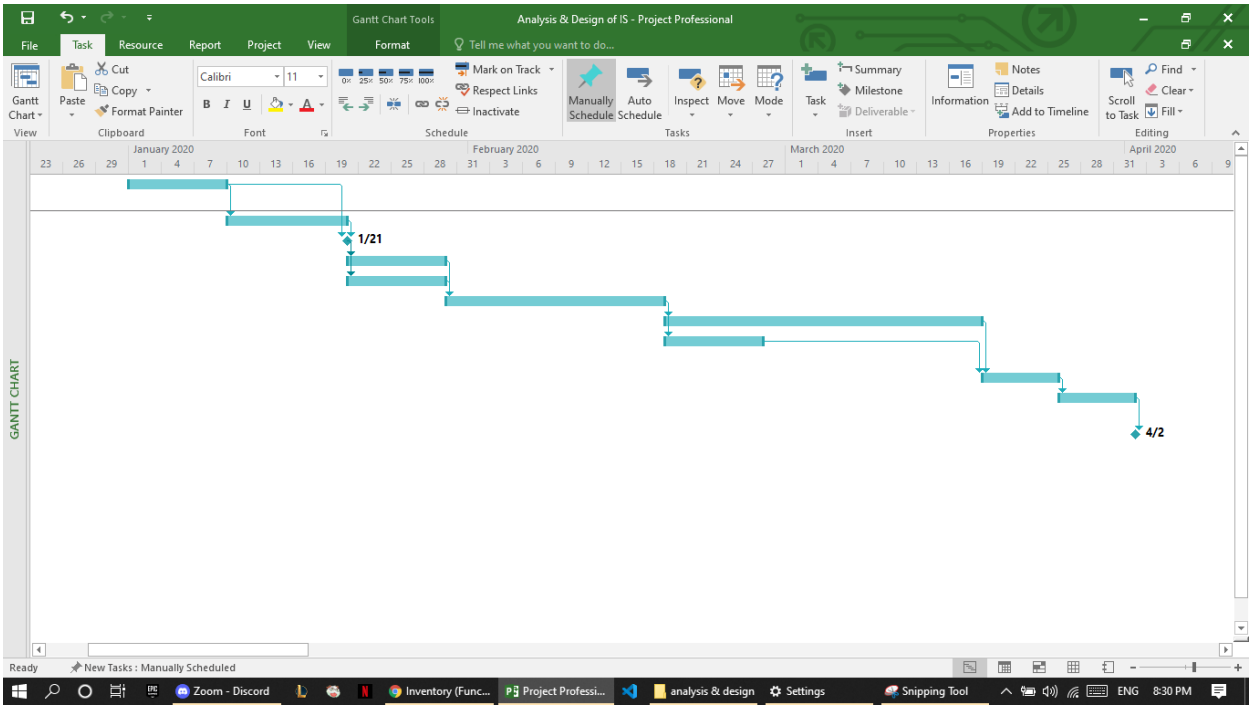
The all Guests Reservation

Planning

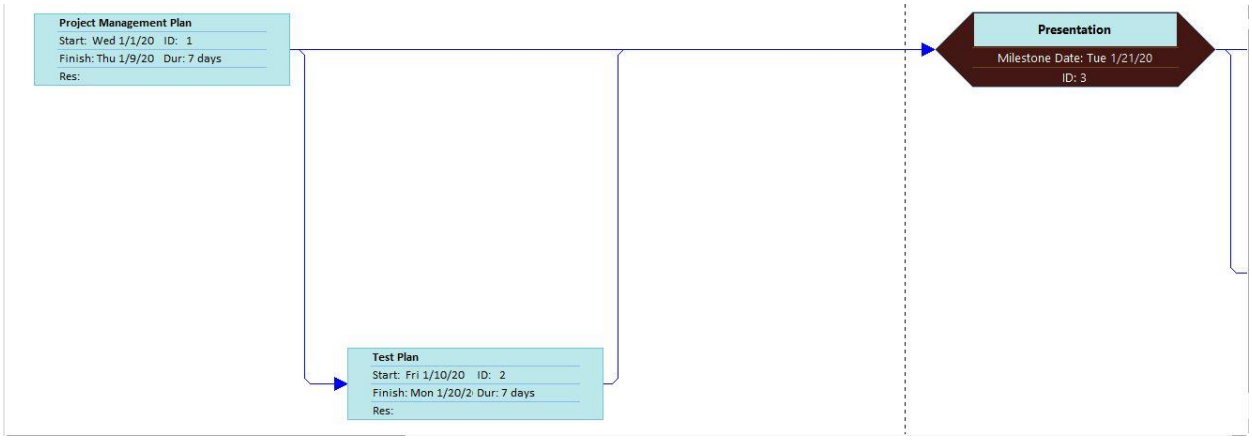

Gantt Chart Tools
Analysis & Design of IS - Project Professional
File
Task
Resource
Report
Project
View
Format
Tell me what you want to do...
Gantt Chart
Paste
Cut
Copy
Format Painter
Calibri
11
Mark on Track
Respect Links
Inactivate
Manually Schedule
Auto Schedule
Inspect
Move
Mode
Task
Summary
Milestone
Deliverable
Information
Notes
Details
Add to Timeline
Scroll to Task
Find
Clear
Fill
View
Clipboard
Font
Schedule
Tasks
Insert
Properties
Editing
TIMELINE
Start
Add tasks with dates to the timeline
Finish
Thu 2/27/20
Jan 5, '20
Jan 12, '20
Jan 19, '20
Jan 26, '20
Feb 2, '20
Feb 9, '20
Feb 16, '20
Feb 23, '20
Mar 1, '20
Mar 8, '20
Mar 15, '20
Mar 22, '20
Mar 29, '20
GANTT CHART
Task Mode
Task Name
Duration
Start
Finish
Predecessors
1 Project Management Plan 7 days Wed 1/1/20 Thu 1/9/20
2 Test Plan 7 days Fri 1/10/20 Mon 1/20/20 1
3 Presentation 0 days Tue 1/21/20 Tue 1/21/20 1,2
4 Data Flow Diagram 7 days Tue 1/21/20 Wed 1/29/20 3
5 Entity Relation Diagr 7 days Tue 1/21/20 Wed 1/29/20 3
6 Detailed Design 14 days Thu 1/30/20 Tue 2/18/20 4,5
7 Database Creation 21 days Wed 2/19/20 Wed 3/18/20 6
8 Graphical User Interface 7 days Wed 2/19/20 Thu 2/27/20 6
9 Testing 5 days Thu 3/19/20 Wed 3/25/20 7,8
10 Improving & Repairing System 5 days Thu 3/26/20 Wed 4/1/20 9
11 Final Presentation 0 days Thu 4/2/20 Thu 4/2/20 10
January 2020
February 2020
1/21
Ready
New Tasks : Manually Scheduled
Zoom - Disc...
Inventory (F...
Project Prof...
analysis & d...
Downloads
Settings
Snipping Tool
ENG
8:25 PM

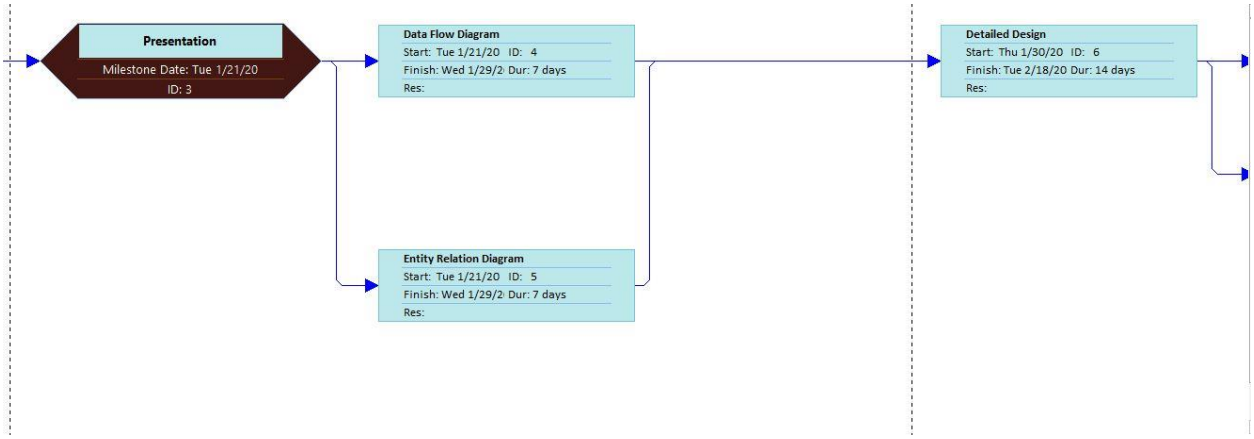

Gantt Chart Tools
Analysis & Design of IS - Project Professional
File
Task
Resource
Report
Project
View
Format
Tell me what you want to do...
Gantt Chart
Paste
Cut
Copy
Format Painter
Calibri
11
Mark on Track
Respect Links
Inactivate
Manually Schedule
Auto Schedule
Inspect
Move
Mode
Task
Summary
Milestone
Deliverable
Information
Notes
Details
Add to Timeline
Scroll to Task
Find
Clear
Fill
View
Clipboard
Font
Schedule
Tasks
Insert
Properties
Editing
TIMELINE
Thu 2/6/20
Start
Add tasks with dates to the timeline
Finish
Jan 5, '20
Jan 12, '20
Jan 19, '20
Jan 26, '20
Feb 2, '20
Feb 9, '20
Feb 16, '20
Feb 23, '20
Mar 1, '20
Mar 8, '20
Mar 15, '20
Mar 22, '20
Mar 29, '20
GANTT CHART
Task Mode
Task Name
Duration
Start
Finish
Predecessors
1 Project Management Plan 7 days Wed 1/1/20 Thu 1/9/20
2 Test Plan 7 days Fri 1/10/20 Mon 1/20/20 1
3 Presentation 0 days Tue 1/21/20 Tue 1/21/20 1,2
4 Data Flow Diagram 7 days Tue 1/21/20 Wed 1/29/20 3
5 Entity Relation Diagr 7 days Tue 1/21/20 Wed 1/29/20 3
6 Detailed Design 14 days Thu 1/30/20 Tue 2/18/20 4,5
7 Database Creation 21 days Wed 2/19/20 Wed 3/18/20 6
8 Graphical User Interface 7 days Wed 2/19/20 Thu 2/27/20 6
9 Testing 5 days Thu 3/19/20 Wed 3/25/20 7,8
10 Improving & Repairing System 5 days Thu 3/26/20 Wed 4/1/20 9
11 Final Presentation 0 days Thu 4/2/20 Thu 4/2/20 10
March 2020
April 2020
4/2
Ready
New Tasks : Manually Scheduled
Zoom - Discord
Inventory (Func...
Project Professi...
analysis & design
Settings
Snipping Tool
ENG
8:27 PM

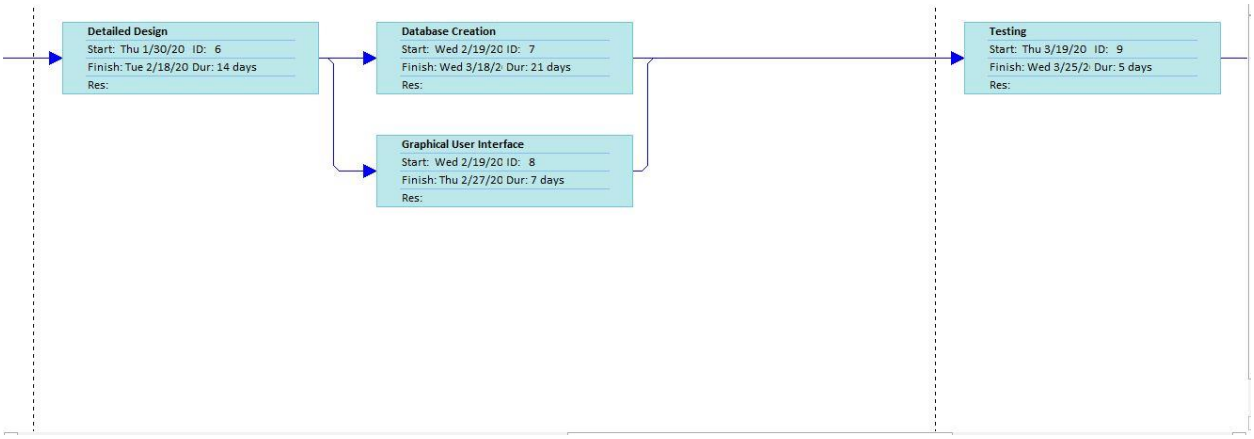

January 2020
February 2020
March 2020
April 2020
1/21
4/2


Gantt Chart Tools
Analysis & Design of IS - Project Professional
File
Task
Resource
Report
Project
View
Format
Tell me what you want to do...
Gantt Chart
Paste
Cut
Copy
Format Painter
Calibri
11
Mark on Track
Respect Links
Inactivate
Manually Schedule
Auto Schedule
Inspect
Move
Mode
Task
Summary
Milestone
Deliverable
Information
Notes
Details
Add to Timeline
Scroll to Task
Find
Clear
Fill
View
Clipboard
Font
Schedule
Tasks
Insert
Properties
Editing
GANTT CHART
January 2020
February 2020
March 2020
April 2020
1/21
4/2
Ready
New Tasks : Manually Scheduled
Zoom - Discord
Inventory (Func...
Project Professi...
analysis & design
Settings
Snipping Tool
ENG
8:30 PM

Testing
Start: Thu 3/19/20 ID: 9
Finish: Wed 3/25/2 Dur: 5 days
Res:
Improving & Repairing System
Start: Thu 3/26/20 ID: 10
Finish: Wed 4/1/20 Dur: 5 days
Res:
Final Presentation
Milestone Date: Thu 4/2/20
ID: 11

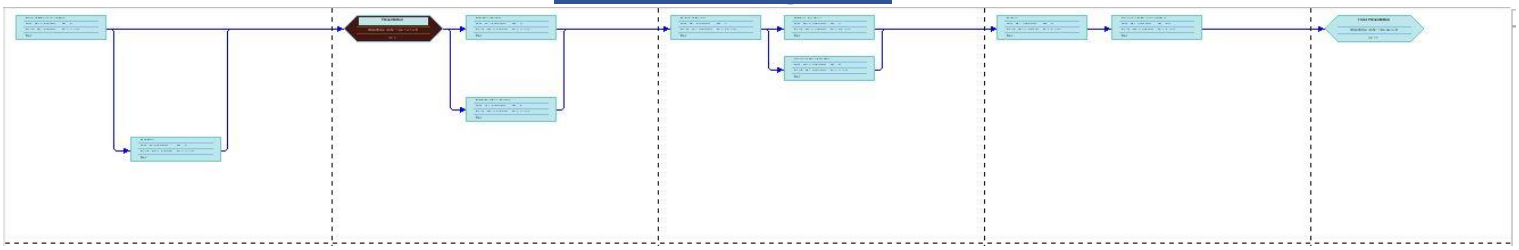

Project Management Plan
Start: Wed 1/1/20 ID: 1
Finish: Thu 1/9/20 Dur: 7 days
Res:
Presentation
Milestone Date: Tue 1/21/20
ID: 3
Test Plan
Start: Fri 1/10/20 ID: 2
Finish: Mon 1/20/2 Dur: 7 days
Res:


Presentation
Milestone Date: Tue 1/21/20
ID: 3
Data Flow Diagram
Start: Tue 1/21/20 ID: 4
Finish: Wed 1/29/2 Dur: 7 days
Res:
Detailed Design
Start: Thu 1/30/20 ID: 6
Finish: Tue 2/18/20 Dur: 14 days
Res:
Entity Relation Diagram
Start: Tue 1/21/20 ID: 5
Finish: Wed 1/29/2 Dur: 7 days
Res:

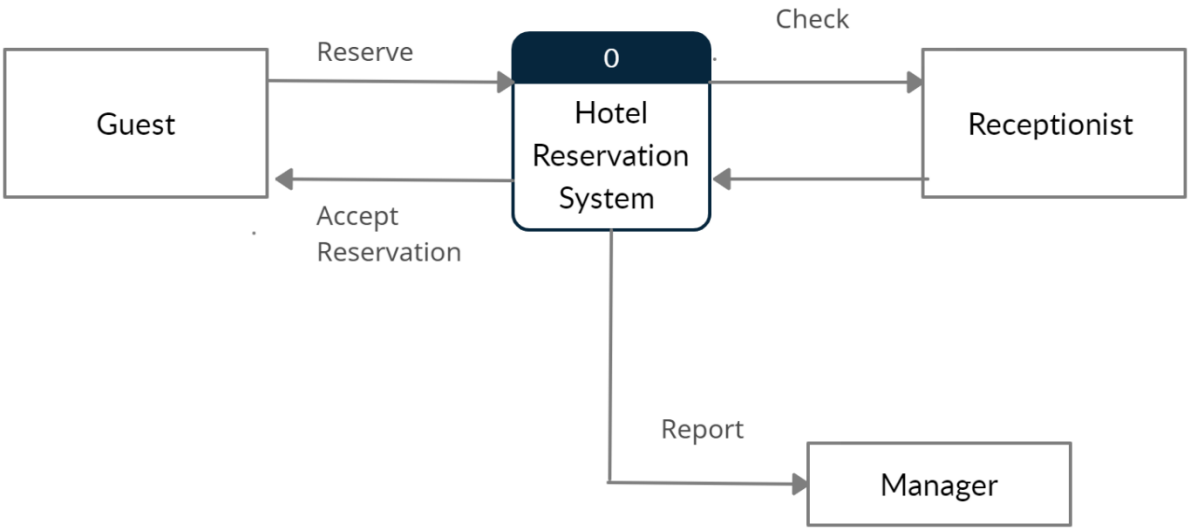

Detailed Design
Start: Thu 1/30/20 ID: 6
Finish: Tue 2/18/20 Dur: 14 days
Res:
Database Creation
Start: Wed 2/19/20 ID: 7
Finish: Wed 3/18/2 Dur: 21 days
Res:
Graphical User Interface
Start: Wed 2/19/20 ID: 8
Finish: Thu 2/27/20 Dur: 7 days
Res:
Testing
Start: Thu 3/19/20 ID: 9
Finish: Wed 3/25/2 Dur: 5 days
Res:

Task Name	Duration	Start	Finish	Predecessors
Project Management Plan	7 days	Wed 1/1/20	Thu 1/9/20	
Test Plan	7 days	Fri 1/10/20	Mon 1/20/20	1
Presentation	0 days	Tue 1/21/20	Tue 1/21/20	1,2
Data Flow Diagram	7 days	Tue 1/21/20	Wed 1/29/20	3
Entity Relation Diagr	7 days	Tue 1/21/20	Wed 1/29/20	3
Detailed Design	14 days	Thu 1/30/20	Tue 2/18/20	4,5
Database Creation	21 days	Wed 2/19/20	Wed 3/18/20	6
Graphical User Interface	7 days	Wed 2/19/20	Thu 2/27/20	6
Testing	5 days	Thu 3/19/20	Wed 3/25/20	7,8
Improving & Repairing System	5 days	Thu 3/26/20	Wed 4/1/20	9
Final Presentation	0 days	Thu 4/2/20	Thu 4/2/20	10

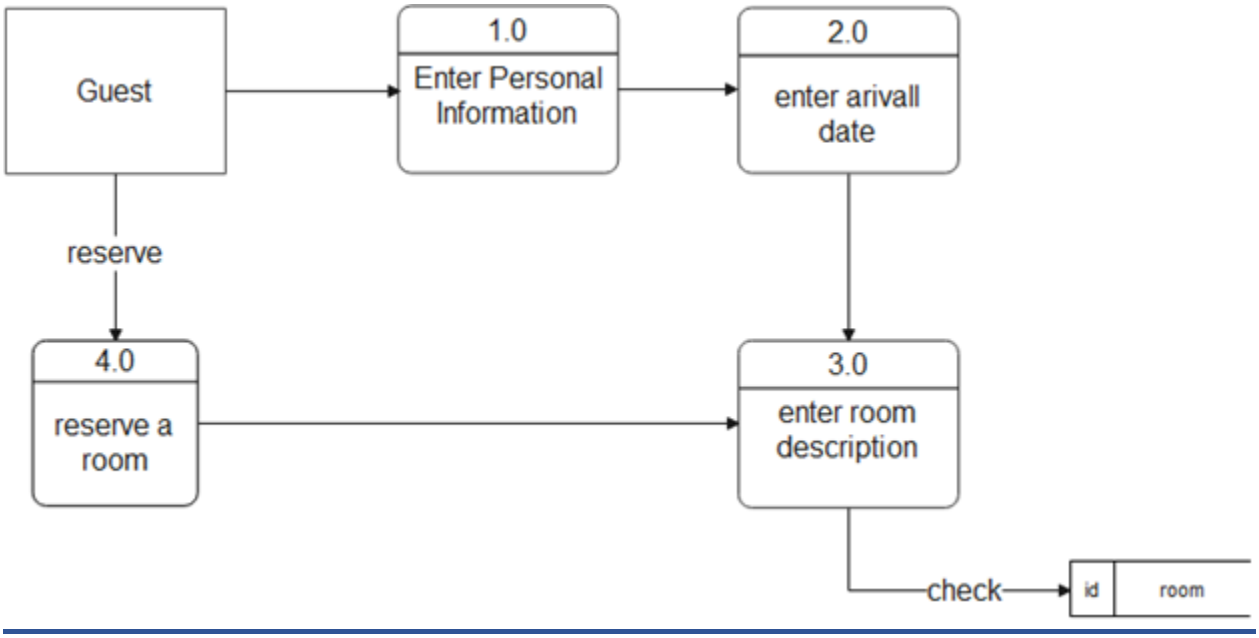
Network diagram:



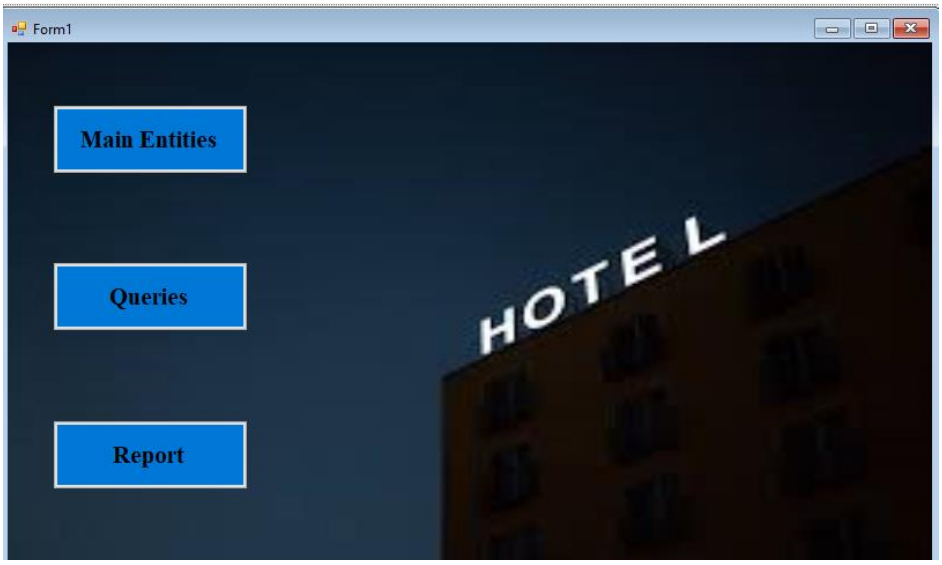
Context diagram



DFD



Gui description



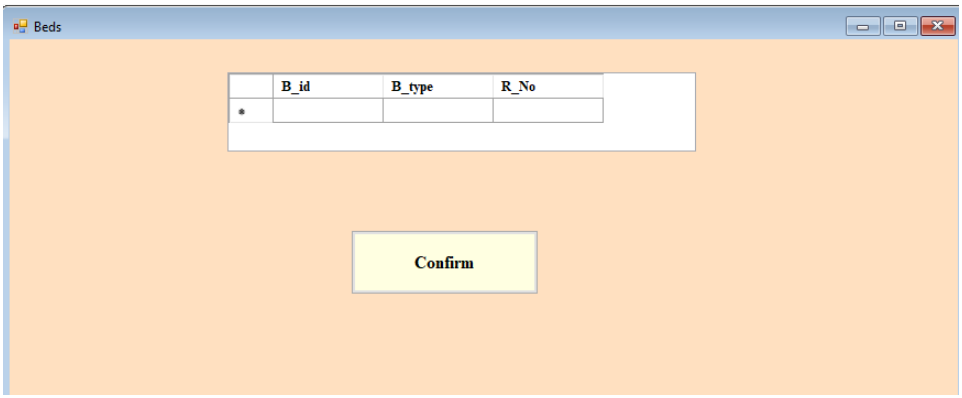
First form that user chooses the step to be done.

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

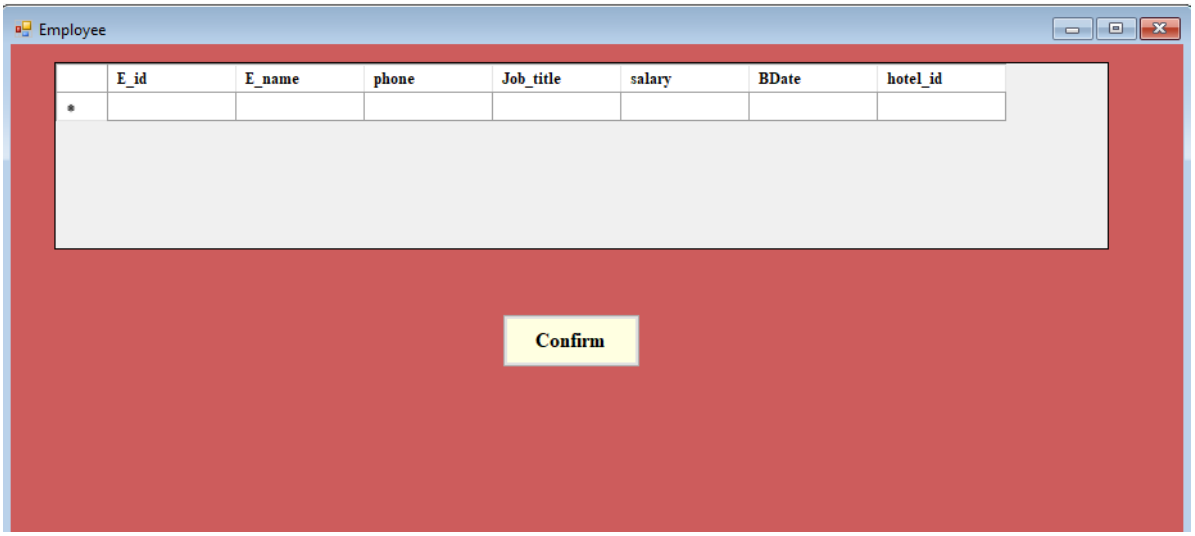
Query form where user gets room data or bill of the guest

Report form

Reservation form to enter reservation data.

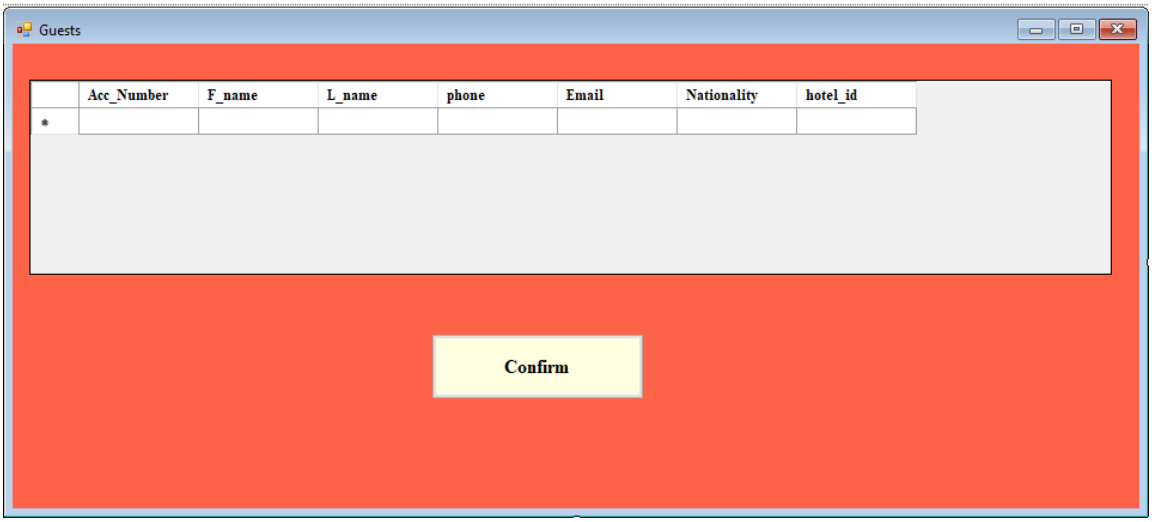


Beds form to enter beds data.

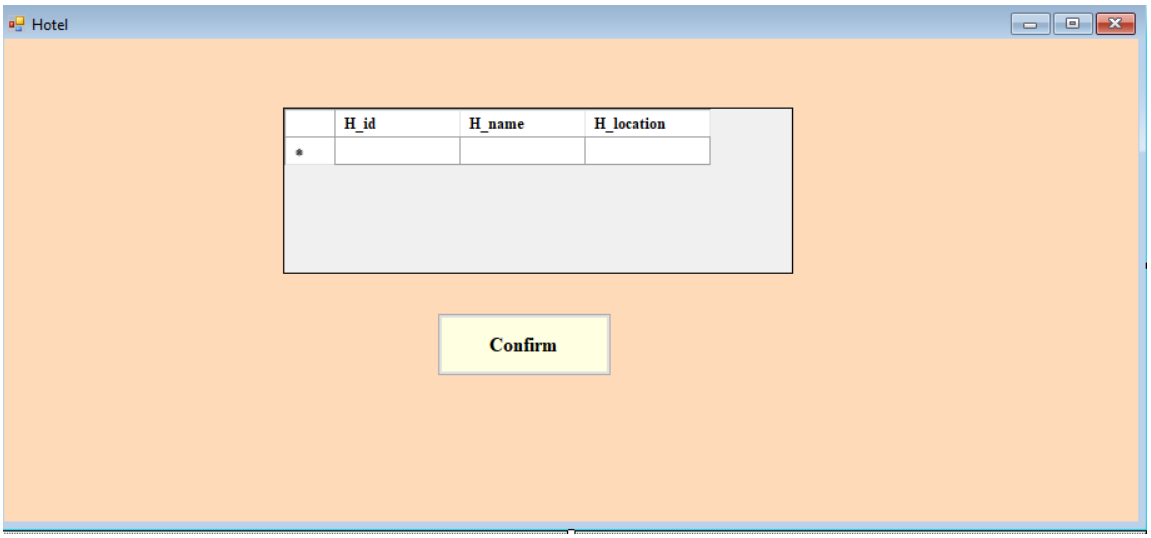


Employee form to enter employee data.

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)

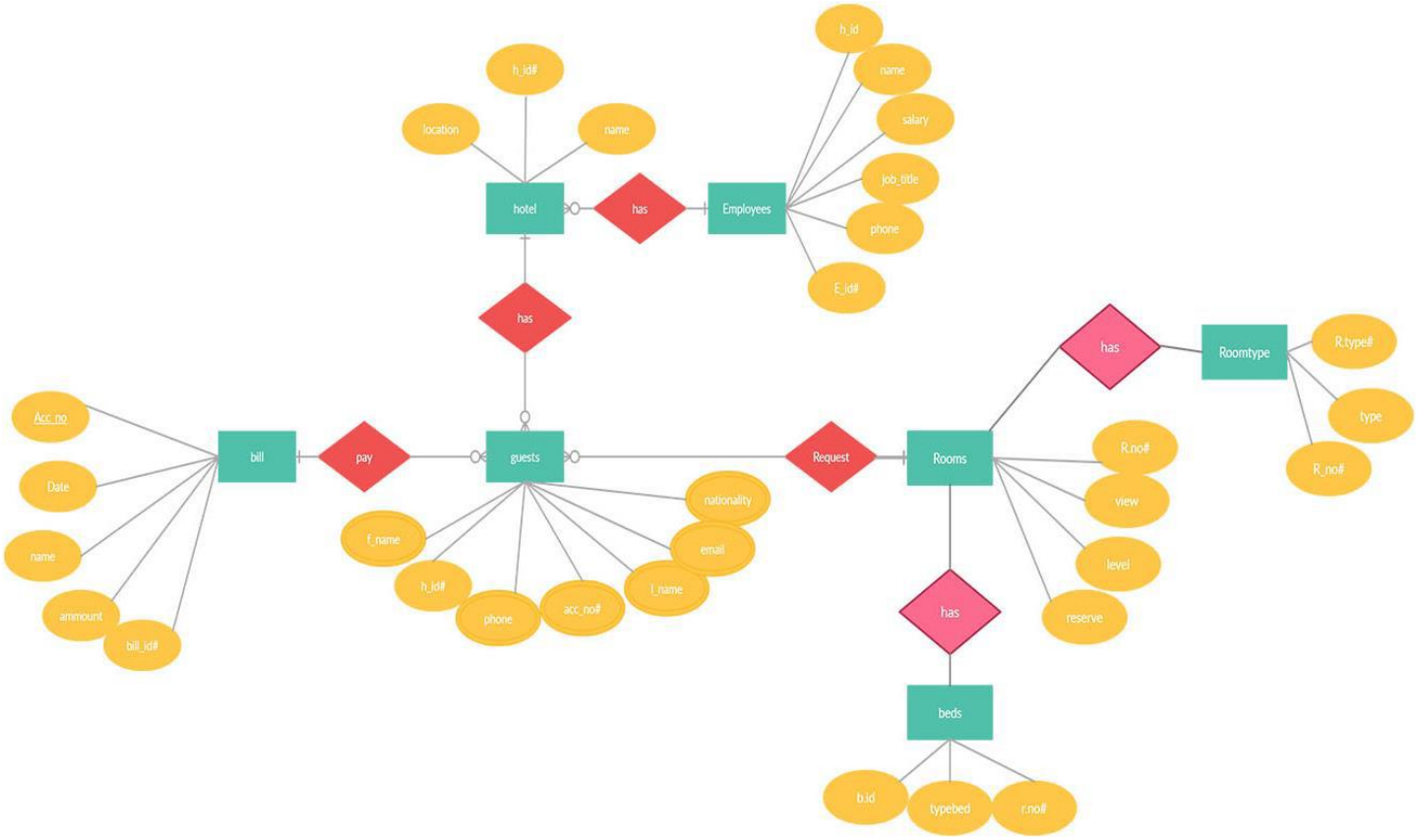
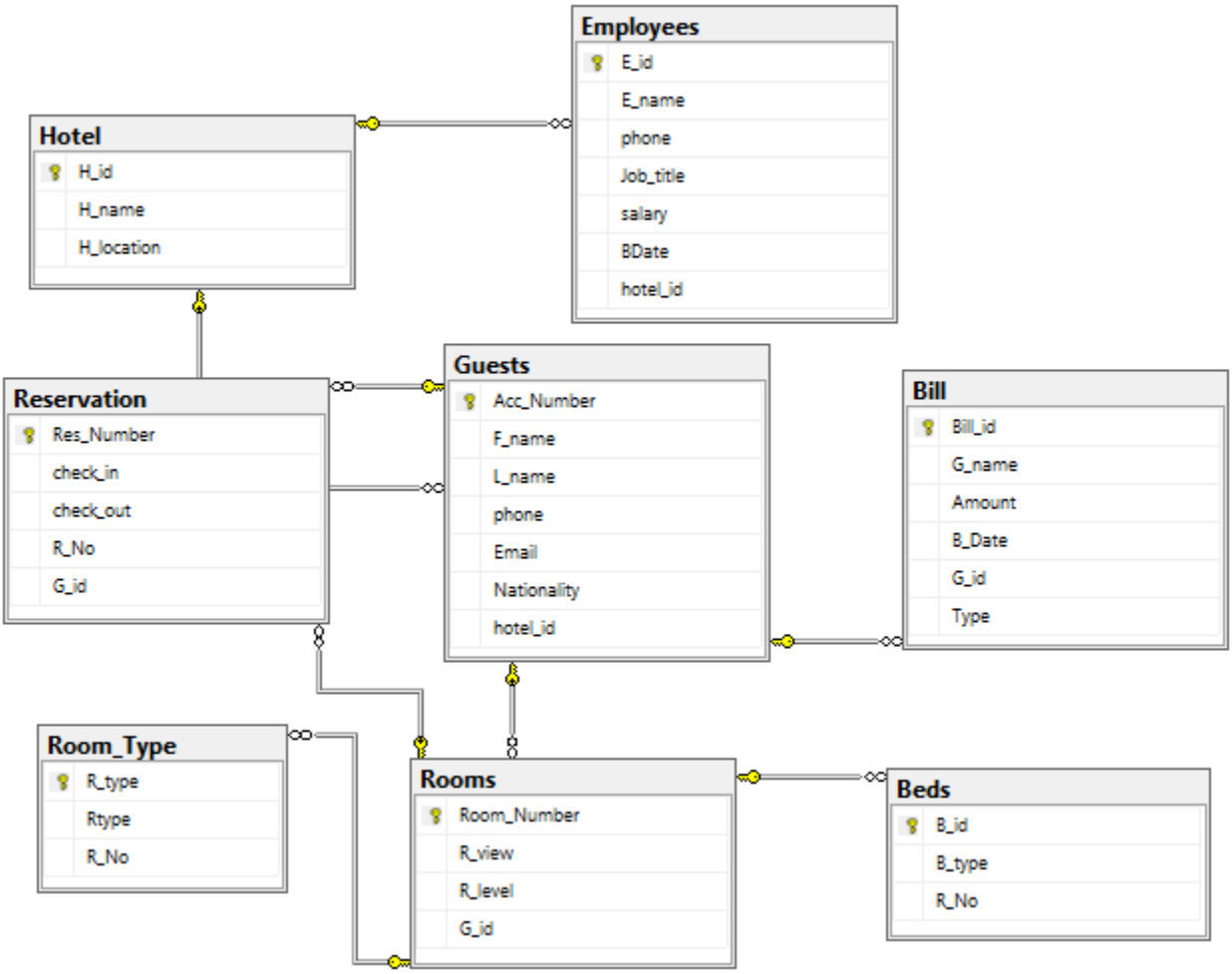
Bill(Bill_id,G_name,Amount,B_Date,G_id,Type)

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:


h_id
name
salary
job_title
phone
E_id#
h_id#
location
name
hotel
has
Employees
has
has
Roomtype
R.type#
type
R_no#
Acc_no
bill
pay
guests
Request
Rooms
R.no#
view
level
reserve
Date
name
ammount
bill_id#
f_name
h_id#
phone
acc_no#
l_name
email
nationality
has
beds
b.id
typebed
r.no#

Relational Model :