National University
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DATABASE SYSTEMS FINAL PROJECT

IL-MARE HOTEL MANAGEMENT SYSTEM

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Introduction of the proposed system:

Italian billionaire Luca Dolce owns a hotel management system, having multiple branches on the famous coasts of Italy. Each hotel branch is managed by a professional manager. A hotel manager must keep a constant check to ensure the proper working in the hotel. The hotel must have other staff like receptionists, service staff, etc. A receptionist manages all the customers, bookings, checkouts, billings, etc. Service staff on the other hand provide different types of services like room service, food service, etc. Customers after successful authentication can now order services, do complaints, make bookings, etc. The hotel has a specific capacity of, a limited number of rooms which means the number of people and the number of bookings must be kept in view.

All entities including the manager and receptionists must authenticate themselves in order to function as a receptionist to validate the customer must first prove its identity. Similarly, a customer must validate its booking to the receptionist otherwise the database will check the availability of rooms if space is available another booking will be made.

This is the basic functioning behind the Il Mare Hotel management system, which provides excellent services while also blessing the customer's eyes with the beauty of the coasts.

2- Functional requirements:

FR1: Hotel has Manager, Staff, and Customer

FR2: The manager adds a receptionist

FR3: Manager checks complaints

FR4: Receptionist adds customers

FR5: Receptionist retrieves customers

FR6: Receptionist generates bill

FR7: Receptionist validates customer

FR8: Customer order services

FR9: Customer Checkout

FR10: Customer complaints

FR11: Customer makes booking

3- ERD
Please find attached 1760_1782_2166_erd.pdf

4- Normalization of ERD

Does:

Customer_ID	CheckOut_ID	No. of days	CheckOut Time
FK reference: Customer	FK reference: Checkout		

Orders:

Customer ID	Service ID	Order time	Order type
FK reference: Customer	FK reference: Service		

Complaints:

Customer_ID	Manager ID	Issue encountered
FK reference: Customer	FK reference: Manager	

Customer:

Customer_ID	Customer First Name	Customer Last Name	Customer address	Customer CNIC	Customer phone
PK					

gives_ID:

Customer_ID	Receptionist ID	
FK reference: Customer	FK reference: Receptionist	

Receptionist:

Receptionist ID	Receptionist First Name	Receptionist Last Name	Shift time	Receptionist phone	No. of bookings per day

PK

Validates ID:

Receptionist ID	Bill ID
FK reference: Receptionist	FK reference: Bill

Bill:

Bill ID	Bill Room Type	Total Bill	Receptionist ID
PK			FK reference: Receptionist

Booking:

Booking ID	Booking time	Customer_ID
PK		FK reference: Customer

Hotel

Hotel id	Hotel name	location	No. of rooms	No. of serviceman	Hotel rating	

Primary key = hotel id

Rooms

Room id	Bill per day	Customer id	accommodation

Primary key = room id

Foreign key = customer-id

Checkout

Checkout id	Check-in date	Check-out date	Customer id	

Primary key = checkout id

Foreign key = customer-id

Manager

Manager id	Phone number	address	First name	Last name	CNIC	Hotel id	Customer id

Primary key =manager id

Foreign key = hotel id

Foreign key = customer id

Service

Service id	Service type	Service charges	Customer id	Manager id

Primary key = service id

Foreign key = customer id, manager id

5- Relational Mapping with all constraints and checks

```sql
CREATE DATABASE IL_MARE;

USE IL_MARE;


CREATE TABLE Hotel (
Hotel_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Hotel_Name VARCHAR(255) NOT NULL,
Hotel_location VARCHAR(255) NOT NULL,
No_of_rooms integer NOT NULL,
No_of_servicemen integer NOT NULL,
hotel_rating integer
);
DROP TABLE Hotel;

INSERT into Hotel VALUES('HTL1001','Il Mare West','Calabria',100,200,5);
INSERT into Hotel VALUES('HTL1002','Il Mare East','Amalfi Coast',100,200,5);



SELECT * FROM Hotel;

CREATE TABLE Manager (
Manager_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Manager_phone VARCHAR(255) NOT NULL,
Manager_address VARCHAR(255) NOT NULL,
Manager_First_Name VARCHAR(255) NOT NULL,
Manager_Last_Name VARCHAR(255) NOT NULL,
Manager_CNIC VARCHAR(255) NOT NULL,
Htl_ID VARCHAR(255) FOREIGN KEY (Htl_ID) REFERENCES Hotel (Hotel_ID),
);
DROP TABLE Manager;

INSERT into Manager VALUES('MG1001','09999999','Amalfi Coast','Tracy','McConnell','90000000','HTL1002');
INSERT into Manager VALUES('MG1002','19999999','Calabria','Joshua','Mitchell','91111111','HTL1001');



SELECT * from Manager;
```

```sql
CREATE TABLE Customerr (
Customer_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Customer_First_Name VARCHAR(255) NOT NULL,
Customer_Last_Name VARCHAR(255) NOT NULL,
Customer_CNIC VARCHAR(255) NOT NULL,
Customer_phone VARCHAR(255) NOT NULL,
Mng_ID VARCHAR(255) FOREIGN KEY (Mng_ID) REFERENCES Manager (Manager_ID)
);
DROP TABLE Customerr;

INSERT into Customerr VALUES ('CUST1001','Pablo', 'Hudson', 37405678,03001188,'MG1002');
INSERT into Customerr VALUES ('CUST1002','Rabbie', 'Parkinson', 37400987,03002134,'MG1001');
INSERT into Customerr VALUES ('CUST1003','Packard', 'Rafferty', 37231245,03000987,'MG1001');
INSERT into Customerr VALUES ('CUST1004','Raffy', 'Parle', 37256789,03001218,'MG1001');
INSERT into Customerr VALUES ('CUST1005','Padern', 'Radbert', 23415372,03025688,'MG1002');
INSERT into Customerr VALUES ('CUST1006','Raine', 'Parsifal', 90293847,03007688,'MG1001');
INSERT into Customerr VALUES ('CUST1007','Rafi', 'Rakesh', 17823649,03002388,'MG1002');
INSERT into Customerr VALUES ('CUST1008','Pasquale', 'Napoleon', 38475012,03003288,'MG1001');
INSERT into Customerr VALUES ('CUST1009','Naoko', 'Patamon', 65781920,03008188,'MG1001');
INSERT into Customerr VALUES ('CUST1010','Patrick', 'Nadim', 25398172,03001278,'MG1002');


SELECT * from Customerr;
SELECT Customer_ID,Customer_First_Name,Customer_Last_Name,Customer_CNIC,Customer_phone,Mng_ID from Customerr  WHERE Customer_ID = 'CUST1010';

CREATE TABLE Receptionist (
Receptionist_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Receptionist_First_Name VARCHAR(255) NOT NULL,
Receptionist_Last_Name VARCHAR(255) NOT NULL,
Shift_time VARCHAR(255),
Receptionist_phone VARCHAR(255) NOT NULL,
No_of_bookings_per_day integer
);
DROP TABLE Receptionist;

INSERT into Receptionist VALUES ('RCP0001', 'Amias', 'Bee', '9AM', '03001234',5);
INSERT into Receptionist VALUES ('RCP0002', 'Cassian', 'Clio', '9AM', '03341221',8);
```

```sql
INSERT into Receptionist VALUES ('RCP0001', 'Amias', 'Bee', '9AM', '03001234',5);
INSERT into Receptionist VALUES ('RCP0002', 'Cassian', 'Clio', '9AM', '03341221',8);
INSERT into Receptionist VALUES ('RCP0003', 'Dove', 'Charles', '5PM', '03001132',15);
INSERT into Receptionist VALUES ('RCP0004', 'Guthrie', 'James', '9AM', '03003334',26);
INSERT into Receptionist VALUES ('RCP0005', 'Lilac', 'John', '9AM', '03004436',8);
INSERT into Receptionist VALUES ('RCP0006', 'Juana', 'Theo', '5PM', '03211234',14);
INSERT into Receptionist VALUES ('RCP0007', 'Romy', 'Henry', '5PM', '03308238',28);
INSERT into Receptionist VALUES ('RCP0008', 'River', 'Ezra', '5PM', '03007766',23);
INSERT into Receptionist VALUES ('RCP0009', 'Jupiter', 'Otis', '9AM', '03008898',20);
INSERT into Receptionist VALUES ('RCP0010', 'Peyton', 'Hudson', '9AM', '03216264',17);

SELECT * from Receptionist;

SELECT [Receptionist_ID]
      ,[Receptionist_First_Name]
      ,[Receptionist_Last_Name]
      ,[Shift_time]
      ,[Receptionist_phone]
      ,[No_of_bookings_per_day]
  FROM [dbo].[Receptionist]


CREATE TABLE Servicee (
Service_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Service_Type VARCHAR(255) NOT NULL,
Service_Charges integer,/*link it with bill*/
Cust_ID VARCHAR(255)FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID),
Mng_ID VARCHAR(255) FOREIGN KEY (Mng_ID) REFERENCES Manager (Manager_ID)
);
DROP TABLE Servicee;

INSERT into Servicee VALUES ('SER3001', 'Food Service', 35 , 'CUST1010', 'MG1002');
INSERT into Servicee VALUES ('SER3002', 'Room Service', 60 , 'CUST1001', 'MG1002');
INSERT into Servicee VALUES ('SER3003', 'Food Service', 15 , 'CUST1004', 'MG1001');
INSERT into Servicee VALUES ('SER3004', 'Food Service', 29 , 'CUST1005', 'MG1002');
INSERT into Servicee VALUES ('SER3005', 'Room Service', 60 , 'CUST1005', 'MG1002');
INSERT into Servicee VALUES ('SER3006', 'Room Service', 60 , 'CUST1002', 'MG1001');
```

```sql
Select * from Servicee;


]CREATE TABLE Bill (
Bill_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Bill_Room_Type VARCHAR(255) NOT NULL,
Total_Bill integer,
statuss VARCHAR(255),
Recpt_ID VARCHAR(255) FOREIGN KEY (Recpt_ID) REFERENCES Receptionist (Receptionist_ID),
/*Srv_ID VARCHAR(255) FOREIGN KEY (Srv_ID) REFERENCES Servicee (Service_ID)*/
);
DROP TABLE Bill;

INSERT into Bill VALUES ('B1001', 'two-bed', 100 ,'un-paid', 'RCP0005' );
INSERT into Bill VALUES ('B1002', 'one-bed', 50 ,'un-paid', 'RCP0001');
INSERT into Bill VALUES ('B1003', 'one-bed', 50 ,'un-paid', 'RCP0006');
INSERT into Bill VALUES ('B1004', 'suite', 200 ,'un-paid', 'RCP0002');
INSERT into Bill VALUES ('B1005', 'two-bed', 100 ,'un-paid', 'RCP0003');
INSERT into Bill VALUES ('B1006', 'one-bed', 50 ,'un-paid', 'RCP0007');
INSERT into Bill VALUES ('B1007', 'two-bed', 100 ,'un-paid', 'RCP0009');
INSERT into Bill VALUES ('B1008', 'suite', 200 ,'un-paid', 'RCP0010');
INSERT into Bill VALUES ('B1009', 'two-bed', 100 ,'un-paid', 'RCP0008');
INSERT into Bill VALUES ('B1010', 'one-bed', 50 ,'un-paid', 'RCP0004');


Select * from Bill;

]CREATE TABLE Booking (
Booking_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Booking_time VARCHAR(255) NOT NULL,
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID)
);
DROP TABLE Booking;

INSERT into Booking VALUES ('BK4001', '12PM', 'CUST1001');
INSERT into Booking VALUES ('BK4002', '1PM', 'CUST1002');
INSERT into Booking VALUES ('BK4003', '2PM', 'CUST1003');
INSERT into Booking VALUES ('BK4004', '11AM', 'CUST1004');
INSERT into Booking VALUES ('BK4005', '1AM', 'CUST1005');
```

```sql
INSERT into Booking VALUES ('BK4002', '1PM', 'CUST1002');
INSERT into Booking VALUES ('BK4003', '2PM', 'CUST1003');
INSERT into Booking VALUES ('BK4004', '11AM', 'CUST1004');
INSERT into Booking VALUES ('BK4005', '1AM', 'CUST1005');
INSERT into Booking VALUES ('BK4006', '3PM', 'CUST1006');
INSERT into Booking VALUES ('BK4007', '7PM', 'CUST1007');
INSERT into Booking VALUES ('BK4008', '9PM', 'CUST1008');
INSERT into Booking VALUES ('BK4009', '2PM', 'CUST1009');
INSERT into Booking VALUES ('BK4010', '11PM', 'CUST1010');

SELECT * FROM Booking;


CREATE TABLE  Rooms (
Room_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Bill_per_day integer,
Accommodation integer,
Htl_ID VARCHAR(255) FOREIGN KEY (Htl_ID) REFERENCES Hotel (Hotel_ID),
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID)
);
DROP TABLE Rooms;

INSERT into Rooms VALUES ('R5001', 50 ,2, 'HTL1001','CUST1001');/*one*/
INSERT into Rooms VALUES ('R5002', 50 ,2, 'HTL1001','CUST1005');/*one*/
INSERT into Rooms VALUES ('R5003', 50 ,2, 'HTL1001','CUST1007');/*one*/
INSERT into Rooms VALUES ('R5004', 100 ,4, 'HTL1001','CUST1010');/*two*/
INSERT into Rooms VALUES ('R5005', 100 ,4, 'HTL1002','CUST1002');/*two*/
INSERT into Rooms VALUES ('R5006', 100 ,4, 'HTL1002','CUST1003');/*two*/
INSERT into Rooms VALUES ('R5007', 50 ,2, 'HTL1002','CUST1004');/*one*/
INSERT into Rooms VALUES ('R5008', 200 ,8, 'HTL1002','CUST1006');/*suite*/
INSERT into Rooms VALUES ('R5009', 200 ,8, 'HTL1002','CUST1008');/*suite*/
INSERT into Rooms VALUES ('R5010', 100 ,4, 'HTL1002','CUST1010');/*two*/


SELECT * FROM Rooms;
```

```sql
CREATE TABLE Checkout (
Checkout_ID VARCHAR(255) NOT NULL PRIMARY KEY,
Check_in_date VARCHAR(255) NOT NULL,
Check_out_date VARCHAR(255) NOT NULL,
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID)
);
DROP TABLE Checkout;

INSERT into Checkout VALUES ('CHK6001', '10-2-2022','11-2-2022','CUST1001');
INSERT into Checkout VALUES ('CHK6002', '1-1-2022','2-1-2022','CUST1002');
INSERT into Checkout VALUES ('CHK6003', '23-3-2022','25-3-2022','CUST1003');
INSERT into Checkout VALUES ('CHK6004', '20-2-2022','22-2-2022','CUST1004');
INSERT into Checkout VALUES ('CHK6005', '9-2-2022','17-2-2022','CUST1005');
INSERT into Checkout VALUES ('CHK6006', '1-2-2022','3-2-2022','CUST1006');
INSERT into Checkout VALUES ('CHK6007', '9-4-2022','13-4-2022','CUST1007');
INSERT into Checkout VALUES ('CHK6008', '17-5-2022','18-5-2022','CUST1008');
INSERT into Checkout VALUES ('CHK6009', '8-5-2022','12-5-2022','CUST1009');
INSERT into Checkout VALUES ('CHK6010', '22-2-2022','24-2-2022','CUST1010');


SELECT * FROM Checkout;


CREATE TABLE Validates_ID (
Recpt_ID VARCHAR(255)FOREIGN KEY (Recpt_ID) REFERENCES Receptionist (Receptionist_ID),
Book_ID VARCHAR(255) FOREIGN KEY (Book_ID) REFERENCES Booking (Booking_ID)
/*its booking not bill*/
);
DROP TABLE Validates_ID;

INSERT into Validates_ID VALUES ('RCP0001','BK4001');
INSERT into Validates_ID VALUES ('RCP0002','BK4006');
INSERT into Validates_ID VALUES ('RCP0003','BK4003');
INSERT into Validates_ID VALUES ('RCP0004','BK4005');
INSERT into Validates_ID VALUES ('RCP0005','BK4009');
INSERT into Validates_ID VALUES ('RCP0006','BK4007');
INSERT into Validates_ID VALUES ('RCP0007','BK4004');
INSERT into Validates_ID VALUES ('RCP0008','BK4010');
```

```sql
SELECT * FROM validates_ID;

CREATE TABLE gives_ID (
Recpt_ID VARCHAR(255) FOREIGN KEY (Recpt_ID) REFERENCES Receptionist (Receptionist_ID),
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID)
);
DROP TABLE gives_ID;

INSERT into  gives_ID VALUES ('RCP0001','CUST1001');
INSERT into  gives_ID VALUES ('RCP0002','CUST1006');
INSERT into  gives_ID VALUES ('RCP0003','CUST1003');
INSERT into  gives_ID VALUES ('RCP0004','CUST1005');
INSERT into  gives_ID VALUES ('RCP0005','CUST1009');
INSERT into  gives_ID VALUES ('RCP0006','CUST1007');
INSERT into  gives_ID VALUES ('RCP0007','CUST1004');
INSERT into  gives_ID VALUES ('RCP0008','CUST1010');
INSERT into  gives_ID VALUES ('RCP0009','CUST1002');
INSERT into  gives_ID VALUES ('RCP0010','CUST1008');

SELECT * FROM gives_ID;

CREATE TABLE Does (
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID),
Ckt_ID VARCHAR(255) FOREIGN KEY (Ckt_ID) REFERENCES Checkout (Checkout_ID),
No_of_days integer,
Checkout_time VARCHAR(255) NOT NULL,

);
DROP TABLE Does;

INSERT into  Does VALUES ('CUST1001', 'CHK6001',4,'8PM');
INSERT into  Does VALUES ('CUST1002', 'CHK6002',1,'8AM');
INSERT into  Does VALUES ('CUST1003', 'CHK6003',2,'3PM');
INSERT into  Does VALUES ('CUST1004', 'CHK6004',2,'5AM');
INSERT into  Does VALUES ('CUST1005', 'CHK6005',5,'9PM');
INSERT into  Does VALUES ('CUST1006', 'CHK6006',1,'11PM');
INSERT into  Does VALUES ('CUST1007', 'CHK6007',1,'7AM');
INSERT into  Does VALUES ('CUST1008', 'CHK6008',2,'2AM');
```

```sql
CREATE TABLE Orders (
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID),
Srv_ID VARCHAR(255) FOREIGN KEY (Srv_ID) REFERENCES Servicee (Service_ID),
Order_time VARCHAR(255) NOT NULL,

);
DROP TABLE Orders;

INSERT into  Orders VALUES ('CUST1001', 'SER3002','6PM');
INSERT into  Orders VALUES ('CUST1002', 'SER3006','1PM');
INSERT into  Orders VALUES ('CUST1004', 'SER3003','5AM');
INSERT into  Orders VALUES ('CUST1005', 'SER3004','5PM');
INSERT into  Orders VALUES ('CUST1005', 'SER3005','2AM');
INSERT into  Orders VALUES ('CUST1006', 'SER3010','9AM');
INSERT into  Orders VALUES ('CUST1007', 'SER3008','11AM');
INSERT into  Orders VALUES ('CUST1009', 'SER3009','8PM');
INSERT into  Orders VALUES ('CUST1010', 'SER3001','3PM');
INSERT into  Orders VALUES ('CUST1010', 'SER3007','1AM');

SELECT * FROM Orders;

CREATE TABLE Complaints (
Cust_ID VARCHAR(255) FOREIGN KEY (Cust_ID) REFERENCES Customerr (Customer_ID),
Mng_ID VARCHAR(255) FOREIGN KEY (Mng_ID) REFERENCES Manager (Manager_ID),
Issue_encountered VARCHAR(255) NOT NULL
);
DROP TABLE Complaints;

INSERT into  Complaints VALUES ('CUST1001', 'MG1002','Long Wait on Hold');
INSERT into  Complaints VALUES ('CUST1002', 'MG1001','Unavailable or Out of Stock Product');
INSERT into  Complaints VALUES ('CUST1003', 'MG1001',' Repeating the Customers Problem');
INSERT into  Complaints VALUES ('CUST1004', 'MG1001','Uninterested Service Rep');
INSERT into  Complaints VALUES ('CUST1005', 'MG1002','Poor Product or Service');
INSERT into  Complaints VALUES ('CUST1006', 'MG1001','Lack of Follow Up');
INSERT into  Complaints VALUES ('CUST1007', 'MG1002','Uninterested Service Rep');
INSERT into  Complaints VALUES ('CUST1008', 'MG1001','Lack of Follow Up');
INSERT into  Complaints VALUES ('CUST1009', 'MG1001','Poor Product or Service');
INSERT into  Complaints VALUES ('CUST1010', 'MG1002','Unavailable or Out of Stock Product');
```

6- Database design and development (sql queries)

Please find attached 1760_1782_2166_sql file

7- SCREENSHOTS OF FORMS AND REPORTS

Report 1:

Displays the name of the hotel, number of rooms it has and its rating.

IL MARE

Hotel Name	Hotel ID	Hotel location	No of rooms	hotel rating
Il Mare West	HTL1001	Calabria	100	5
Il Mare East	HTL1002	Amalfi Coast	100	5

Report 2:

This report displays the complaints filed by the customer and the manager that deals with it.

COMPLAINTS OF CUSTOMERS

Cust ID	Mng ID	Issue encountered
CUST1001	MG1002	Long Wait on Hold
CUST1002	MG1001	Unavailable or Out of Stock Product
CUST1003	MG1001	Repeating the Customers Problem
CUST1004	MG1001	Uninterested Service Rep
CUST1005	MG1002	Poor Product or Service
CUST1006	MG1001	Lack of Follow Up
CUST1007	MG1002	Uninterested Service Rep
CUST1008	MG1001	Lack of Follow Up
CUST1009	MG1001	Poor Product or Service
CUST1010	MG1002	Unavailable or Out of Stock Product

Report 3:

It displays the detailed information about the receptionists working in the hotel.

RECEPTIONISTS OF IL MARE

Receptionist First Name	Receptionist Last Name	Receptionist ID	Shift time	Receptionist phone
Amias	Bee	RCP0001	9AM	3001234
Cassian	Clio	RCP0002	9AM	3341221
Dove	Charles	RCP0003	5PM	3001132
Guthrie	James	RCP0004	9AM	3003334
Lilac	John	RCP0005	9AM	3004436
Juana	Theo	RCP0006	5PM	3211234
Romy	Henry	RCP0007	5PM	3308238
River	Ezra	RCP0008	5PM	3007766
Jupiter	Otis	RCP0009	9AM	3008898
Peyton	Hudson	RCP0010	9AM	3216264

Report 4:

The services offered by IL MARE and the charges along with the customer that required it is shown. Moreover, the information about the Manager that deals with it is displayed.

SERVICES

Cust ID	Mng ID	Service ID	Service Type	Service Charges
CUST1010	MG1002	SER3001	Food Service	35
CUST1001	MG1002	SER3002	Room Service	60
CUST1004	MG1001	SER3003	Food Service	15
CUST1005	MG1002	SER3004	Food Service	29
CUST1005	MG1002	SER3005	Room Service	60
CUST1002	MG1001	SER3006	Room Service	60
CUST1010	MG1002	SER3007	Room Service	60
CUST1007	MG1002	SER3008	Food Service	45
CUST1009	MG1001	SER3009	Room Service	60
CUST1006	MG1001	SER3010	Food Service	34

Report 5:

The billing criteria by IL MARE and the service, receptionist information is also displayed.
Along with bill type and amount.

Billing Report

Srv ID	Recpt ID	Bill ID	Bill Room Type	statuss	Total Bill
SER3001	RCP0005	B1001	two-bed	un-paid	100
SER3002	RCP0001	B1002	one-bed	un-paid	50
SER3003	RCP0006	B1003	one-bed	un-paid	50
SER3004	RCP0002	B1004	suite	un-paid	200
SER3005	RCP0003	B1005	two-bed	un-paid	100
SER3006	RCP0007	B1006	one-bed	un-paid	50
SER3007	RCP0009	B1007	two-bed	un-paid	100
SER3008	RCP0010	B1008	suite	un-paid	200
SER3009	RCP0008	B1009	two-bed	un-paid	100
SER3010	RCP0004	B1010	one-bed	un-paid	50

Report 6:

The bookings present in IL MARE and has booking information along with customer ID to tract
its data.

Booking Status

Cust ID	Booking ID	Booking time
CUST1001	BK4001	12PM
CUST1002	BK4002	1PM
CUST1003	BK4003	2PM
CUST1004	BK4004	11AM
CUST1005	BK4005	1AM
CUST1006	BK4006	3PM
CUST1007	BK4007	7PM
CUST1008	BK4008	9PM
CUST1009	BK4009	2PM
CUST1010	BK4010	11PM

Report 7:

The room charges and types by IL MARE and the billing information is displayed

Rooms
Bill

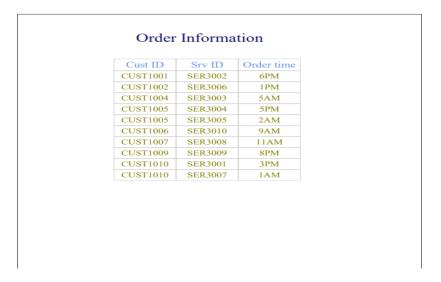| Htl ID	Cust ID	Room ID	Accommodation	Bill per day
HTL1001	CUST1001	R5001	2	50
HTL1001	CUST1005	R5002	2	50
HTL1001	CUST1007	R5003	2	50
HTL1001	CUST1010	R5004	4	100
HTL1002	CUST1002	R5005	4	100
HTL1002	CUST1003	R5006	4	100
HTL1002	CUST1004	R5007	2	50
HTL1002	CUST1006	R5008	8	200
HTL1002	CUST1008	R5009	8	200
HTL1002	CUST1010	R5010	4	100

Report 8:

Customer arrival and departure data to keep track of the available capacity along with time to have updated data always.

Customers Arrival and Departure

Cust ID	Checkout ID	Check in date	Check out date
CUST1001	CHK6001	10-2-2022	11-2-2022
CUST1002	CHK6002	1-1-2022	2-1-2022
CUST1003	CHK6003	23-3-2022	25-3-2022
CUST1004	CHK6004	20-2-2022	22-2-2022
CUST1005	CHK6005	9-2-2022	17-2-2022
CUST1006	CHK6006	1-2-2022	3-2-2022
CUST1007	CHK6007	9-4-2022	13-4-2022
CUST1008	CHK6008	17-5-2022	18-5-2022
CUST1009	CHK6009	8-5-2022	12-5-2022
CUST1010	CHK6010	22-2-2022	24-2-2022

Report 9:

All the order of services of all the customers are recorded to keep track and synchronize the flow.

Order Information

Cust ID	Srv ID	Order time
CUST1001	SER3002	6PM
CUST1002	SER3006	1PM
CUST1004	SER3003	5AM
CUST1005	SER3004	5PM
CUST1005	SER3005	2AM
CUST1006	SER3010	9AM
CUST1007	SER3008	11AM
CUST1009	SER3009	8PM
CUST1010	SER3001	3PM
CUST1010	SER3007	1AM

Report 10:

At last the manager information is stored and displayed for consultation and queries.

Manager's Information

Manager Name	Manager phone	Manager address
Tracy	09999999	Amalfi Coast
Joshua	19999999	Calabria

8- Advantages and Weaknesses of your system and suggestion for improvement

ADVANTAGES:

- **The implementation provides up to date data for easy access,**
- **Handles multiple customers**
- **Handles Managers**
- **Handles staffs**
- **Each one has its own functionalities thus limit of access is ensured.**
- **The execution follows a specific path.**
- **Can handle errors**

WEAKNESSES:

- **Cannot perform proper validation**
- **Sometimes it is a dead-end at forms end**

SUGGESTIONS:

- **System should authenticate both users and its staff**
- **System should have last windows backtracking buttons to avoid dead-ends.**