

TASK 11.A)

DATE: 28/7/2025

TITLE: Conceptual Design using ER Model -
Hostel management system

AIM: To design using ER-model =
Hotel management system.

Goal: Manage hotel reservations,
customer data, room availability, billing,
and payments efficiently

Requirements:

- Customer registration
- Room reservation & availability
- Billing & invoice generation
- payment tracking
- Hotel & Room category information

(1a) Identify major Entities

From The diagram, The main entities
are:

- Customer
- Reservation
- Hotel
- Room
- Room-category
- payment
- invoice
- Bill
- Today price.

1b Identify Attributes for each Entity

- Customer : Name, E-mail, Country, SSN, GId
- Reservation: Reservation-id, start.Date, End Date, Date, Period
- Hotel : Hotel-Id, Name, location, GId
- Room : Room-Id, check-out, Date
- Room-category : Room-Id, name, Hotel-id, GId
- Today-price : Date, price

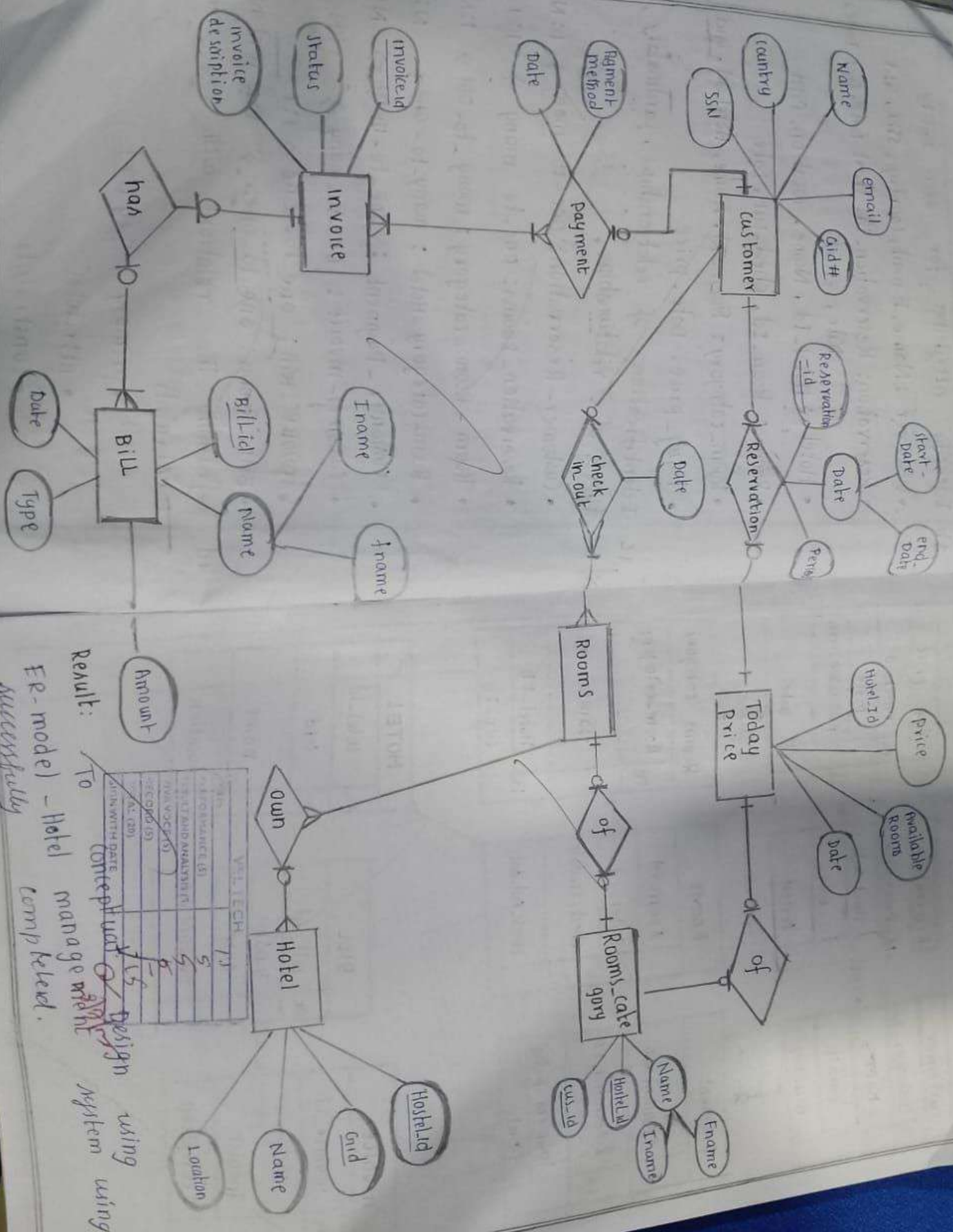
1c Identification of relationships, cardinality, type of relationship.

- Customer-Reservation: one-to-many $\Rightarrow 1:N$
- Reservation-Rooms: one-to-many $\Rightarrow 1:1$
- Room-Room-category: many-to-one $\Rightarrow 1:N$
- Room-category-Hotel: many-to-one $\Rightarrow N:1$
- Customer-Payment: One-to-many $\Rightarrow N:1$
- Customer-Invoice: one-to-many $\Rightarrow 1:N$
- Invoice-Bill: one-to-one $\Rightarrow 1:1$
- Bill-Rooms: one-to-one $\Rightarrow 1:N$ (or) $N:N$

1d Reframing The relations with key and constraints

- primary key (PK)
- Attributes
- Constraints

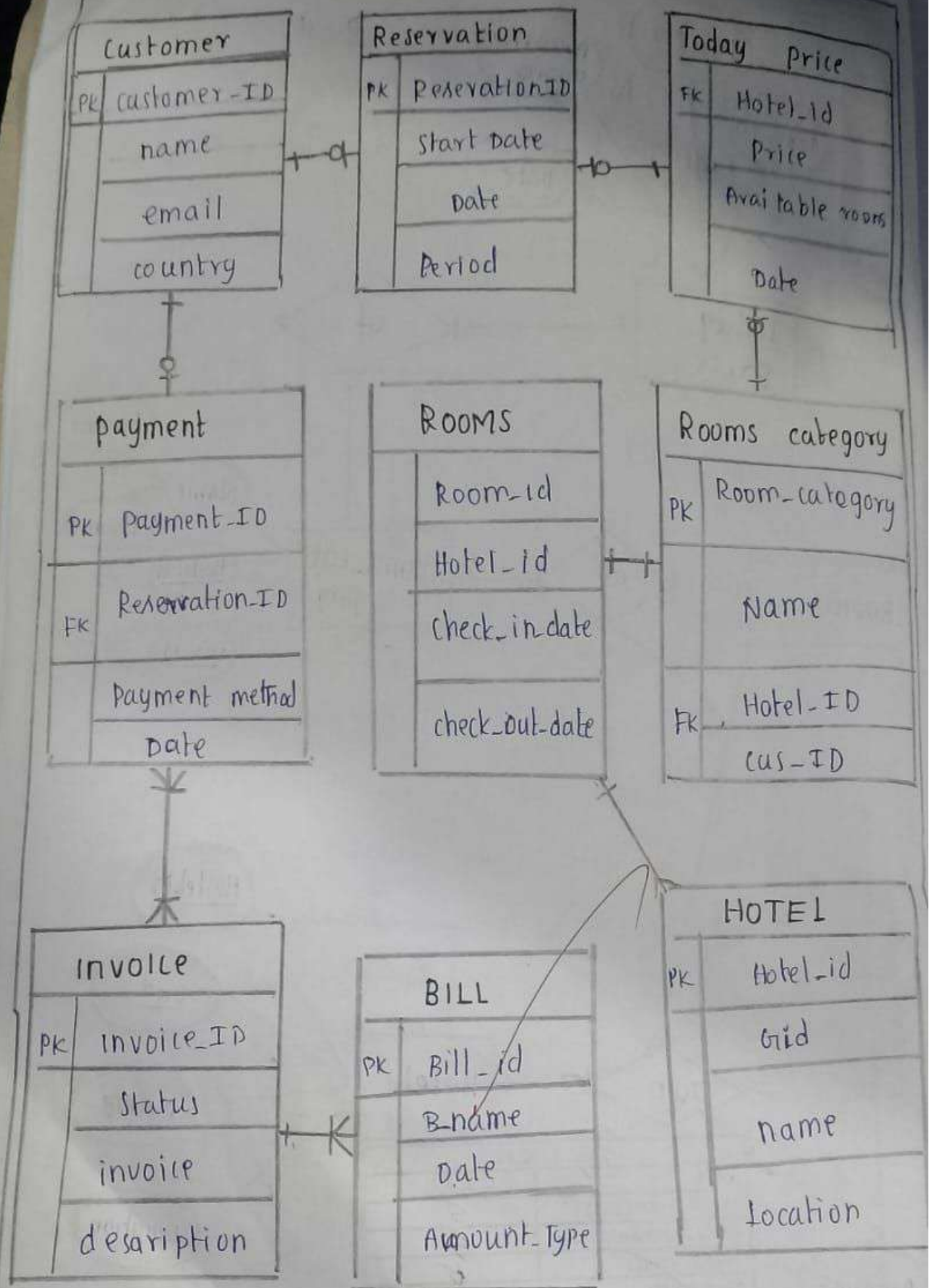
ER-Diagram:-



Result: To Conceptual Design using ER-model - Hotel management system using successfully completed.

Sl. No.	Name	Grade	Section	Score
1
2
3
4
5
6
7
8
9
10

Relation model



Task : (I.B)

Date : 28/7/2025

AIM :

Reframing The relations with key and constraints show in Relational model

VEL TECH	
PROFESSOR (5)	4
STUDENT (5)	5
RESULT AN. ANALYSIS (5)	5
VIVA VOCE (5)	1
RECORD (5)	1
TOTAL (25)	16
SIGN WITH DATE	

28/7/25

RESULT : To Conceptual Design using ER-model - Hotel management system successfully completed.