CLASS: F.Y. MCA   **SEM: I**

COURSE CODE: MC504   **SUBJECT NAME: DATABASE MANAGEMENT SYSTEM LAB**

ROLL NO. : 2022510034   **BATCH: B**

NAME: Rishikesh Prakash Lingayat

EXPERIMENT NO: 02

EXPERIMENT TITLE: Mapping of ER model to Relational ModelAssignment (Schema Diagram)

Aim :- Railway Management Schema diagram

Theory :-

A schema diagram or a class diagram in DBMS is a type of diagram and part of a unified modeling language (UML) that defines and provides the overview and structure of a system in terms of entities and attributes, relations and the relationships between different entities.

In this diagram, **entities** as well as **relations** are displayed in the form of a container where entities have **attributes** in their container whereas relations have the **primary keys of the entities** participating in that relations.

Entities and relations are connected to each other via a **single/double directed line**. Schema Diagrams can show **multiple entities having multiple relationships** with each other.

Here, entities are :- **Passenger, Ticket, Payment, Train, Train Status.**
and relations are :- **has, issues, makes**

Schema Diagram :-

Passenger
- pass-id (PK)
- name
- phone_number
- gender
- DOB
- address
- email

issues
- pass-id
- PNR

Ticket
- PNR (PK)
- pass-id (FK)
- source
- destination
- date
- reservation

makes
- pass-id
- pay-id

has
- PNR
- trn-no

has
- trn-no

Payment
- pay-id (PK)
- pass-id (FK)
- total_amount
- online_payment

Train Status
- trn-no (FK)
- PNR (FK)
- avail_seat
- wait_seat
- book_seat
- total_passengers

Train
- trn-no (PK)
- trn_name
- trn_arrival_time
- trn_departure_time