



DEPARTMENT OF ELECTRONIC COMMUNICATION ENGINEERING

COURSE CODE-INT306

DATA BASE MANAGEMENT SYSTEM

PROJECT ON

RAILWAY RESERVATION SYSTEM

SUBMITTED BY:

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DECLARATION

I DECLARE THIS PROJECT “RAILWAY RESERVATION SYSTEM” WAS DONE BY KANCHARLA REHIT ON BEHALF OF DR. BALRAJ SINGH

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ABSTRACT

IN THIS PROJECT BY DEVOLPING RAILWAY RESERVATION SYSTEM THE USER CAN BOOK TICKETS FROM ONLINE .

THE INDIAN RAILWAY IS SECOND LARGEST RAILWAY IN THE WORLD. IN THIS RAILWAY IT TAKE TIME TOO BOOK TICKET FROM RAILWAY OFFICE SO THIS “RAILWAY RESERVATION SYSTEM” USEFUL FOR THE CITIZIENS TO BOOK TICKETS AND OTHER ADVANTAGES VIA ONLINE PLATFORMS LIKE IRCTC.

INTRODUCTION

The main purpose of maintaining data base for railway reservation system is to reduce the manual errors involved in the booking and cancelling of tickets and it convient for the user and provides to maintain the data about their customers and also about seats available at them due to automation many loopholes that exist in the manual maintenance of the records can be removed .

PROJECT DESCRIPTION

This project is about creating the data base about railway reservation system

The railway reservation system facilities the passenger to enquire about trains available on source of destination ,booking and cancellation of tickets .

The aim of this project is reduce human errors while booking or cancellation of tickets and the data base stores the records

Passangers can book their tickets for their train in which seats are available .

List of assumption snice the reservation system is very large in reality it is not feasible to develop the case study to extend

And prepare documentation at that level .therefore a small samples case study has been created to demonstrate the working of the reservation system.

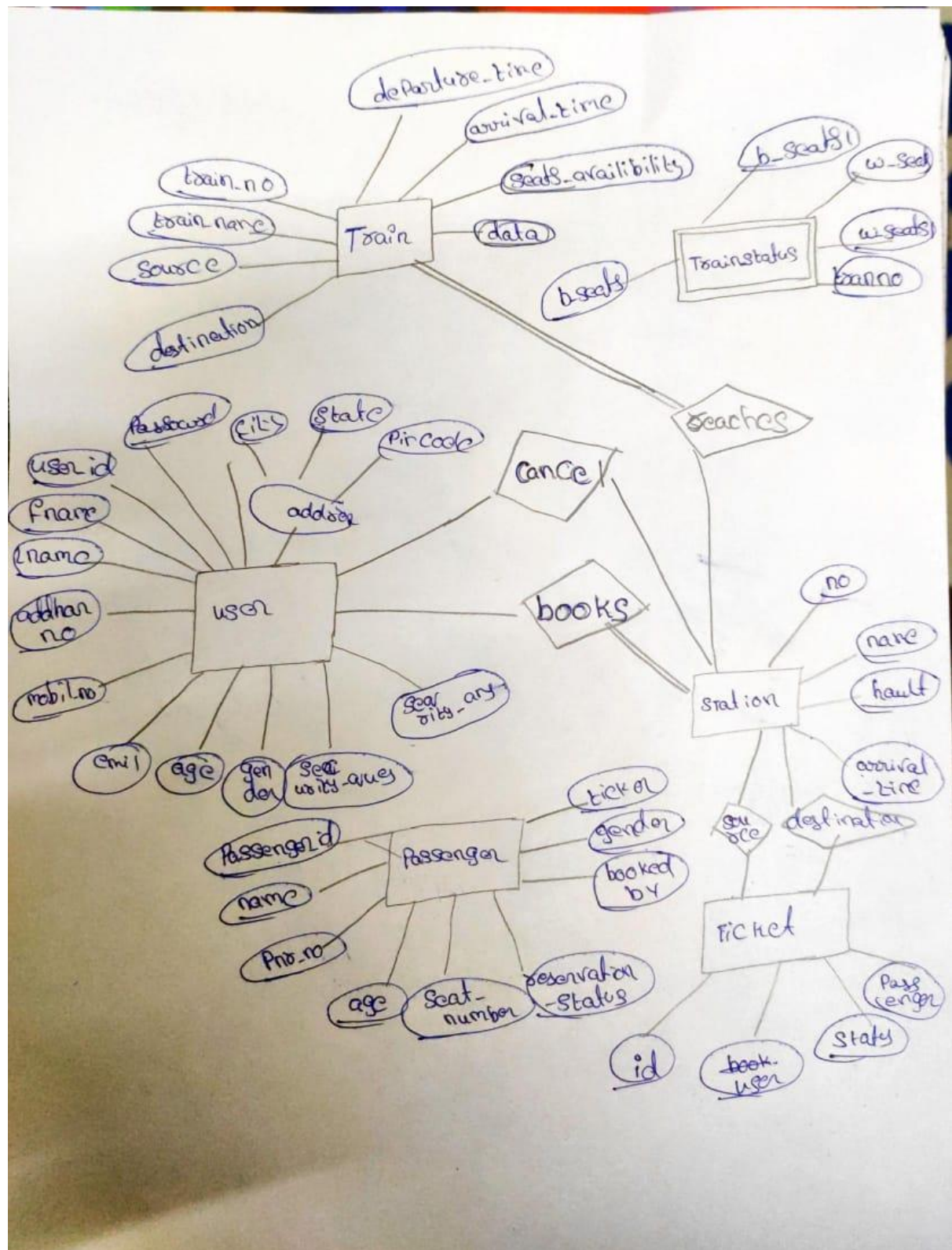
- The number of trains has been restrictrd
- The booking is open only for next seven days from current date
- The total number of tickets that has can be given the status of wating
- The in -between stoppage stations and their bookings are not considered

LIST OF ENTITIES AND ATTRIBUTES

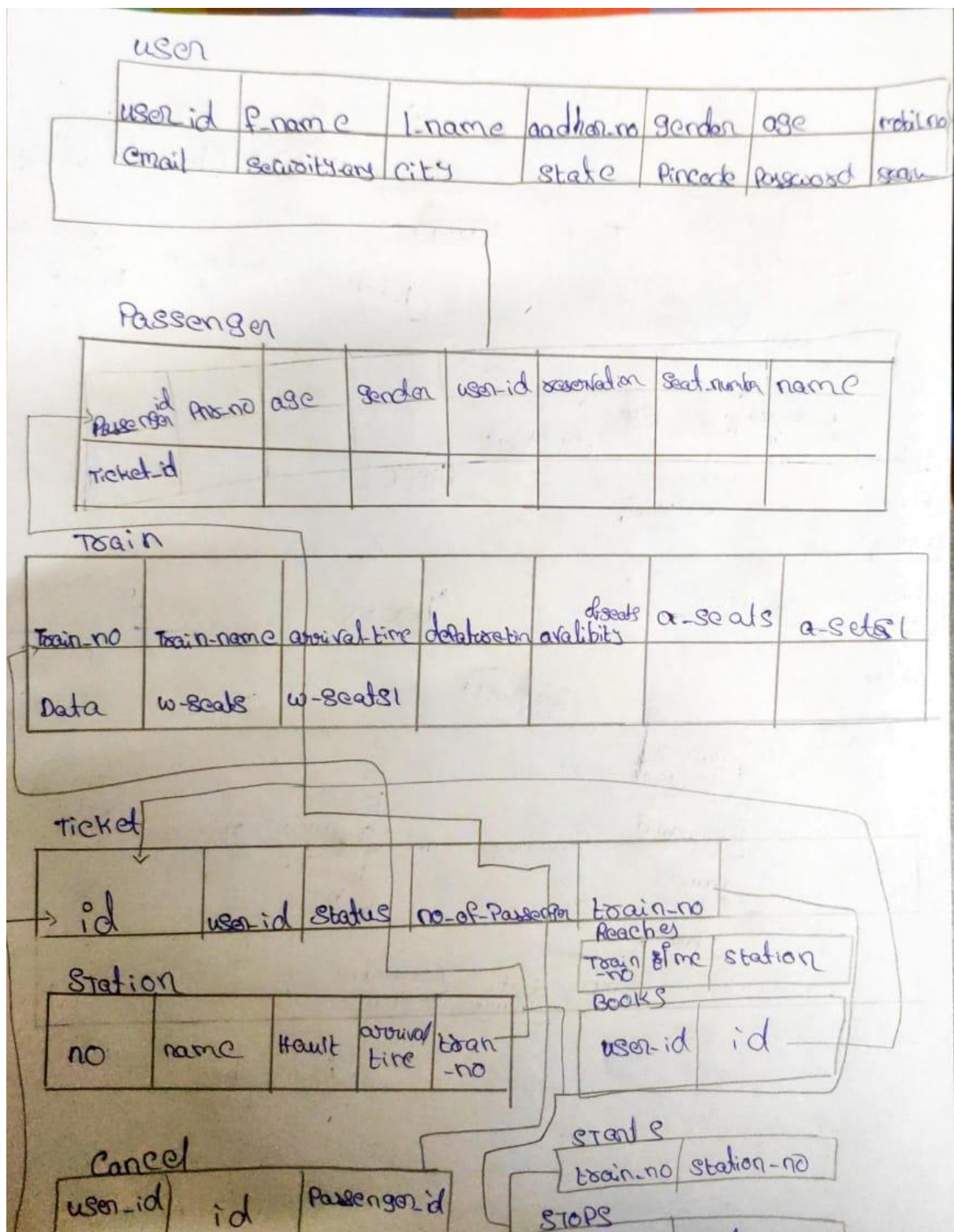
ENTITES	ATTRIBUTES
USER4	USER.ID Password First _name Last _name Age Gender Email Phone no Addhar City Pin code Security _ques Security _ans
Passenger	Passenger_id Name Gender Age Seat _no Booked _by Reservation _statues
Train	Train _no Train name Train no Source Destination Arrival time Departure time

	Availability of seats
Station	Name Train no Arravial time Hault
Ticket	Id Train no Booked user Statues No of passengers

E-R DIAGRAM



SCHEMA DIAGRAM



CREATE & INSERT SQL VALUES

TABLE 1

CREATE TABLE USER4

```
(  
    USER_ID NUMBER PRIMARY KEY,  
    FNAME VARCHAR(50),  
    LNAME VARCHAR(50),  
    ADHAR VARCHAR(20),  
    GENDER CHAR,  
    AGE NUMBER,  
    MOBILE_NO VARCHAR(50),  
    CITY VARCHAR(50),  
    STATE VARCHAR(50),  
    PIN_CODE NUMBER  
)
```

TABLE 2

CREATE TABLE TRAIN

```
(  
    TRAIN_NO NUMBER PRIMARY KEY,  
    TRAIN_NAME VARCHAR(50),  
    ARRIVAL_TIME VARCHAR(50),  
    DEPARTURE_TIME VARCHAR(20),
```

```
SEATS_REMAING NUMBER,  
DATE1 VARCHAR(50)  
)
```

TABLE 3

```
CREATE TABLE STATION2
```

```
(  
    NO NUMBER,  
    SNAME VARCHAR(50),  
    HAULT NUMBER,  
    ARRAVIAL_TIME NUMBER,  
    TRAIN_NO NUMBER  
)
```

```
CONSTARINT FOREIGN KEY(TRAIN_NO) REFERENCES  
TRAIN(TRAIN_NO)
```

TABLE 4

```
CREATE TABLE PASSENGER1
```

```
(  
    PASSENGER_ID NUMBER PRIMARY KEY,  
    AGE NUMBER,  
    PNR_NO VARCHAR(50),  
    GENDER CHAR,
```

```
USER_ID NUMBER,  
RESERVATION_STATUES VARCHAR(20),  
SEAT_NUMBER VARCHAR(5),  
PNAME VARCHAR(50),  
TICKET_ID NUMBER  
)  
  
CONSTRAINT FOREIGN KEY(USER_ID)REFERENCES  
USER4(USER_ID),  
  
CONSTRAINT FOREIGN KEY(TICKET_ID)REFERENCES  
TICKET(ID)
```

TABLE 5

```
CREATE TABLE TICKET1  
(  
IID NUMBER PRIMARY KEY,  
USER_ID VARCHAR(20),  
STATUES VARCHAR(10),  
PASSENGERS_NO VARCHAR(20),  
TRAIN_NO NUMBER  
)  
  
CONSTRAINT FOREIGN KEY(USER_ID)REFERENCES  
USER4(USER_ID),
```

CONSTRAINT FOREIGN KEY(TRAIN_NO)REFERENCES
TRAIN1(TRAIN_NO)

TABLE 6

```
CREATE TABLE TRAIN_STATUES1  
(  
    TRAIN_NO NUMBER PRIMARY KEY,  
    B_SEATS NUMBER,  
    B_SEATS1 NUMBER,  
    W_SEATS NUMBER,  
    W_SEATS1 NUMBER  
)
```

TABLE 7

```
CREATE TABLE REACHES  
(  
    TRAIN_NO NUMBER,  
    STATION_NO NUMBER  
)
```

TABLE 8

```
CREATE TABLE CANCEL  
(
```

```
USER_ID NUMBER,  
PASSENGE_ID NUMBER,  
PNAME VARCHAR(50),  
CITY VARCHAR(20)  
)
```

INSERT VALUES

```
INSERT INTO USER4 VALUES(  
1701,'KANCHARLA','REHIT',8820,'M',19,77320,'JALANDHAR','  
PUNJAB', 144414)
```

```
INSERT INTO USER4 VALUES(  
1702,'KANCHARLA','REVANTH',8745,'M',19,8466,'JALANDHA  
R','PUNJAB', 144414)
```

```
SELECT*FROM USER4
```

```
INSERT INTO TRAIN  
VALUES(120059,'HUMSAFAR',1030,3030,38,'DEC16')
```

```
SELECT*FROM TRAIN
```

```
INSERT INTO STATION2 VALUES(145, 'JALANDHAR CANTT',  
10, 1030, 120059)
```

```
INSERT INTO STATION2 VALUES(145, 'JALANDHAR CANTT',  
15, 1035, 120078)
```

```
SELECT*FROM STATION2
```

```
INSERT INTO TRAIN_STATUES1 VALUES(120059,12,13,2,3)
```

```
SELECT*FROM TRAIN_STATUES1
```

```
INSERT INTO PASSENGER1
```

```
VALUES(5001,19,78965,'M',1701,'CONFIORMED','B12','REVA  
NTH',4002)
```

```
SELECT*FROM PASSENGER1
```

```
INSERT INTO TICKET1
```

```
VALUES(4002,1701,'CONFIROMED',1,120059)
```

```
SELECT*FROM TICKET1
```

```
INSERT INTO REACHES VALUES(120059,143)
```

```
SELECT*FROM REACHES
```

```
INSERT INTO CANCEL1 VALUES(1701,4002,5001)
```

```
SELECT*FROM CANCEL1
```

QUERIES OUTPUTS

1 PRINT DETAILS OF PASSENGER TRAVELLING UNDER TICKET NO 4002

The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following query:

```
SELECT P.* FROM PASSENGER1 P, TRAIN T,  
SELECT T.* FROM TICKET1 T WHERE T.B_SEATS LIKE 'CONFIRMED' AND T.TRAIN_NO=120059  
SELECT * FROM PASSENGER1 WHERE TICKET_ID LIKE 4002
```

The result of the query is displayed in a table with the following columns: PASSENGER_ID, AGE, PNR_NO, GENDER, USER_ID, RESERVATION_STATUES, SEAT_NUMBER, PNAME, and TICKET_ID. The table contains one row of data:

PASSENGER_ID	AGE	PNR_NO	GENDER	USER_ID	RESERVATION_STATUES	SEAT_NUMBER	PNAME	TICKET_ID
5001	19	78965	M	1701	CONFIRMED	B12	REVAATH	4002

Below the table, there is a link to "Download CSV".

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2 PRINT USER_ID AND NAME OF ALL THOSE USER WHO BOOKED TICKET HUMSAFAR

**SELECT U.USER_ID, CONCAT(U.FNAME, U.LNAME) AS
NAME FROM USER4 U, TRAIN T, TICKET TC
WHERE U.USER_ID=TC.USER_ID AND
T.TRAIN_NO=TC.TRAIN_NO AND TRAIN_NAME LIKE
'HUMSAFAR'**

Oracle Live SQL - SQL Worksheet

livesql.oracle.com/apex/f?p=590:15045962450240:NO:RP:-

Live SQL

SQL Worksheet

```

103 SELECT*FROM TICKET
104
105 INSERT INTO REACH VALUES(120059,145)
106 SELECT*FROM REACH
107
108 INSERT INTO CANCELL VALUES(1701,4002,5001)
109 SELECT*FROM CANCELL
110
111 SELECT U.USER_ID,CONCAT(U.FNAME,U.LNAME)AS NAME FROM USER4 U,TRAIN T,TICKET TC
112 WHERE U.USER_ID=TC.USER_ID AND T.TRAIN_NO=TC.TRAIN_NO AND TRAIN_NAME LIKE 'HUMSAFAR'
113
114
115
116
117
118
119
120
121
122
123
124

```

USER_ID	NAME
1701	KANCHARLA REHIT

Download CSV

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25°C Haze

17:34 10-11-2022

3 DROP A COLOUMN IN USER4 TABLE

Oracle Live SQL - SQL Worksheet

livesql.oracle.com/apex/f?p=590:113102862155631:LEVEL1:-

Live SQL

SQL Worksheet

```

79
80 USER_ID NUMBER,
81 IID NUMBER,
82 PASSENGE_ID NUMBER
83
84 )
85
86 INSERT INTO USER4 VALUES( 1701,'KANCHARLA','REHIT',8820,'M',19,77320,'JALANDHAR','PUNJAB',144414)
87 INSERT INTO USER4 VALUES( 1702,'KANCHARLA','REVANTH',8745,'M',19,8466,'JALANDHAR','PUNJAB',144414)
88 SELECT*FROM USER4
89
90 INSERT INTO TRAIN VALUES(120059,'HUMSAFAR',1030,3030,38,'DEC16')
91 SELECT*FROM TRAIN
92
93 INSERT INTO STATION2 VALUES(145,'JALANDHAR CANTT',10,1030,120059)
94 INSERT INTO STATION2 VALUES(145,'JALANDHAR CANTT',15,1035,120078)
95 SELECT*FROM STATION2
96
97 INSERT INTO TRAIN_STATUES1 VALUES(120059,12,13,2,3)
98 SELECT*FROM TRAIN_STATUES1
99

```

USER_ID	FNAME	LNAME	GENDER	AGE	MOBILE_NO	CITY	STATE	PIN_CODE
1702	KANCHARLA	REVANTH	M	19	8466	JALANDHAR	PUNJAB	144414
1701	KANCHARLA	REHIT	M	19	77320	JALANDHAR	PUNJAB	144414

Download CSV

2 rows selected.

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2014 10-11-2022

4 ADD AN COLOUMN IN A TABLE

The screenshot displays the Oracle Live SQL web interface. The left sidebar contains navigation options: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area shows a SQL worksheet with the following code:

```

78 CREATE TABLE CANCEL1
79 (
80 USER_ID NUMBER,
81 ID NUMBER,
82 PASSENGER_ID NUMBER
83 )
84
85
86 INSERT INTO USER4 VALUES( 1701,'KANCHARLA','REHIT',8820,'M',19,77320,'JALANDHAR','PUNJAB', 144414)
87 INSERT INTO USER4 VALUES( 1702,'KANCHARLA','REVANTH',8745,'M',19,8466,'JALANDHAR','PUNJAB', 144414)
88 SELECT*FROM USER4
89
90 INSERT INTO TRAIN VALUES(120059,'HUMSAFAH',1030,3030,38,'DEC16')
91 SELECT*FROM TRAIN
92
93 INSERT INTO STATION2 VALUES(145, 'JALANDHAR CANTT', 10, 1030, 120059)
94 INSERT INTO STATION2 VALUES(145, 'JALANDHAR CANTT', 15, 1035, 120078)
95 SELECT*FROM STATION2
96
97 INSERT INTO TRAIN_STATUES1 VALUES(120059,12,13,2,3)
98 SELECT*FROM TRAIN_STATUES1

```

Below the code, a table displays the results of the query `SELECT*FROM USER4`:

USER_ID	FNAME	LNAME	GENDER	AGE	MOBILE_NO	CITY	STATE	PIN_CODE	SECURITY_QUES
1702	KANCHARLA	REVANTH	M	19	8466	JALANDHAR	PUNJAB	144414	-
1701	KANCHARLA	REHIT	M	19	77320	JALANDHAR	PUNJAB	144414	-

Below the table, it says "Download CSV" and "2 rows selected." At the bottom, the footer indicates: "© 2022 Oracle - Live SQL 22.3.1, running Oracle Database 19c Enterprise Edition - 19.14.0.0.0 - Database Documentation - Ask Tom - Dev Gym. Built with using Oracle APEX - Privacy - Terms of Use".

CONCLUSION

IN THIS PROJECT RAILWAY RESERVATION SYSTEM WE HAVE STORED ALL THE INFORMATION ABOUT THE TRAINS SCHEDULE AND THE USERS BOOKING TICKETS AND EVEN STATUES FROM THEIR PLACE PLACE ITSELF IT AVOIDS IN CONVINIENCES OF GOING TO RAILWAY STATION FOR EACH AND EVERY QUERY THEY GET