

CHINMAYA VIDYALAYA TARAPUR



IP Project

TOPIC-RAILWAY RESERVATION MANAGEMENT

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Std:-XII

Roll. No:-

Subject:-Information Practices

CHINMAYA VIDYALAYA TARAPUR

P-201, SARAVALI (P.O) MIDC AREA, VIDYA NAGAR BOISAR,
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CERTIFICATE

This is to certify that Pranjal Suryawanshi of class XII-A
of Chinmaya Vidyalaya Tarapur has successfully
completed the IP Project as prescribed by the ALL
INDIA SENIOR SECONDARY SCHOOL
CERTIFICATE EXAMINATION(AISSCE) for
academic year 2024-25

Internal Examiner

External Examiner

Principal

School Stamp

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INTRODUCTION

The Railway Reservation System facilitates the passengers to enquire about the trains available on the basis of source and destination, Booking and Cancellation of tickets, enquire about the status of the booked ticket, etc. The aim is to design and develop a database maintaining the records of different trains, train status, and passengers.

Users can book their tickets for the train in which seats are available. For this, user has to provide the desired train number and the date for which ticket is to be booked.

CODE

```
import mysql.connector as sql

# Connect to the database

conn = sql.connect(host='localhost', user='root', password='root',
database='railwaydata') if conn.is_connected():
print('Successfully connected')

c1 = conn.cursor()

while True:

    print()
    print("RAILWAY RESERVATION MANAGEMENT")
    print("#####")
    print()
    print("1. Add new Passenger
Detail)
    print("2. Add new Train Detail")
    print("3. Show PNR NO.")
    print("4. Reservation of Ticket")
    print("5. Exit")

    ch = int(input("Enter your choice: "))

    if ch == 1:
        print("Passenger Details Form")

        name = input("Enter your full name: ")

        age = int(input("Enter your age: "))

        gender = input("Enter your gender: ")

        total = int(input("Enter total number of people: "))
```

```

    date = input("Enter your date (yyyy-mm-dd): ")

    query = "INSERT INTO passenger (name, age, gender, total, date) VALUES
    (%s, %s, %s, %s, %s)"

    values = (name, age, gender, total, date)

    c1.execute(query, values)

    conn.commit()

    print("Passenger details added successfully.")

elif ch == 2:

    print("Train Details Form")

    train_name = input("Enter train name: ")

    boogie_type = input("Enter boogie type: ")

    query = "INSERT INTO train (train_name, boogie_type) VALUES (%s, %s)"

    values = (train_name, boogie_type)

    c1.execute(query, values)

    conn.commit()

    print("Train details added successfully.")

elif ch == 3:

    pnr_no= input("Enter pnr_no ")

    passenger_id=input("enter passenger_id")

    train_id=input("enter train_id ")

    available_seats=int(input("Enter number of seats available: "))

    query = "INSERT INTO reservation (pnr_no, passenger_id,
    train_id,available_seats) VALUES (%s, %s, %s, %s)"

    values = (pnr_no, passenger_id , train_id,available_seats)

```

```

        c1.execute(query,values)

        conn.commit()

        print("pnr number added successfully")

elif ch == 4:

    print("Reservation of Ticket")

    passenger_id = int(input("Enter your Passenger ID: "))

    train_id = int(input("Enter Train id: "))

    seats = int(input("Enter number of seats: "))

    query = "SELECT available_seats FROM reservation WHERE train_id = %s"

    c1.execute(query, (train_id,))

    result = c1.fetchone()

    available_seats = int(input("enter available seats"))

    if seats <= available_seats:

        status = "Confirmed"

        query = "UPDATE reservation SET

available_seats = %s"

        WHERE train_id = %s

        c1.execute(query, (available_seats, train_id))

    else:

        status = "Waiting List"

    print("Ticket reservation status:", status)

elif ch == 5:

    print("You have exited")

    print("Visit again soon")

```



```
else:
    print("Invalid choice, please try again.")
    c1.close()
    conn.close()
else:
    print("Connection failed.")
```

CODE FOR RAILWAY DATABASE

```
CREATE DATABASE railwaydata;
USE railwaydata; CREATE TABLE passenger (
id INT AUTO_INCREMENT PRIMARY KEY,
name VARCHAR(100),
age INT,
gender VARCHAR(10),
total INT,
date DATE);
CREATE TABLE train (
train_name VARCHAR(100),
boogie_type VARCHAR(20));
CREATE TABLE reservation (
    pnr_no INT ,
passenger_id INT,
train_id INT,
available_seats INT);
drop database railwaydata;
```

OUTPUT

```
RAILWAY RESERVATION MANAGEMENT
#####

1. Add new Passenger Detail
2. Add new Train Detail
3. Show PNR NO.
4. Reservation of Ticket
5. Exit
Enter your choice: 1
Passenger Details Form
Enter your full name: Pranjal Suryawanshi
Enter your age: 17
Enter your gender: Female
Enter total number of people: 5
Enter your date (yyyy-mm-dd): 2025-05-06
Passenger details added successfully.

RAILWAY RESERVATION MANAGEMENT
#####

1. Add new Passenger Detail
2. Add new Train Detail
3. Show PNR NO.
4. Reservation of Ticket
5. Exit
Enter your choice: 2
Train Details Form
Enter train name: Panjab Mails
Enter boogie type: AC
Train details added successfully.

RAILWAY RESERVATION MANAGEMENT
#####

1. Add new Passenger Detail
2. Add new Train Detail
3. Show PNR NO.
4. Reservation of Ticket
5. Exit
Enter your choice: 3
```

```
5. Exit
Enter your choice: 3
Enter pnr_no 22446688
enter passenger_id 1234
enter train_id 243568
Enter number of seats available: 60
pnr number added successfully
```

```
RAILWAY RESERVATION MANAGEMENT
#####
```

```
1. Add new Passenger Detail
2. Add new Train Detail
3. Show PNR NO.
4. Reservation of Ticket
5. Exit
Enter your choice: 4
Reservation of Ticket
Enter your Passenger ID: 1234
Enter Train id: 243568
Enter number of seats: 5
enter available seats 60
Ticket reservation status: Confirmed
```

```
RAILWAY RESERVATION MANAGEMENT
#####
```

```
1. Add new Passenger Detail
2. Add new Train Detail
3. Show PNR NO.
4. Reservation of Ticket
5. Exit
Enter your choice: 5
You have exited
Visit again soon
```

```

Database changed
mysql> Show Tables;
+-----+
| Tables_in_railwaydata |
+-----+
| passenger              |
| reservation            |
| train                  |
+-----+
3 rows in set (0.00 sec)

mysql> Select* From passenger;
+-----+-----+-----+-----+-----+-----+
| id | name                | age | gender | total | date       |
+-----+-----+-----+-----+-----+-----+
| 1  | Pranjali Suryawanshi | 17  | Female | 5      | 2025-05-06 |
| 2  | Surbhi Zope          | 17  | Female | 5      | 2025-06-12 |
| 3  | Anisha Gupta         | 17  | Female | 5      | 2025-07-24 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> Select* From train;
+-----+-----+
| train_name      | boogie_type |
+-----+-----+
| Panjab Mails    | AC          |
| Rajdhani Express | AC          |
| Nijamuddin Express | AC         |
+-----+-----+
3 rows in set (0.00 sec)

mysql> Select* From reservation;
+-----+-----+-----+-----+
| pnr_no      | passenger_id | train_id | available_seats |
+-----+-----+-----+-----+
| 224466888   | 1234         | 243568   | 60              |
| 24356879    | 2345         | 113355   | 60              |
| 13245768    | 3456         | 465789   | 60              |
+-----+-----+-----+-----+
3 rows in set (0.01 sec)

```

BIBLIOGRAPHY

- NCERT textbook
- www.ncert.nic.in

TEACHER'S EVALUATION REPORT

School Name: CHINMAYA VIDYALAYA
TARAPUR

School Address: CHINMAYA VIDYALAYA TARAPUR,
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Student Name: - Pranjal Suryawanshi

Overall Remark: - _____

Teacher's Remark: - _____