COMPUTER SCIENCE PROJECT 2020-21

- DEBARGHYA JODDAR

CERTIFICATION

This is to certify that the project entitled:

*"***Railway Reservation System***"*

is a record of bonafide work carried out by:

Debarghya Joddar (12-Q)

in partial fulfilment of the requirements in COMPUTER SCIENCE prescribed by CBSE for CBSE BOARD 2020-2021 in the school

DELHI PUBLIC SCHOOL RUBY PARK

_____

DATE

_____   _____

INTERNAL EXAMINER   EXTERNAL EXAMINER

ACKNOWLEDGEMENT

I gratefully acknowledge my sincere thanks to my Computer Science Teacher Mr. Anirban Sinha for his remarkable guidance and supervision throughout the project work. I am also utmost indebted to all my batch mates for their encouragement, help, suggestion and their readily helpful service in the successful completion of this project.

I wish to express my deep gratitude and sincere thanks to the Principal, Mrs. Joyoti Chaudhuri, Delhi Public School Ruby Park for her encouragement and for all the facilities that she provided for this project work.

SYNOPSIS:

Aim of the Experiment:

The aim of the experiment is to make a *Railway Reservation System* using *Python programming language* and *MySQL Database* and the program will be able to perform certain functions which are available in real-life Railway Reservation Systems

Contents:

In this program we have a virtual system of a real railway reservation portal. The program can perform several tasks related to railway reservation. The user can select from the functions below and use the system accordingly.

- **Login**
    - I. **View Account**
    - II. **Alter Account**
    - III. **View Bookings**
    - IV. **Manage Bookings**
    - V. **New Booking**
    - VI. **Logout**
- **Signup**
- **Exit**

This railway reservation system has been developed using:

- **Python compiler**
- **MySQL (back-end database)**
- **The program and the database have been linked together using *Python-MySQL Connector*.**

The reservation system will be able to cater to one user at a time. The user will be required to login if he/she has an account or can sign up. Then he/she can perform the above mentioned tasks without hindrance

HARDWARE/SOFTWARE REQUIREMENTS

OS: *Windows 10 Pro 64-bit (10.0, Build 19041)*

Processor: *Intel(R) Core(TM) i5-9400F CPU @ 2.90GHz (6 CPUs), ~2.9GHz*

Memory: *8192MB RAM*

DirectX Version: *DirectX 12*

CONTRIBUTIONS

Debarghya Joddar: DATABASE CREATION, INTERACTIVE DISCUSSIONS, IDEAS, PROGRAMMING.

Rohan Priyadarshi: DATABASE CREATION, INTERACTIVE DISCUSSIONS, IDEAS.

Rajarshi Ghosh: DATABASE CREATION, INTERACTIVE DISCUSSIONS, IDEAS.

TABLE DESCRIPTIONS:

```
mysql> use anand_railway_services;
Database changed
mysql> show tables;
+-------------------------------+
| Tables_in_anand_railway_services |
+-------------------------------+
| account                       |
| bookings                      |
| trains                        |
+-------------------------------+
3 rows in set (0.02 sec)

mysql> desc account;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| USERCODE     | int          | NO   | PRI | NULL    |       |
| USERPASSWORD | varchar(255) | NO   |     | NULL    |       |
| USERNAME     | varchar(255) | NO   |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.04 sec)

mysql> desc bookings;
+---------------------+--------------+------+-----+---------+-------+
| Field               | Type         | Null | Key | Default | Extra |
+---------------------+--------------+------+-----+---------+-------+
| USERCODE            | int          | NO   | MUL | NULL    |       |
| TRAIN_ID            | int          | NO   |     | NULL    |       |
| NUMBER_OF_PASSENGERS | int         | NO   |     | NULL    |       |
| DATE_OF_JOURNEY     | date         | YES  |     | NULL    |       |
| TIME_OF_JOURNEY     | time         | YES  |     | NULL    |       |
| NAME_OF_TRAIN       | varchar(255) | YES  |     | NULL    |       |
| SOURCE              | varchar(255) | YES  |     | NULL    |       |
| DESTINATION         | varchar(255) | YES  |     | NULL    |       |
+---------------------+--------------+------+-----+---------+-------+
8 rows in set (0.00 sec)
```

```
mysql> desc trains
    -> ;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| PNR           | int         | NO   | PRI | NULL    |       |
| Name          | varchar(50) | YES  |     | NULL    |       |
| Source        | varchar(50) | YES  |     | NULL    |       |
| Dest          | varchar(50) | YES  |     | NULL    |       |
| Seats         | int         | YES  |     | NULL    |       |
| Departure     | time        | YES  |     | NULL    |       |
| Arrival       | time        | YES  |     | NULL    |       |
| Tier          | varchar(50) | YES  |     | NULL    |       |
| Cost_per_ticket | int       | YES  |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
9 rows in set (0.00 sec)
```

DATA STORED WITHIN TABLES:

```
mysql> select * from account;
+----------+--------------+----------+
| USERCODE | USERPASSWORD | USERNAME |
+----------+--------------+----------+
|        1 | rohan1234    | ROHAN    |
|        2 | raju1234     | RAJU     |
|        3 | deb1234      | DEB      |
|        4 | deep1234     | DEEP     |
+----------+--------------+----------+
4 rows in set (0.00 sec)

mysql> select * from bookings;
+----------+----------+--------------------+----------------+-----------------+-----------------+------------+-------------+
| USERCODE | TRAIN_ID | NUMBER_OF_PASSENGERS | DATE_OF_JOURNEY | TIME_OF_JOURNEY | NAME_OF_TRAIN    | SOURCE     | DESTINATION |
+----------+----------+--------------------+----------------+-----------------+-----------------+------------+-------------+
|        1 |     1111 |                  1 | 2020-12-02     | 08:30:00        | DURANTO         | PATNA      | HOWRAH      |
|        2 |     2222 |                  2 | 2020-12-05     | 09:30:00        | ROYAL EXPRESS   | HOWRAH     | PATNA       |
|        3 |     3333 |                  3 | 2020-12-07     | 07:30:00        | HUMSAFAR EXPRESS | NEW DELHI  | PATNA       |
|        4 |     4444 |                  4 | 2020-12-09     | 10:15:00        | SHATABDI EXPRESS | NEW DELHI  | MUMBAI      |
+----------+----------+--------------------+----------------+-----------------+-----------------+------------+-------------+
4 rows in set (0.00 sec)

mysql> select * from trains;
+-------+-------------+----------------+------------------+-------+-----------+---------+------------------------------+----------------+
| PNR   | Name        | Source         | Dest             | Seats | Departure | Arrival | Tier                         | Cost_per_ticket |
+-------+-------------+----------------+------------------+-------+-----------+---------+------------------------------+----------------+
| 11077 | MAIL EXPRESS | PUNE          | JAMMU TAWI       |    90 | 17:20:00  | 10:10:00 | 1AC 2AC 3AC SLEEPER          |            367 |
| 12019 | SHATABDI    | HOWRAH         | RANCHI           |   102 | 06:05:00  | 13:15:00 | 1AC 2AC 3AC AC CHAIR CAR SLEEPER |        300 |
| 12038 | SHATABDI    | LUDHIANA       | NEW DELHI        |    46 | 16:40:00  | 22:10:00 | 2AC 3AC AC CHAIR CAR         |            400 |
| 12267 | DURONTO     | MUMBAI CENTRAL | AHMEDABAD        |   100 | 23:25:00  | 05:55:00 | 2AC 3AC AC CHAIR CAR         |            750 |
| 12268 | DURONTO     | AHMEDABAD      | MUMBAI CENTRAL   |   100 | 23:40:00  | 06:00:00 | 2AC 3AC AC CHAIR CAR         |            750 |
| 12426 | RAJDHANI    | JAMMU TAWI     | NEW DELHI        |    42 | 19:40:00  | 05:05:00 | AC CHAIR CAR SLEEPER         |            348 |
| 12430 | RAJDHANI    | NEW DELHI      | LUCKNOW          |    70 | 20:50:00  | 06:40:00 | 1AC 2AC AC CHAIR CAR SLEEPER |            360 |
| 12437 | RAJDHANI    | SECUNDERABAD   | HAZRAT NIZAMUDDIN |   80 | 12:45:00  | 10:25:00 | 1AC 2AC 3AC                  |            410 |
| 22201 | DURONTO     | SEALDAH        | PURI             |    65 | 20:00:00  | 04:00:00 | 2AC 3AC AC CHAIR CAR         |            245 |
| 22204 | DURONTO     | SECUNDERABAD   | VISHAKHAPATNAM   |   112 | 20:15:00  | 06:35:00 | 1AC 2AC AC CHAIR CAR SLEEPER |            142 |
| 22206 | DURONTO     | MADURAI        | CHENNAI          |    78 | 22:40:00  | 07:20:00 | 1AC 2AC AC CHAIR CAR SLEEPER |            450 |
+-------+-------------+----------------+------------------+-------+-----------+---------+------------------------------+----------------+
11 rows in set (0.00 sec)
```

PYTHON SOURCE CODE:

```python
import mysql.connector as mycon

import random

def body2(ucode):

    k=None

    while k!=4:

        print('''1. VIEW BOOKINGS

2. MANAGE BOOKINGS

3. NEW BOOKING

4. MAIN MENU''')

        k=int(input())

        if k==1:

            cur.execute('select * from bookings where usercode='+str(ucode))

            result=cur.fetchall()

            print("%20s"%"USERCODE","%20s"%"TRAIN ID","%20s"%"NUMBER OF
PASSENGERS","%20s"%"DATE OF JOURNEY","%20s"%"TIME OF
JOURNEY","%20s"%"NAME OF TRAIN","%20s"%"SOURCE","%20s"%"DESTINATION")

            for row in result:

print("%20s"%row[0],"%20s"%row[1],"%20s"%row[2],"%20s"%row[3],"%20s"%row[4],"%20s"%row[5],"%20s"%row[6],"%20s"%row[7])

        elif k==2:

            c=input('WARNING!! DO YOU REALLY WANT TO CANCEL BOOKING?[Y/N]')

            if c=='Y':

                cur.execute('select * from bookings where usercode="'+str(ucode)+'"')

                result=cur.fetchall()
```

```python
        print("%20s"%"USERCODE","%20s"%"TRAIN ID","%20s"%"NUMBER OF
PASSENGERS","%20s"%"DATE OF JOURNEY","%20s"%"TIME OF
JOURNEY","%20s"%"NAME OF TRAIN","%20s"%"SOURCE","%20s"%"DESTINATION")

        for row in result:

print("%20s"%row[0],"%20s"%row[1],"%20s"%row[2],"%20s"%row[3],"%20s"%row[4],"%20s"%row[5],"%20s"%row[6],"%20s"%row[7])

        f=input('Enter the Train Id of the train you want to cancel')

        cur.execute('select count(*) from bookings where train_id='''+str(f)+'''')

        result=cur.fetchall()

        if str(result[0][0]==1):

            cur.execute('delete from bookings where train_id='''+str(f)+'''')

            con.commit()

            print('BOOKINGS DELETED SUCCESSFULLY!! REFUND AMOUNT WILL BE
SENT TO YOUR ACCOUNT SHORTLY!!')

        else:

            print('NO TRAINS FOUND!!')

    elif k==3:

        print('/'*191)

        print('''WELCOME TO BOOKING TERMINAL

THE TRAINS AVAILABLE ARE AS FOLLOWS''')

        cur.execute('select * from trains')

        result=cur.fetchall()

print("%10s"%"PNR","%20s"%"NAME","%20s"%"SOURCE","%20s"%"DESTINATION","%10s"%"SEATS","%10s"%"DEPARTURE","%10s"%"ARRIVAL","%40s"%"TIER","%40s"%"COST
PER TICKET")

        print('/'*191)

        for row in result:
```

```python
print("%10s"%row[0],"%20s"%row[1],"%20s"%row[2],"%20s"%row[3],"%10s"%row[4],"%10s"%row[5],"%10s"%row[6],"%40s"%row[7],"%40s"%row[8])
        print('/'*191)
    pnr=int(input('ENTER PNR OF THE TRAIN YOU WANT TO BOOK'))
    cur.execute('select count(*) from trains where pnr='+str(pnr))
    result=cur.fetchall()
    if str(result[0][0])=='0':
        print('NO TRAINS AVAILABLE')
    else:
        cur.execute('select * from trains where pnr='+str(pnr))
        r=cur.fetchall()
        tier=input('ENTER TIER NAME')
        if tier in r[0][7]:
            print('Tier available!!')
            date=input('Enter date of journey[YYYY-MM-DD]')
            seats=int(input('Enter the number of seats you want to book: '))
            if seats>r[0][4]:
                print("Not enough seats")
            else:
                print('BOOKING DETAILS STORED!! PROCEEDING TO PAYMENT...')
                print('AMOUNT DUE: ',r[0][8]*seats)
                cardno=input('ENTER CARD NUMBER: ')
                if len(cardno)==16:
                    cvv=input('ENTER CVV: ')
                    if len(cvv)==3:
```

```python
                print('/'*191)

                print('PAYMENT SUCCESSFUL')

                print('/'*191)

                query="insert into bookings
values({},{},{},'{}','{}','{}','{}','{}')".format(ucode,r[0][0],seats,date,r[0][5],r[0][1],r[0][2],r[0][3])

                cur.execute(query)

                remseats=r[0][4]-seats

                cur.execute('update trains set seats='+str(remseats)+' where pnr='+str(pnr))

                con.commit()

            else:

                print('Invalid cvv')


        else:

            print('Invalid Card Number')

    else:

        print('Tier unavailable!!Try some other time!!')



def body(un,pwd):

    k=None

    while k!=4:

        print('/'*191)

        print('''1. VIEW ACCOUNT

2. ALTER ACCOUNT DETAILS

3. MORE

4. LOGOUT''')
```

```python
    k=int(input("Enter your choice: "))
    cur.execute('SELECT * FROM Account where username="'+un+'" and
userpassword="'+pwd+'"')
    result=cur.fetchall()
    ucode=result[0][0]
    if k==1:
        cur.execute('SELECT * FROM Account where username="'+un+'" and
userpassword="'+pwd+'"')
        result=cur.fetchall()
        print("%20s"%"USERCODE","%20s"%"USERPASSWORD","%20s"%"USERNAME")
        print('/'*191)
        for row in result:
            print("%20s"%row[0],"%20s"%row[1],"%20s"%row[2])
            print('/'*191)
    elif k==2:
        u=input('ENTER NEW USERNAME: ')
        p=input('ENTER NEW PASSWORD: ')
        cur.execute('update account set username="'+u+'", userpassword="'+p+'" where
usercode="'+str(ucode)+'"')
        con.commit()
        un=u
        pwd=p
        print('USERNAME PASSWORD CHANGED SUCCESSFULLY!!')
    elif k==3:
        body2(ucode)
    elif k==4:
        print('LOGGED OUT SUCCESSFULLY!!')
```

```python
            break

        else:

            print('INVALID INPUT. TRY AGAIN')




def initiate(n):

    print('/'*191)

    cur.execute("use Anand_Railway_Services")

    print('WECOLME TO ANAND RAILWAY SERVICES')

    print('/'*191)

    while n!=3:

        print('''1. LOGIN

2. SIGNUP

3. EXIT''')

        n=int(input("Enter choice: "))

        if n==1:

            print("PLEASE ENTER USERNAME")

            un=input()

            print("ENTER PASSWORD")

            pwd=input()

            cur.execute('select count(*) from account where username="'+un+'" and
userpassword="'+pwd+'"')

            result=cur.fetchall()

            if str(result[0][0])=='1':
```

```python
        print('/'*191)

        print("ACCEPTED!!")

        body(un,pwd)

    else:

        print("INVALID USER ID/PASSWORD, TRY SINGUP!!\n \n")

elif n==2:

    print("PLEASE ENTER USERNAME")

    un=input()

    print("ENTER PASSWORD")

    pwd=input()

    cur.execute('select count(*) from account where username="'+un+'" and userpassword="'+pwd+'"')

    result=cur.fetchall

    if result[0]==0:

        print("CONFIRM PASSWORD")

        pwd2=input()

        if pwd==pwd2:

            cur.execute('select max(usercode) from account')

            r1=cur.fetchall

            r2=r1[0][0]+random.randint(1,1000)

            q='insert into account values({},"{}","{}")'.format(r2,un,pwd)

            cur.execute(q)

            con.commit()

            print('/'*191)

            print('ACCOUNT CREATED SUCCESSFULLY!!')

            print('/'*191)
```

```python
        else:

            print('PASSWORDS DO NOT MATCH')

    else:

        print('DUPLICATE ACCOUNT FOUND. TRY ANOTHER
USERNAME/PASSWORD!!')

    elif n==3:

        print('/'*191)

        print('THANK YOU!!')

        print('/'*191)

        break

    else:

        print('INVALID INPUT. TRY AGAIN.')

con = mycon.connect(host='localhost', user='root', password = 'abc123')

cur = con.cursor()

initiate(None)
```

OUTPUTS:

Login:

```
*Python 3.7.8 Shell*                                                                          —   □   X
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py =========
//////////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
//////////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
DEB
ENTER PASSWORD
deb1234
//////////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
//////////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: |
```

Signup:

```
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py =========
//////////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
//////////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 2
PLEASE ENTER USERNAME
dj_plays_007
ENTER PASSWORD
emphatic0305
CONFIRM PASSWORD
emphatic0305
//////////////////////////////////////////////////////////////////////////////////////////////////
ACCOUNT CREATED SUCCESSFULLY!!
//////////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
dj_plays_007
ENTER PASSWORD
emphatic0305
//////////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
//////////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice:
```

Viewing Account Details:

```
/////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
dj_plays_007
ENTER PASSWORD
emphatic0305
/////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
/////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: 1
          USERCODE        USERPASSWORD         USERNAME
/////////////////////////////////////////////////////////////////////////////////////////////
            203          emphatic0305         dj_plays_007
/////////////////////////////////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: |
```

Alter Account Details:

```
Python 3.7.8 Shell*                                                    —  ☐  ✕
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py ========
/////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
/////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
dj_plays_007
ENTER PASSWORD
emphatic0305
/////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
/////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: 2
ENTER NEW USERNAME: dj_plays_007
ENTER NEW PASSWORD: emphatic03052003
USERNAME PASSWORD CHANGED SUCCESSFULLY!!
/////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: |
```

Viewing Bookings:

```
*Python 3.7.8 Shell*                                                                    —   □   ×
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py =========
//////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
//////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
DEB
ENTER PASSWORD
deb1234
//////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
//////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: 3
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice: 1
          USERCODE          TRAIN ID NUMBER OF PASSENGERS   DATE OF JOURNEY   TIME OF JOURNEY     NAME OF TRAIN          SOURCE        DESTINATION
                3              3333                 3          2020-12-07           7:30:00      HUMSAFAR EXPRESS      NEW DELHI           PATNA
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice:
```

Managing Bookings:

```
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice: 2
WARNING!! DO YOU REALLY WANT TO CANCEL BOOKING?[Y/N]Y
          USERCODE          TRAIN ID NUMBER OF PASSENGERS   DATE OF JOURNEY   TIME OF JOURNEY     NAME OF TRAIN          SOURCE        DESTINATION
                3              3333                 3          2020-12-07           7:30:00      HUMSAFAR EXPRESS      NEW DELHI           PATNA
Enter the Train Id of the train you want to cancel3333
BOOKINGS DELETED SUCCESSFULLY!! REFUND AMOUNT WILL BE SENT TO YOUR ACCOUNT SHORTLY!!
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice: |
```

New Booking:

```
*Python 3.7.8 Shell*                                                                    —   □   ×
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py =========
//////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
//////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
DEB
ENTER PASSWORD
deb1234
//////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
//////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: 3
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice: 3
```

```
Enter your choice: 3
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
WELCOME TO BOOKING TERMINAL
THE TRAINS AVAILABLE ARE AS FOLLOWS
    PNR          NAME          SOURCE      DESTINATION    SEATS  DEPARTURE   ARRIVAL                    TIER                        COST PER TICKET
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   11077     MAIL EXPRESS       PUNE       JAMMU TAWI      90    17:20:00   10:10:00          1AC 2AC 3AC SLEEPER                       367
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12019      SHATABDI         HOWRAH        RANCHI       102    6:05:00    13:15:00     1AC 2AC 3AC AC CHAIR CAR SLEEPER              300
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12038      SHATABDI        LUDHIANA      NEW DELHI      46    16:40:00   22:10:00          2AC 3AC AC CHAIR CAR                     400
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12267       DURONTO      MUMBAI CENTRAL  AHMEDABAD     100    23:25:00   5:55:00           2AC 3AC AC CHAIR CAR                     750
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12268       DURONTO       AHMEDABAD    MUMBAI CENTRAL  100    23:40:00   6:00:00           2AC 3AC AC CHAIR CAR                     750
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12426      RAJDHANI       JAMMU TAWI     NEW DELHI      42    19:40:00   5:05:00            AC CHAIR CAR SLEEPER                    348
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12430      RAJDHANI       NEW DELHI      LUCKNOW        70    20:50:00   6:40:00       1AC 2AC AC CHAIR CAR SLEEPER                 360
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   12437      RAJDHANI      SECUNDERABAD HAZRAT NIZAMUDDIN 80    12:45:00   10:25:00              1AC 2AC 3AC                          410
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   22201       DURONTO        SEALDAH        PURI         65    20:00:00   4:00:00           2AC 3AC AC CHAIR CAR                     245
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   22204       DURONTO      SECUNDERABAD  VISHAKHAPATNAM  112    20:15:00   6:35:00       1AC 2AC AC CHAIR CAR SLEEPER                 142
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
   22206       DURONTO        MADURAI       CHENNAI        78    22:40:00   7:20:00       1AC 2AC AC CHAIR CAR SLEEPER                 450
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
ENTER PNR OF THE TRAIN YOU WANT TO BOOK12019
ENTER TIER NAME1AC
Tier available!!
Enter date of journey[YYYY-MM-DD]2021-04-21
Enter the number of seats you want to book: 4
BOOKING DETAILS STORED!! PROCEEDING TO PAYMENT...
AMOUNT DUE:  1200
ENTER CARD NUMBER: 1234567890123456
ENTER CVV: 123
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
PAYMENT SUCCESSFUL
/////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

<u>Checking Whether the Booking has been Stored to Account:</u>

```
PAYMENT SUCCESSFUL
///////////////////////////////////////////////////////////////////////////////////////////////////////////////.
1. VIEW BOOKINGS
2. MANAGE BOOKINGS
3. NEW BOOKING
4. MAIN MENU
Enter your choice: 1
       USERCODE        TRAIN ID NUMBER OF PASSENGERS   DATE OF JOURNEY   TIME OF JOURNEY   NAME OF TRAIN    SOURCE     DESTINATION
          3              12019            4              2021-04-21         6:05:00         SHATABDI       HOWRAH        RANCHI
```

Clearly the booking is successful as the booking details have been stored to account.

Terminating the Program:

```
Python 3.7.8 (tags/v3.7.8:4b47a5b6ba, Jun 28 2020, 07:55:33) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========= RESTART: C:\Users\sipri\Desktop\COMP PRAC PROJ\Final\Final.py ========
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
WECOLME TO ANAND RAILWAY SERVICES
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 1
PLEASE ENTER USERNAME
DEB
ENTER PASSWORD
deb1234
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
ACCEPTED!!
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
1. VIEW ACCOUNT
2. ALTER ACCOUNT DETAILS
3. MORE
4. LOGOUT
Enter your choice: 4
LOGGED OUT SUCCESSFULLY!!
1. LOGIN
2. SIGNUP
3. EXIT
Enter choice: 3
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
THANK YOU!!
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
>>>
```

LIMITATIONS

- *Gui could not be implemented due to CBSE syllabus limitations.*

- *Search filters could not be added due to time constraints.*

- *More variety of trains could not be added due to time constraints.*

BIBLIOGRAPHY

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