PART B – Micro-project Report

Title of Micro-Project: Railway Management System.

- 1. Rationale: The Railway management system is developed using java programming language using different variables and strings. In railway management system, passenger can easily book tickets, cancel reservation, view the railway schedule and also check the passenger list. It manages all the information about passenger reservation and ticket booking.
- 2. Aim: Aim of this micro-project is to build an application program to reduce the manual work for managing the passenger reservation, railways booking, passenger enquiry and to increase efficiency of managing the reservation and booking of railway.

3. Course outcomes Addressed:

CO1: Develop programs using Object Oriented methodology in Java.

CO2: Apply concept of inheritance for code reusability.

4. Literature Review:

In railway management system, passenger can easily book tickets, cancel reservation, view the railway schedule and also check the passenger list. It manages all the information about passenger reservation and ticket booking.

5. Actual Methodology Followed:

- 1. Gathering basic information about Railway management system and its terms.
- 2. Making proposal of micro-project.
- 3. Making changes in proposal if required.
- 4. Developing java program to create Railway management system.
- 5. Checking the output of program and making some changes.
- 6. Preparing the report of micro-project.

6. Actual Resources Used:

S.no.	Name of Resource/material	Specification	Qty	Remarks
1)	Jdk 1.8.0	Execute the	1	
		program		
2)	Word	Designing the	1	
		project		
		information		
		and typing		

7.0 Code and Outputs of the Micro-Projects:

```
class reservation extends railway
String fname, Iname, mname;
int sno,tno,pid;
void first()
super.intro();
Scanner sc=new Scanner(System.in);
void getdata()
System.out.print("\n\n Enter your First Name=");
fname=sc.next();
System.out.print(" enter your Middle Name=");
mname=sc.next();
System.out.print(" enter your last name=");
lname=sc.next();
System.out.print(" enter your passenger id=");
pid=sc.nextInt();
System.out.print(" enter your seat no=");
sno=sc.nextInt();
System.out.print(" enter your train no=");
tno=sc.nextInt();
void show()
System.out.println("\n "+ pid+" "+fname+" "+mname+" "+lname+"
"+sno+" "+tno);
public static void main(String args[])
Scanner sc=new Scanner(System.in);
reservation re[]=new reservation[100];
int ch,ch1,x,id,q,p=0,num=0,flag=0;
do
RESERVATION SYSTEM************************
```

```
System.out.println("=======our
services========::);
System.out.println("\n 1:VIEW ALL AVAILABLE TRAINS");
System.out.println(" 2:RESERVE TICKET");
System.out.println(" 3:CANCEL RESERVATION");
System.out.println(" 4:RESERVATION LIST");
System.out.println(" 5:EXIT");
System.out.print(" enter your choice :");
ch=sc.nextInt();
switch(ch)
{
case 1:
System.out.println("\n TR.NO\t TNAME\t\t\t DESTINATION
\tCHARGES\t TIME'');
System.out.println("\n 1001 \t RAJDHANI EXPRESS\tMUMBAI-DELHI
\t 5000 \t 9.00 AM'');
System.out.println(" 1002 \t REDLINE EXPRESS\tDELHI-MUMBAI \t
5000 \t 12.00 PM");
System.out.println(" 1003 \t SHATABDI EXPRESS\tBANGLORE-PUNE
\t 4500 \t 8.00 AM'');
System.out.println(" 1004 \t LA CITY EXPRESS\tPUNE-BANGLORE \t
4500 \t 11.00 AM");
System.out.println(" 1005 \t DURONTO EXPRESS\tNASHIK-GOA \t
4000 \t 7.00 AM'');
System.out.println(" 1006 \t IRONCITY EXPRESS\tGOA-NASHIK \t
4000 \t 9.30 AM'');
System.out.println(" 1007 \t KEYSTONE EXPRESS\tNAGPUR-NANDED
\t 3500 \t 1.00 PM'');
System.out.println(" 1008 \t GATIMAAN EXPRESS\tNANDED-
NAGPUR \t 3500 \t 4.00 PM");
System.out.println(" 1009 \t SUNRISE EXPRESS\tKACHCH-PUNJAB \t
3000 \t 6.00 AM");
System.out.println(" 1010 \t SUNRISE EXPRESS\tPUNJAB-KACHCH \t
3000 \t 10.00 PM");
break;
```

```
if (flag==0)
System.out.println("****************enter the details of
System.out.print("\n\n how many person you want=");
x=sc.nextInt();
for(int i=0;i<x;i++)
re[i]=new reservation();
for(int i=0;i<x;i++)
re[i].getdata();
flag++;
num=num+x;
else
System.out.println("****************enter the details of
System.out.print("\n\n how many person you want=");
x=sc.nextInt();
int a=x;
a=a+num;
for(int i=num;i<a;i++)</pre>
re[i]=new reservation();
int i=0;
i=i+num;
do
re[i].getdata();
i++;
```

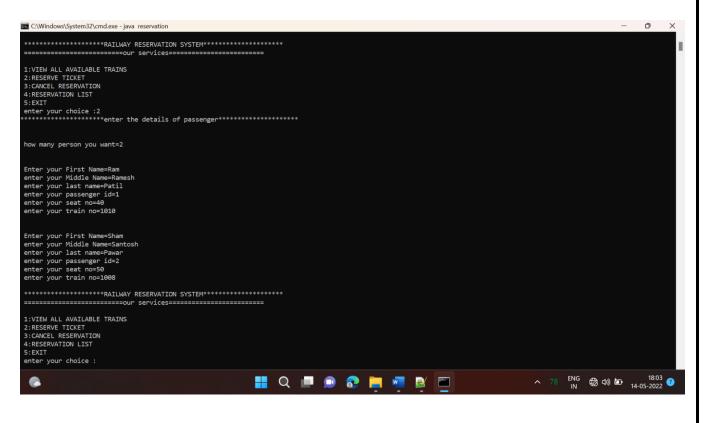
```
}while(p!=x);
num=num+x;
break;
case 3:
System.out.print("\n\nenter passenger id to cancel the ticket=");
id=sc.nextInt();
int post=0;
for(int i=0;i<num;i++)</pre>
if(id==re[i].pid)
post=i+1;
break;
if(post==0)
System.out.print("passenger with given id wasn't found...");
else
for(int i=post-1;i<num;i++)</pre>
re[i]=re[i+1];
num--;
break;
case 4:
System.out.println("
====");
System out.println("\n\n Pass_id FNAME MNAME LNAME SNO
```

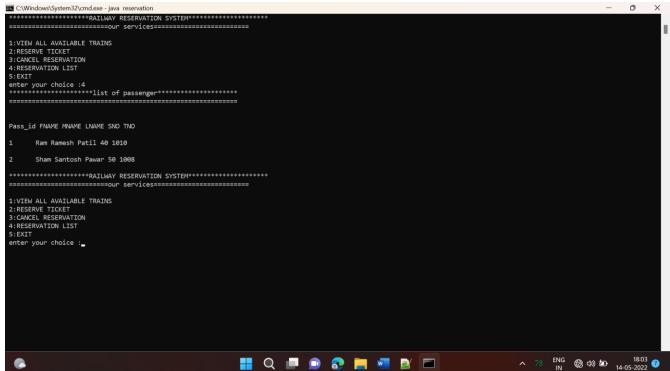
```
TNO");
for(int i=0;i<num;i++)
{
    re[i].show();
}

break;
case 5:
break;
}
}while(ch!=5);
}
```

Screenshots:

```
- o ×
C:\Windows\Svstem32\cmd.exe - java reservation
Microsoft Windows [Version 10.0.22610.1]
(c) Microsoft Corporation. All rights reserved.
  :\Java Programs>javac reservation.java
  :\Java Programs>java reservation
 1:VIEW ALL AVAILABLE TRAINS
2:RESERVE TICKET
3:CANCEL RESERVATION
4:RESERVATION LIST
5:EXIT
 enter your choice :1
 TR.NO TNAME
                                               DESTINATION
                                                                     CHARGES TIME
                                                                                   9.00 AM
12.00 PM
8.00 AM
11.00 AM
7.00 AM
9.30 AM
1.00 PM
4.00 PM
6.00 AM
10.00 PM
            RAJDHANI EXPRESS
REDLINE EXPRESS
SHATABDI EXPRESS
LA CITY EXPRESS
DURONTO EXPRESS
                                              MUMBAI-DELHI
DELHI-MUMBAI
BANGLORE-PUNE
PUNE-BANGLORE
NASHIK-GOA
GOA-NASHIK
                                                                       5000
5000
4500
4500
4000
4000
3500
3500
            IRONCITY EXPRESS
KEYSTONE EXPRESS
GATIMAAN EXPRESS
                                              GOA-NASHIK
NAGPUR-NANDED
                                              NANDED-NAGPUR
KACHCH-PUNJAB
PUNJAB-KACHCH
            SUNRISE EXPRESS
SUNRISE EXPRESS
 1:VIEW ALL AVAILABLE TRAINS
2:RESERVE TICKET
3:CANCEL RESERVATION
4:RESERVATION LIST
5:EXIT
 enter your choice :_
                                                                                                                                                                                                                  ENG (18:01) (7) (18 (14-05-2022)
                                                                                          👭 Q 🔎 🗩 🔂 🏣 💆 🖼
```





```
Pass_id FNAME MNAME LNAME SNO TNO
    Ram Ramesh Patil 40 1010
    Sham Santosh Pawar 50 1008
1:VIEW ALL AVAILABLE TRAINS
2:RESERVE TICKET
3:CANCEL RESERVATION
4:RESERVATION LIST
5:EXIT
enter your choice :3
enter passenger id to cancel the ticket=2
1:VIEW ALL AVAILABLE TRAINS
2:RESERVE TICKET
3:CANCEL RESERVATION
4:RESERVATION LIST
5:EXIT
Pass id FNAME MNAME LNAME SNO TNO
    Ram Ramesh Patil 40 1010
============our services==
                                                                                      🔡 Q 🔎 🗩 📀 📮 🥶 🥞 🔤
```

8.0 Skill Developed / Learning outcome of this Micro-Project:

We learned how to create project, we learn how to use switch case and different operators in Java Programming Language.