A
PROJECT REPORT

ON

"Railway Reservation Management System"

FOR

Arts, Commerce & Science College, Sonai

SUBMITTED TO SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

BY

Miss. Vairagar Sonali Sanjay

Under the Guidance of

Shri. Gaikwad B.A

Shri. Bahirat M.R

IN PARTIAL FULLFILLMENT OF BACHELOR OF COMPUTER APPLICATIONS

FOR THE ACADEMIC YEAR

2020-2021

Mula Education Society's
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Affiliated to Savitribai Phule Pune University (I.D.PU/AN/ASC/031/1989)
NAAC REACCREDITED 'A' GRADE and ISO 9001 : 2008 CERTIFIED

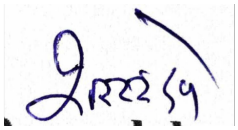
Date:

CERTIFICATE

This is to certify that **Miss.Vairagar Sonali Sanjay** rebonafide students of **Arts, Commerce and Science College, Sonai** have successfully completed the Mini project work as prescribed by the Savitribai Phule Pune University, Pune in the partial fulfillment of the requirement of Third Year, Bachelor of Business Administration (Computer Application). Program for the academic year **2020-2021**.

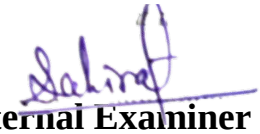
The Project Work titled as "Railway Reservation Management System"

Shri. Gaikwad B.A
Project Guide



Dr.Darandale .S.R
H.O.D.

External Examiner



Internal Examiner

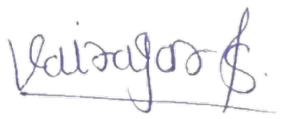
ACKNOWLEDGEMENT

At every outset we express my gratitude to almighty lord for showering his grace and blessings upon me to complete this project.

Although our name appears on the cover of this book, many people had contributed in some form or the other form to this project Development. We could not do this project without the assistance or support of each of the following we thank you all.

We wish to place on my record my deep sense of gratitude to my project guide, for his constant motivation and valuable help through the project work. Express my gratitude to **Dr. Laware S.L.(Principal)** and **Dr. Darandale S.R. (H.O.D.)** of **Arts, Commerce & Science College, Sonai** for her valuable suggestions and advices throughout the **B.B.A(CA)** course. We also extend my thanks to other faculties for their Cooperation during my Course.

Finally, we would like to thank my friends for their co-operation to complete this project.

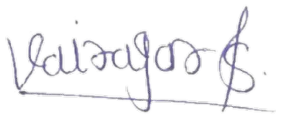


Miss. Vairagar Sonali Sanjay

DECLARATION

We hereby declare that the project work entitled, "**Railway Reservation Management System"** submitted under the guidance of **Shri. Gaikwad B.A.** is our original work completed under the four walls of our institute.

The Report submitted is our own work and has not been duplicated from any other source. We shall be responsible for any unpleasure moment/situation.



Miss. Vairagar Sonali Sanjay

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INTRODUCTION

Railway Management System is help to owner for storing all kinds of Reservation related information in project. Railway Reservation Management System is including module customer, registration and Bill. A project Railway Reservation Management System, which is developed to help the technical experts of database purpose. In this project owner can store various details of information. Owner easily generate the report of stocks.

It can also store information about Passenger likes Id, Name , Mobile No, etc. Using this, user can stay record about their customer. In it they can store their daily report of daily transaction.

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Thus Java was chosen as background to design this application.

In this world of growing technologies everything has been computerized. With large number of work opportunities the Human workforce has increased. Thus, there is a need of a system which can handle the data of such a large number of passenger in city. This project simplifies the task of maintain records because of its user friendly nature.

EXITING SYSTEM

The work that was being carried out with the help of manual system had to be transferred to the computer & internet for variety of reasons.

1) The manual system is slowly being passed out and all the activities that are being carried out by manual system are to taken into care of by the computer system.
2) There were many systems that demanded computerization but were not being covered by the manual system.
3) Actual time required for solution of particular task takes lot of time but computer system it is very fast and easy by using query facility.
4) In manual system reports, storage, calculation and other documentations takes more time that causes delay in processing, so by computerization of the system this delay processing problem is solved.
5) In the existing system the user cannot get fast service, but by computerization it is done much faster.

SCOPE OF SYSTEM

- This system provides security.
- It also helps to maintain Customer records.
- It helps to update registration details quickly & easily.
- It helps to maintain database accurately.
- Since proposed system is computerized, so fast calculation is done.
- It is time saving since it maintains record accurately.
- It does manual task of existing system automatically in effective and efficient manner.
- It provides user friendly GUI.

Through this Railway Reservation system it is possible to print various reports require for the organization.

Scope of the system is as following: -

1) Maintain ace of master file.
2) Data entry for various transactions.
3) Printing of various reports.

For all of this clear information and understanding should have done regarding system. The proper documentation should be necessary

. proper normalization and creating database files should have done properly also various designing should have done.

Finally, the system should have tested properly be tally reports that can be giving much experience in system development.

SYSTEM ANALYSIS

❖FACT FINDING TECHNIQUES

1. Interview:-

During the system study, information of customer of the system have to be taken. We have to show them the data of the system.

2. Observation:-

The basic information about various activities that are carried out can be studied through observation. This method was used to how the documents are handled and to understand the actual manual process.

3. Record Review:-

Documents study is also helped in determining the Input and output of the system. In this type of technique, as we have to study the existing/previous records and reports that helps us in generating an overview for out new system which is to be designed.

❖FEASIBILITY STUDY

An important outcome of preliminary investigation is determination that the system requested is feasible. There are three aspects of feasibility study as follows.

1. Technical Feasibility Study: -

The main aspects of technical feasibility study in Railway Reservation Management System that it is secured by password that will not allow the unknown person to access the system.

2. Economical Feasibility Study: -

The proposed system is economically feasible because the cost of hardware and software installation and maintenance is affordable.

3. Operational Feasibility Study: -

The proposed system being user friendly, it can accept by anybody who has the basic knowledge of computer. This computerized system is very easy to understand.

❖ Hardware and Software Requirement

- Software Requirements:
- "The utility programs which are required to drive the Hardware of the computer are called software."

Operating System : Windows7/10

Technology: Java

Front-End: Java

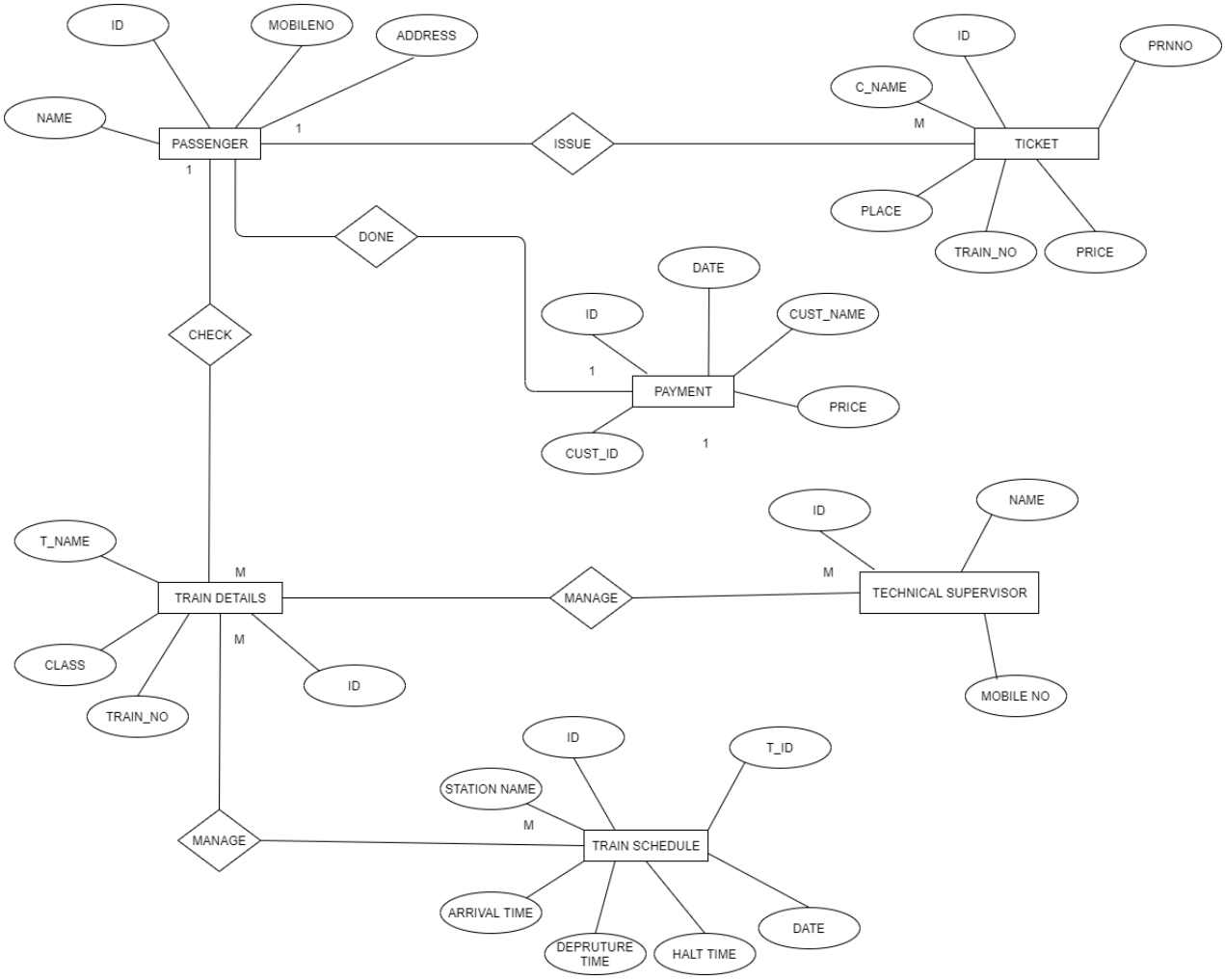
Back-End : MySQL

- Hardware Requirements:-
- "The entire physical equipment's i.e. Input device, processor, output device and inter connecting equipment of computer is called as hardware"

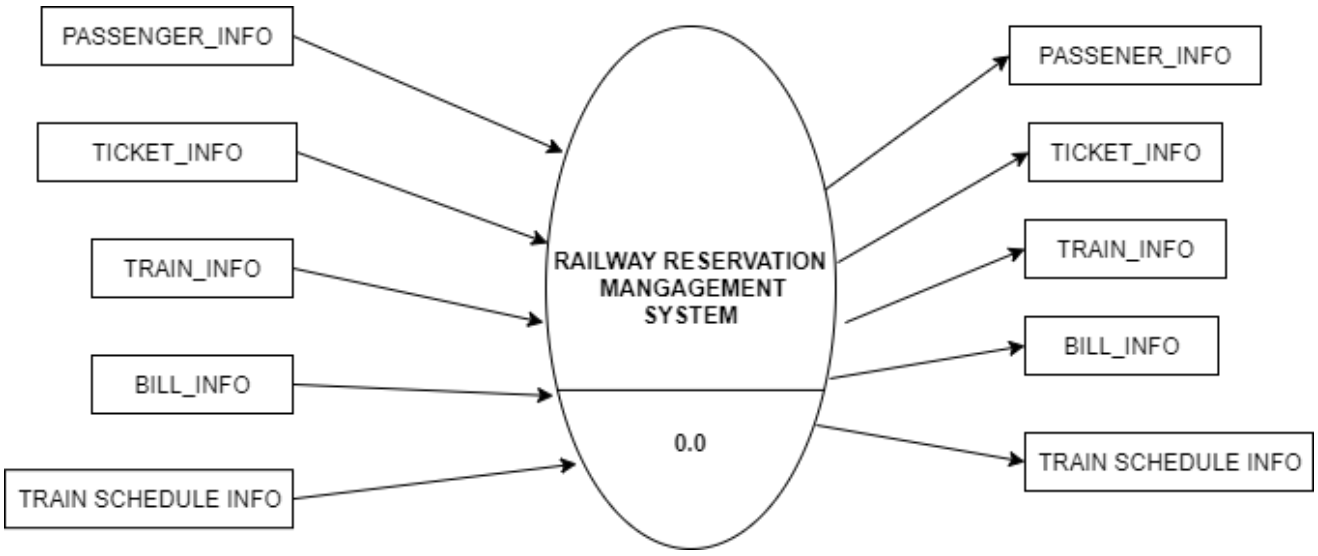
- Processor – i3
- Hard Disk – 5 GB
- 1 GB of RAM
- Keyboard/Mouse
- LCD Display

SYSTEM DESIGN

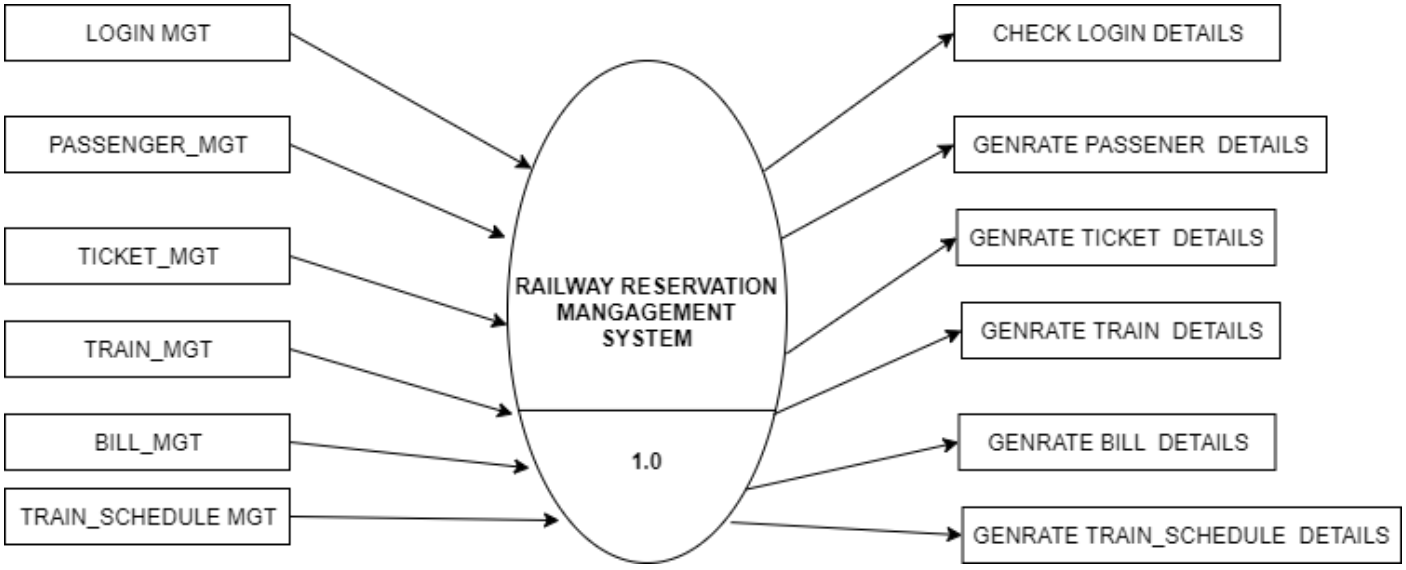
E-R diagram


ID
MOBILENO
ADDRESS
NAME
PASSENGER
1
1
ISSUE
ID
PRNNO
C_NAME
M
TICKET
PLACE
TRAIN_NO
PRICE
DONE
DATE
ID
CUST_NAME
CHECK
1
PAYMENT
PRICE
CUST_ID
1
ID
NAME
T_NAME
M
M
TRAIN DETAILS
MANAGE
TECHNICAL SUPERVISOR
CLASS
M
ID
MOBILE NO
TRAIN_NO
ID
T_ID
STATION NAME
MANAGE
M
TRAIN SCHEDULE
ARRIVAL TIME
DEPRUTURE TIME
HALT TIME
DATE

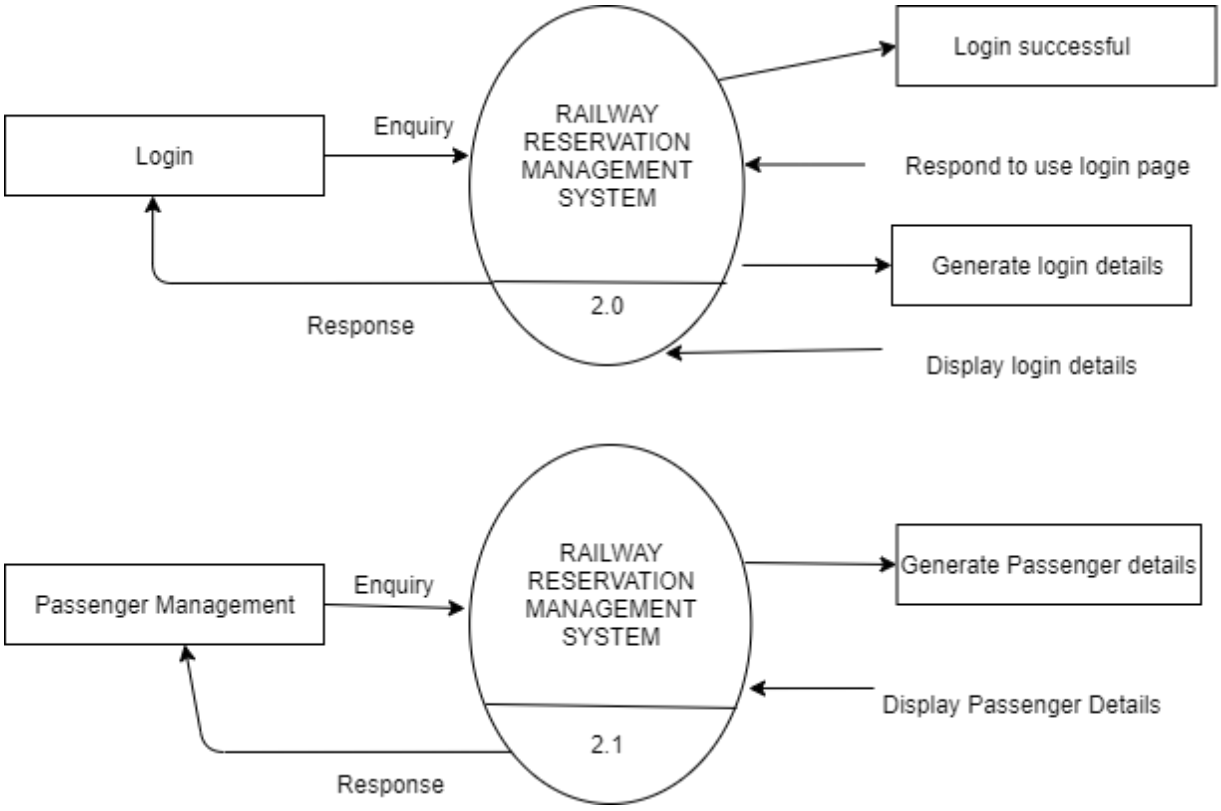
Data Flow Diagram (Level 0)



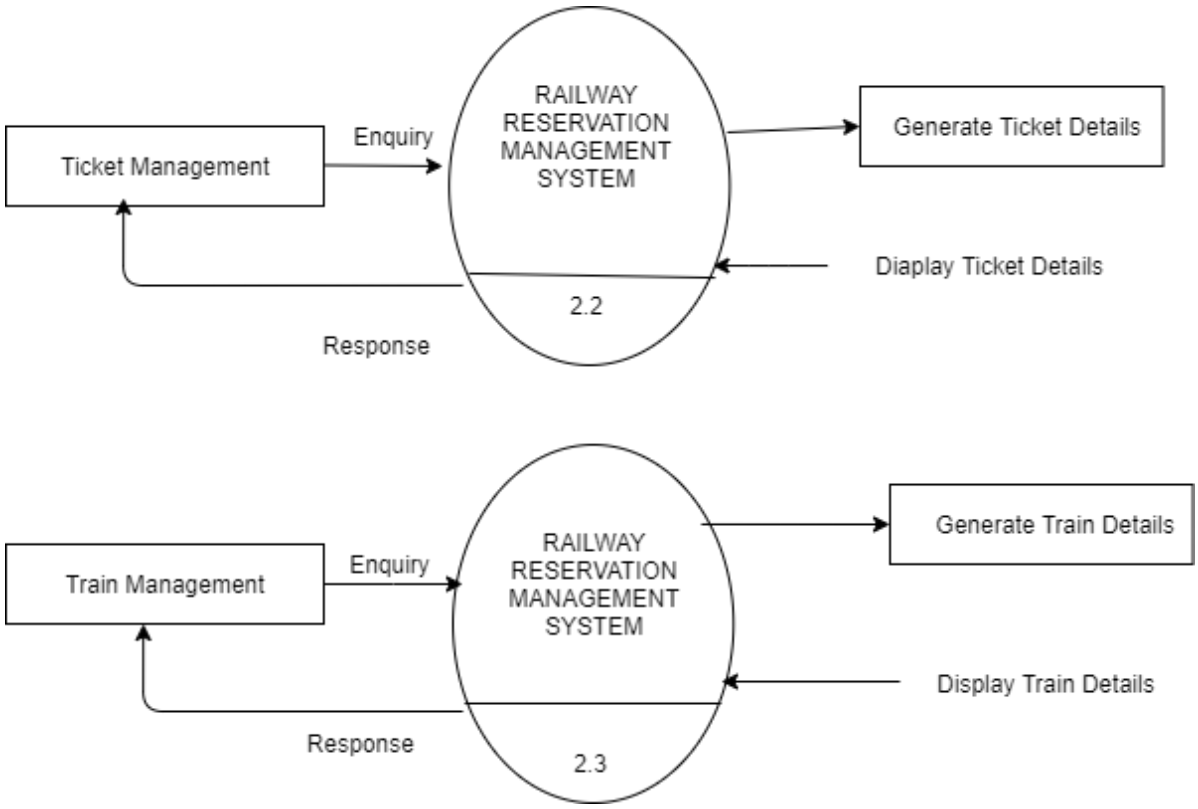
Data Flow Diagram (Level 1)



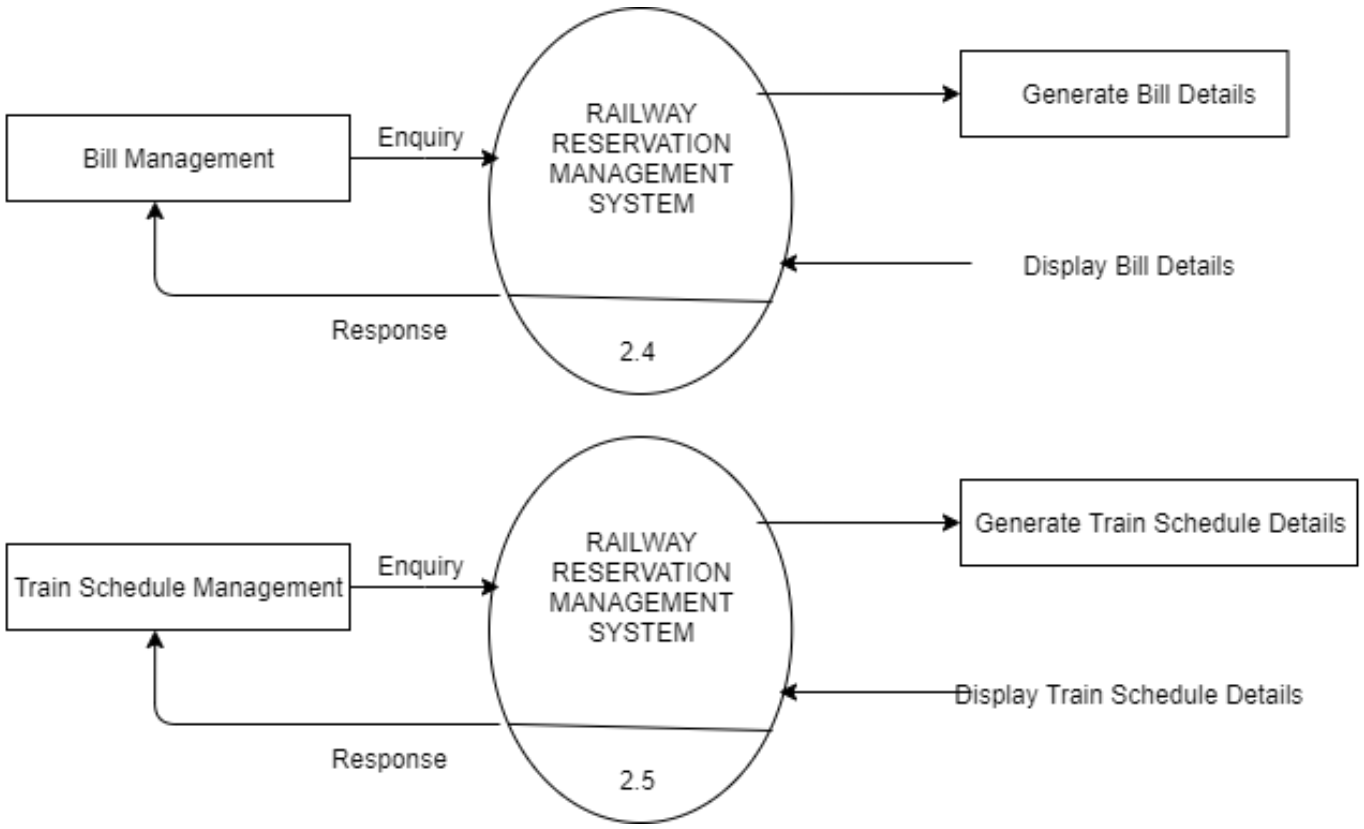
Data Flow Diagram (Level 2)



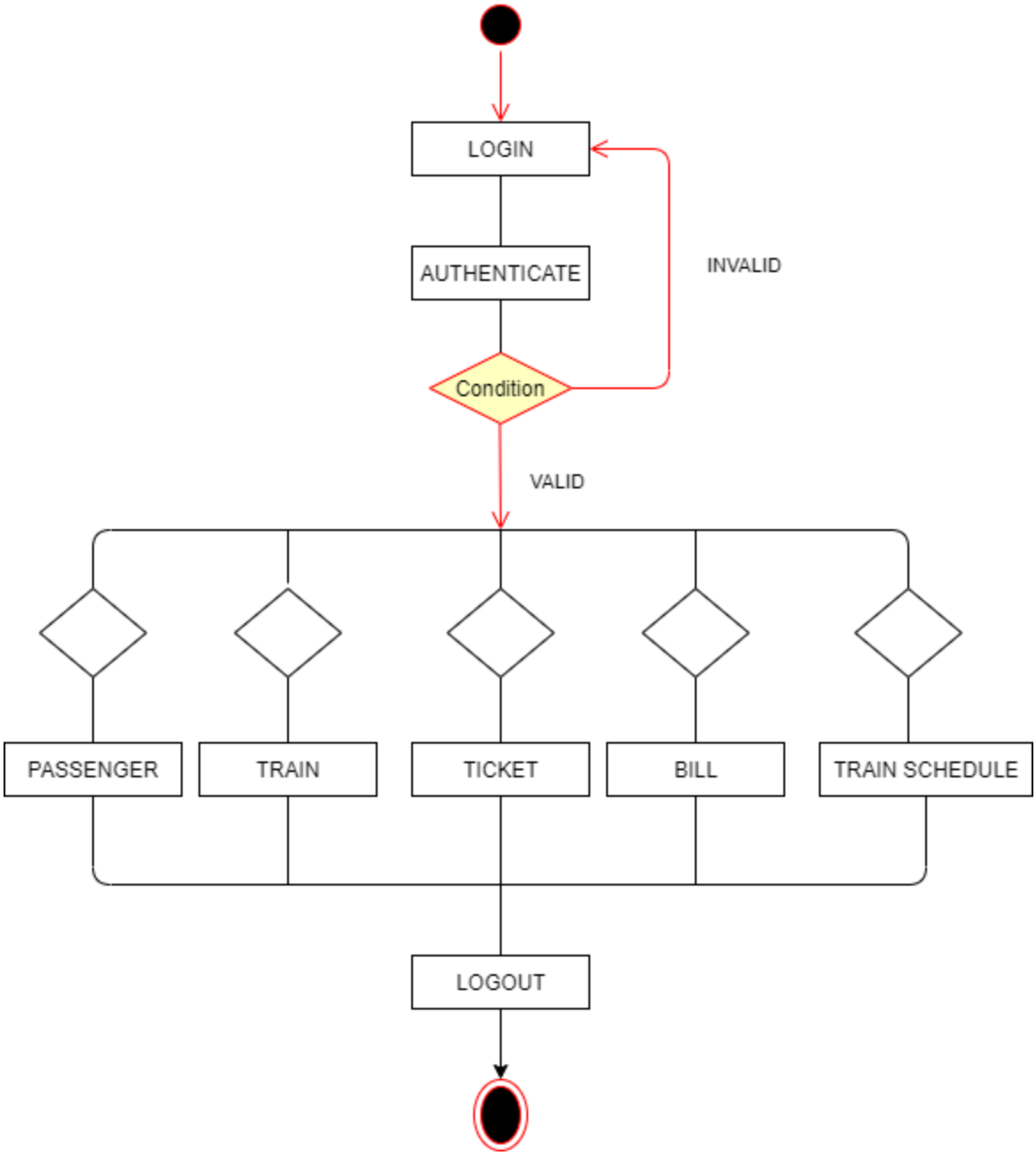
Data Flow Diagram (Level 2)



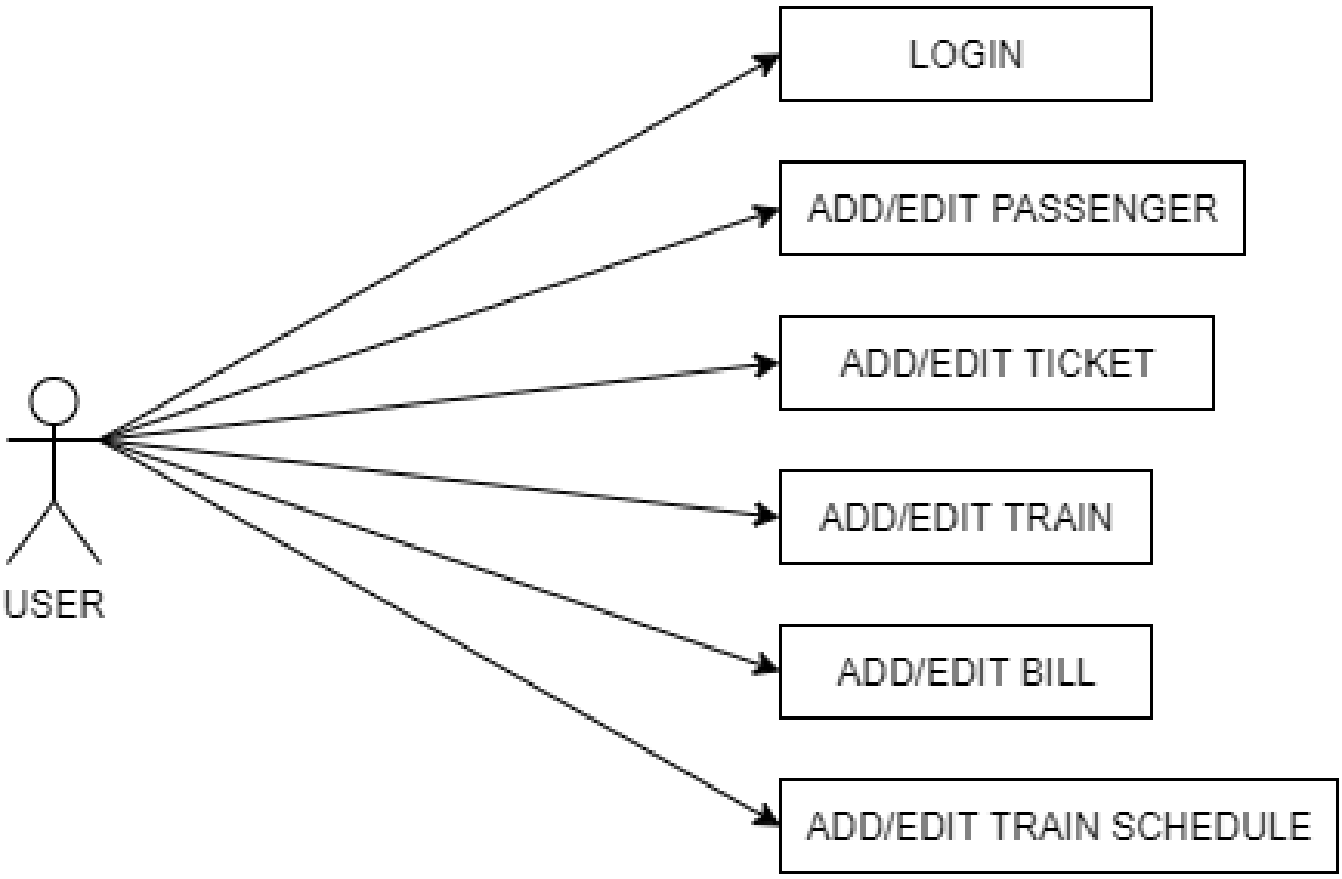
Data Flow Diagram (Level 2)



UML Diagram


LOGIN
AUTHENTICATE
INVALID
Condition
VALID
PASSENGER
TRAIN
TICKET
BILL
TRAIN SCHEDULE
LOGOUT

Use Case Diagram



FILE DESIGN

1. Passenger Master

FILED NAME	TYPE	WIDTH	CONSTRAINTS
Id	Number	10	Primary Key
Name	Text	25	
Mobile No	Number	10	
Address	Text	20	

2. Ticket Master

FILED NAME	TYPE	WIDTH	CONSTRAINTS
ID	Number	10	Primary key
Pass ID	Number	25	Foreign key
PRN No	Number	10	
Place	Text	25	
Train No	Number	10	
Train Name	Text	30	
Date	Date		
Price	Currency		

3.Train Master

FIELD NAME	TYPE	WIDTH	CONSTRAINTS
Id	Number	10	Primary Key
Train id	Number	10	Foreign Key
Train Name	Text	25	
Train Class	Text	10	

4.Train Schedule Master

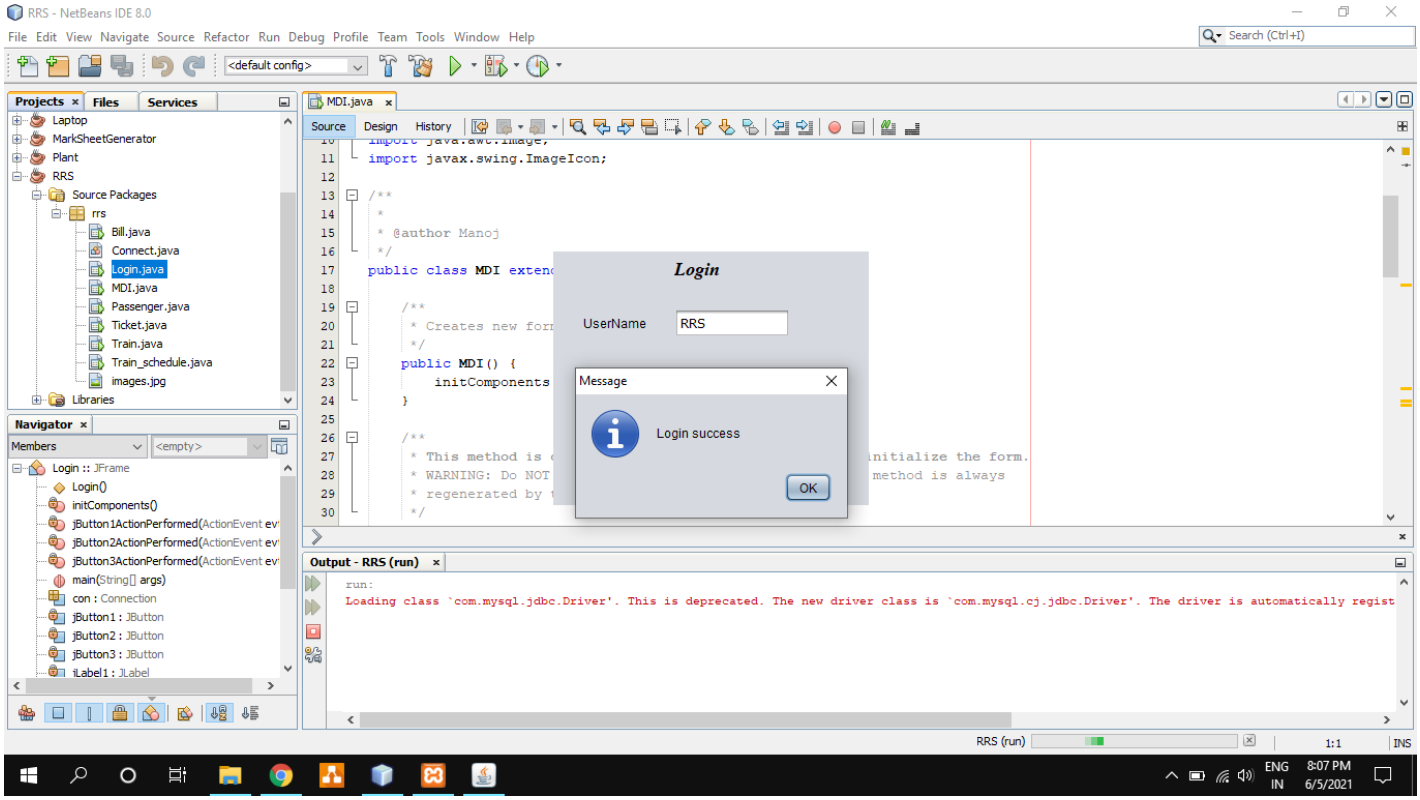
FIELD NAME	TYPE	WIDTH	CONSTRAINTS
Id	Number	10	Primary Key
Train id	Number	10	Foreign Key
Station Name	Text	25	
Arrival Time	Number		
Departure Time	Number		
Halt Time	Number		
Date	Date	-	

5.Bill

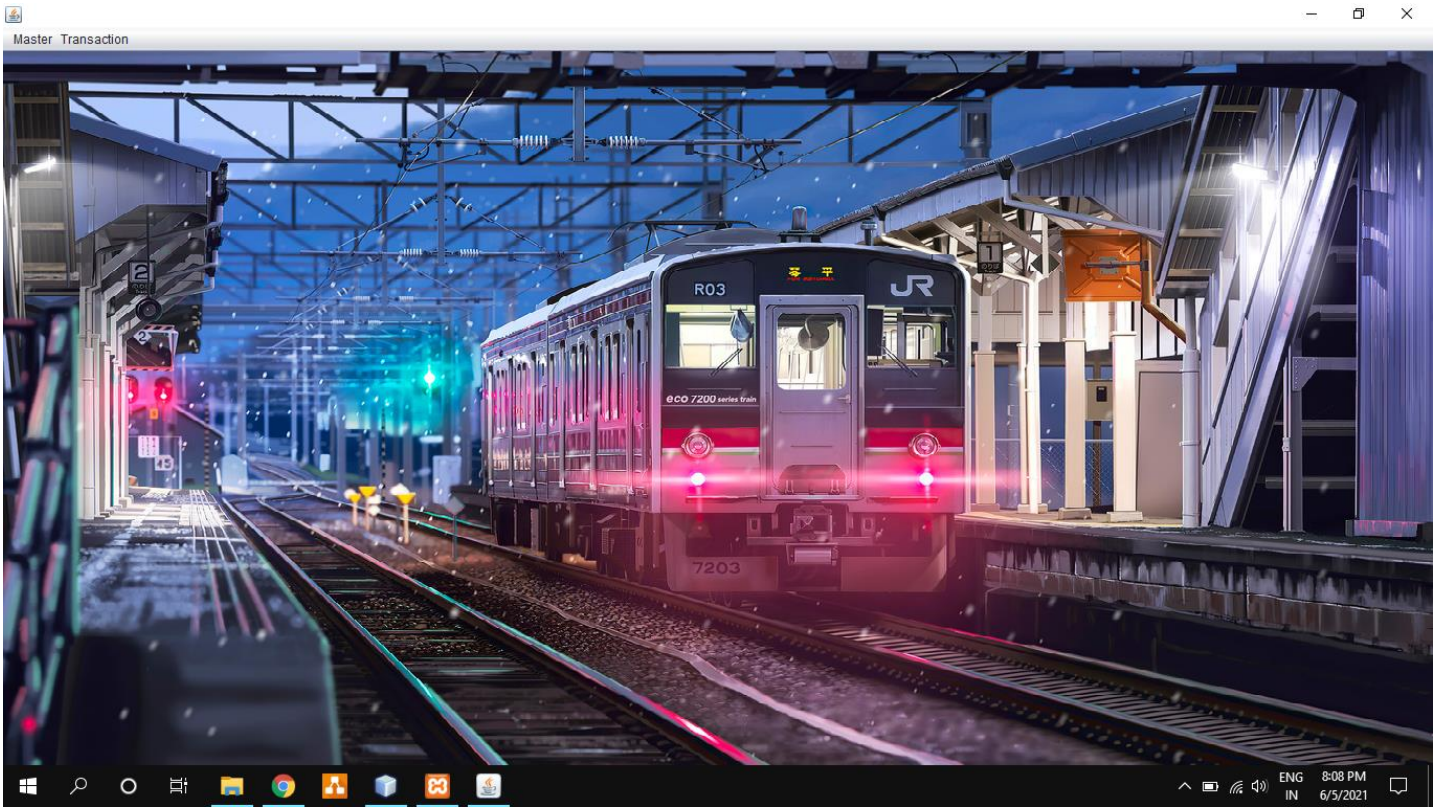
FIELD NAME	TYPE	WIDTH	CONSTRAINTS
Id	Number	10	Primary Key
Cust id	Number	10	Foreign Key
Cust Name	Number	25	
Date	Date	-	
Price	Currency	10	

FORM DESIGNS (WITH INPUT)

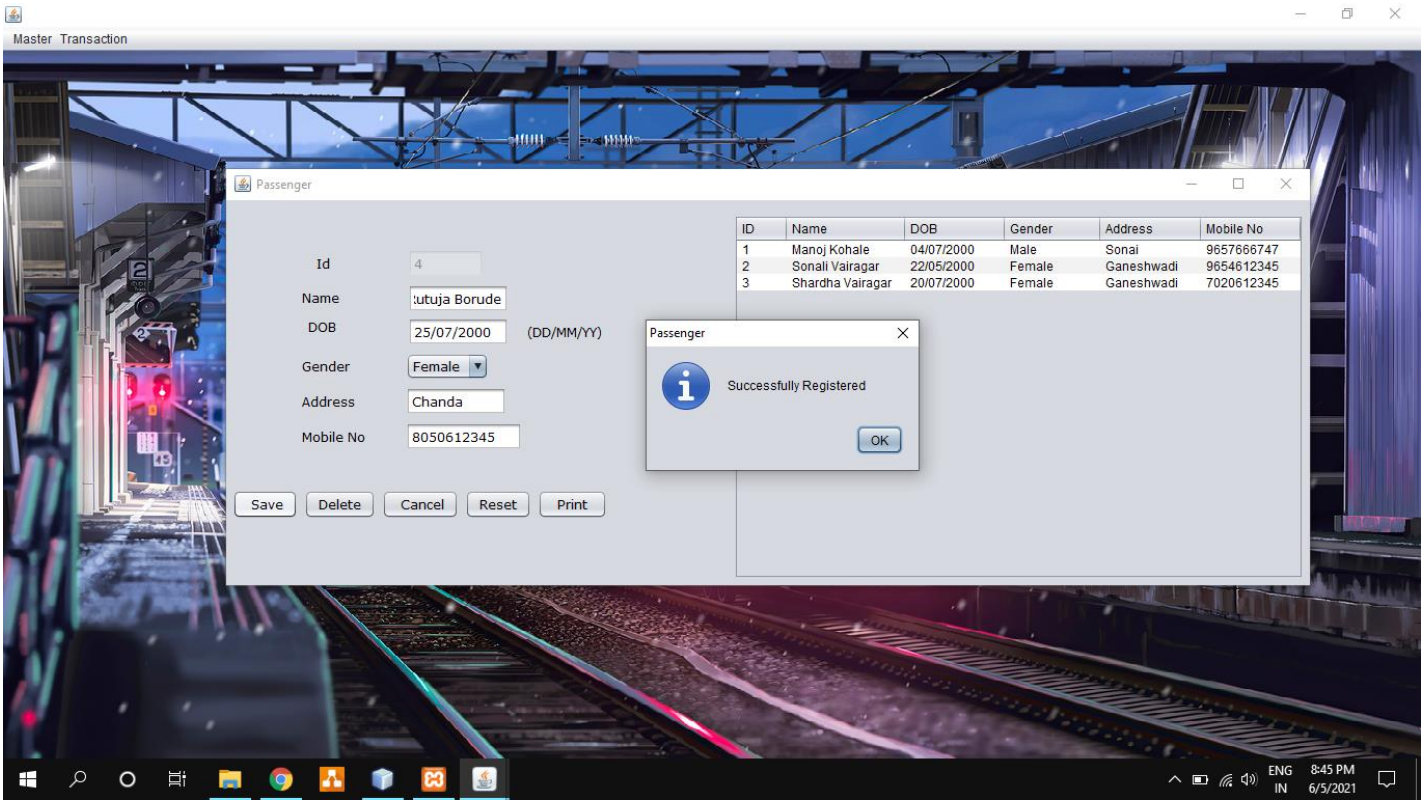
Login Form



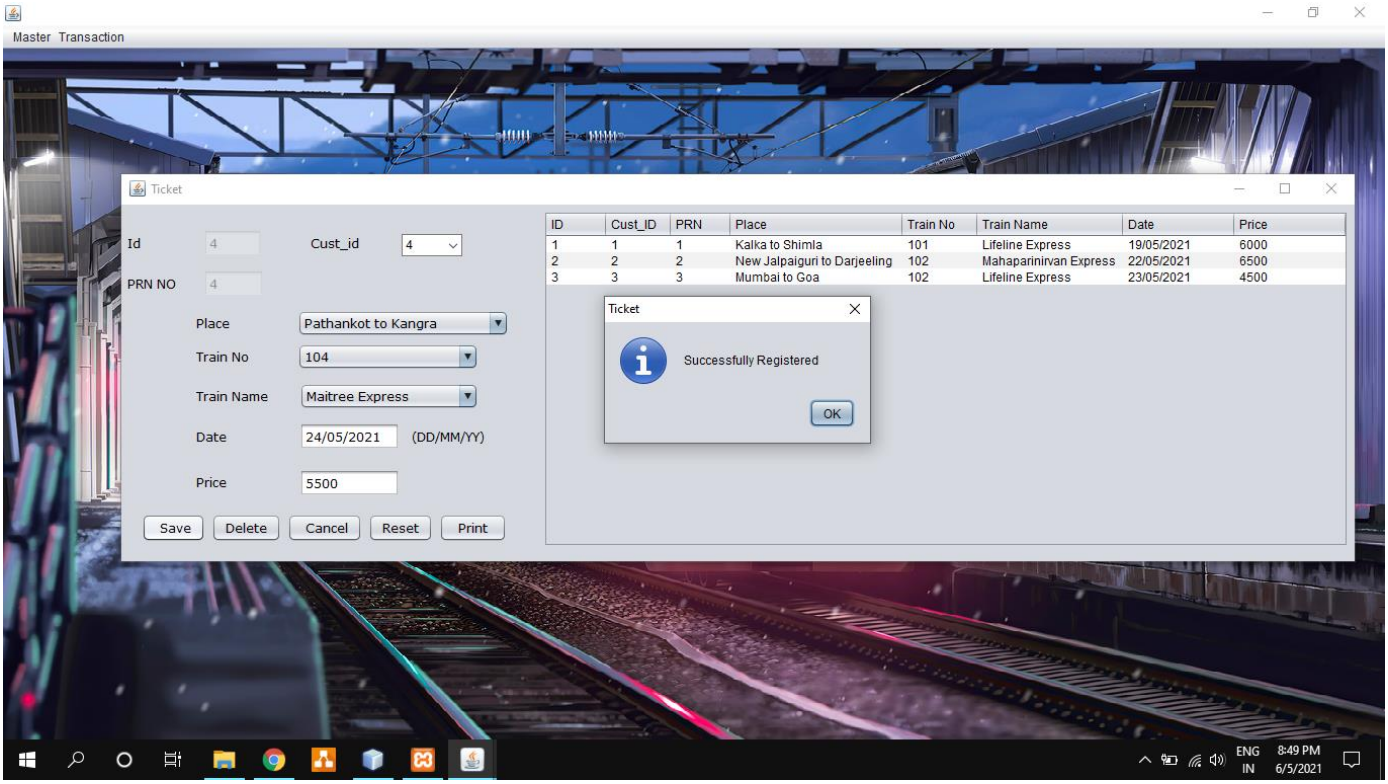
MDI Form


Master Transaction
R03
JR
eco 7200 series train
7203
ENG
IN
8:08 PM
6/5/2021

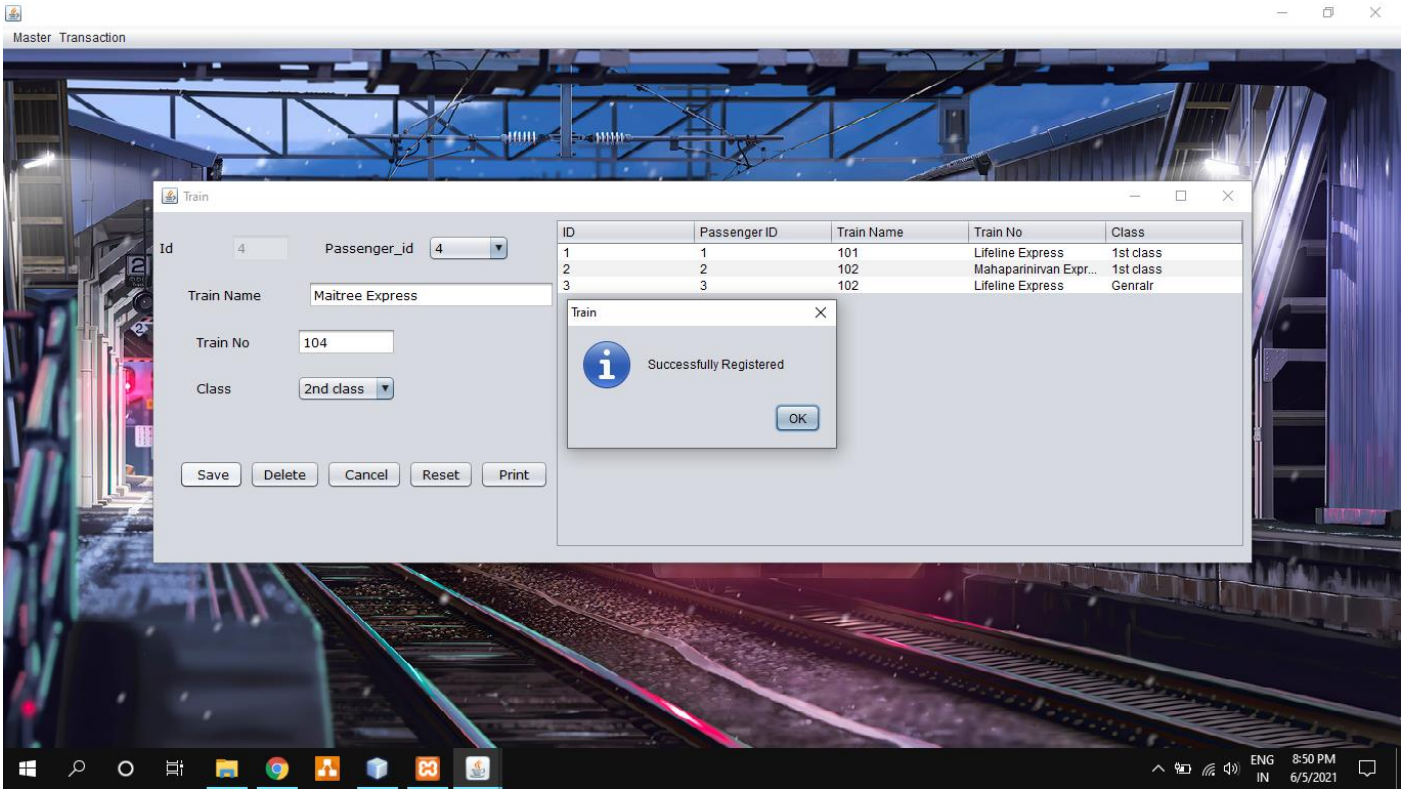
Passenger:


Master Transaction
Passenger
Id
4
Name
:utuja Borude
DOB
25/07/2000
(DD/MM/YY)
Gender
Female
Address
Chanda
Mobile No
8050612345
Save
Delete
Cancel
Reset
Print
ID
Name
DOB
Gender
Address
Mobile No
1
Manoj Kohale
04/07/2000
Male
Sonai
9657666747
2
Sonali Vairagar
22/05/2000
Female
Ganeshwadi
9654612345
3
Shardha Vairagar
20/07/2000
Female
Ganeshwadi
7020612345
Passenger
Successfully Registered
OK
ENG
IN
8:45 PM
6/5/2021

Ticket:


Master Transaction
Ticket
Id
4
Cust_id
4
PRN NO
4
Place
Pathankot to Kangra
Train No
104
Train Name
Maitree Express
Date
24/05/2021
(DD/MM/YY)
Price
5500
Save
Delete
Cancel
Reset
Print
ID Cust_ID PRN Place Train No Train Name Date Price
1 1 1 Kalka to Shimla 101 Lifeline Express 19/05/2021 6000
2 2 2 New Jalpaiguri to Darjeeling 102 Mahaparinirvan Express 22/05/2021 6500
3 3 3 Mumbai to Goa 102 Lifeline Express 23/05/2021 4500
Ticket
Successfully Registered
OK
ENG
IN
8:49 PM
6/5/2021

Train:


Master Transaction
Train
Id
4
Passenger_id
4
Train Name
Maitree Express
Train No
104
Class
2nd class
Save
Delete
Cancel
Reset
Print
ID
Passenger ID
Train Name
Train No
Class
1
1
101
Lifeline Express
1st class
2
2
102
Mahaparinirvan Expr...
1st class
3
3
102
Lifeline Express
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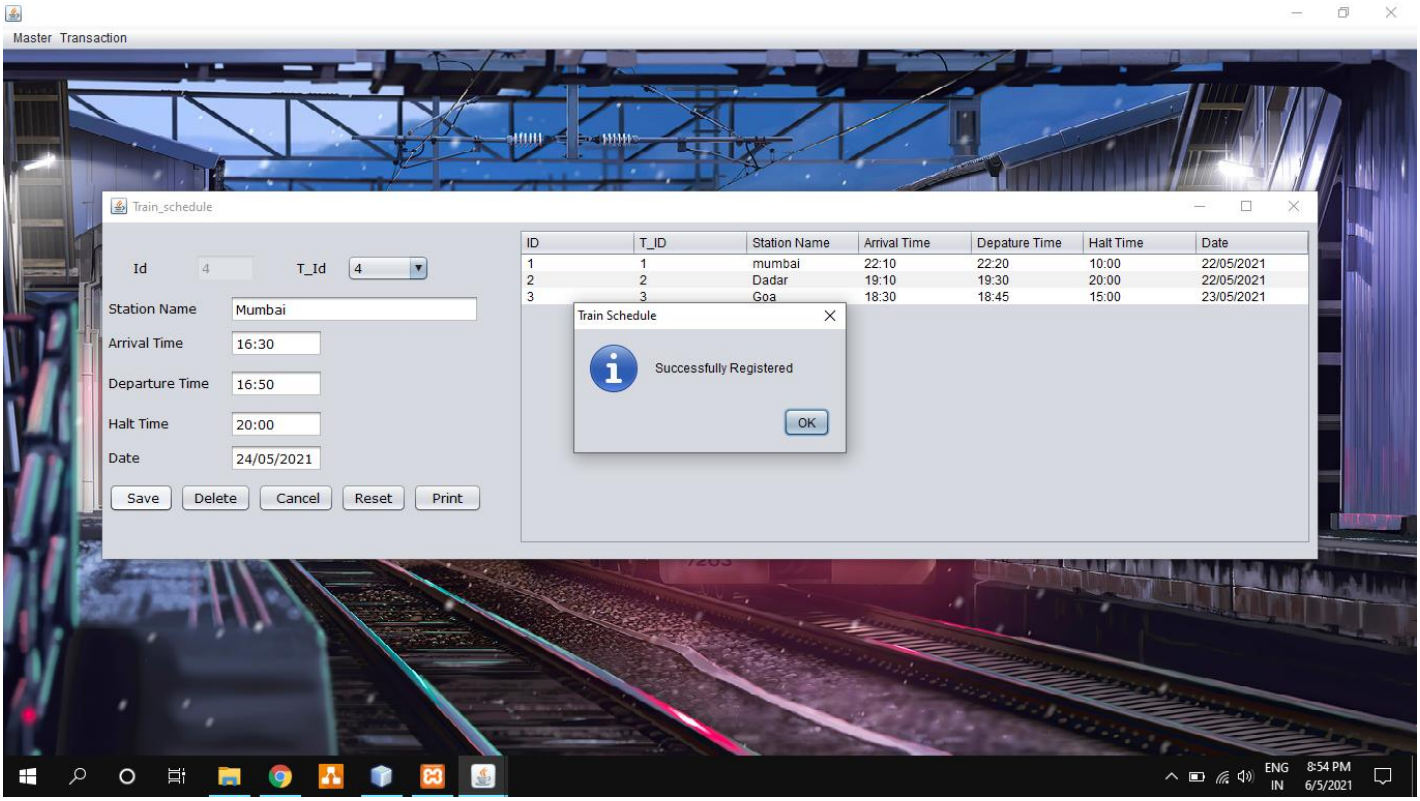
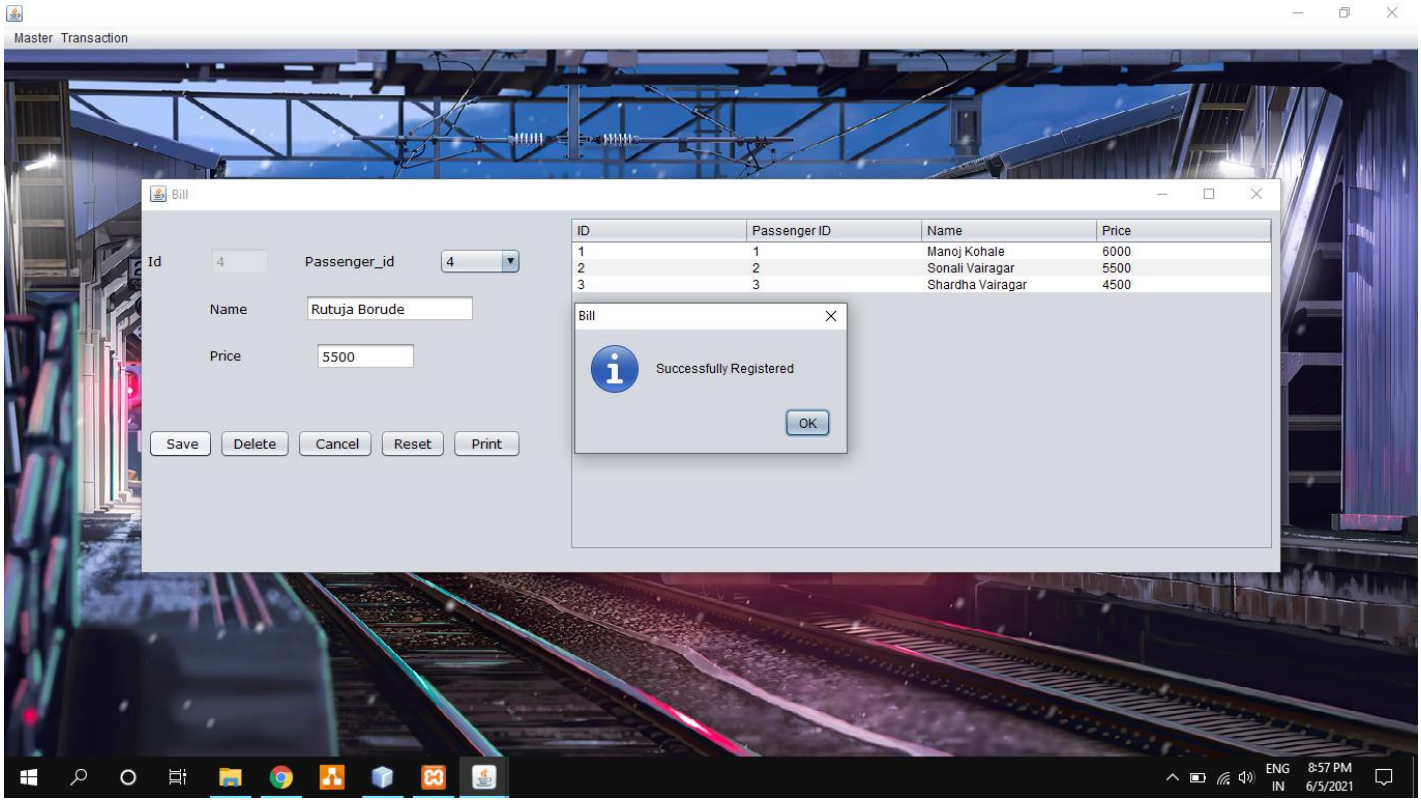
Train
Successfully Registered
OK
ENG
IN
8:50 PM
6/5/2021

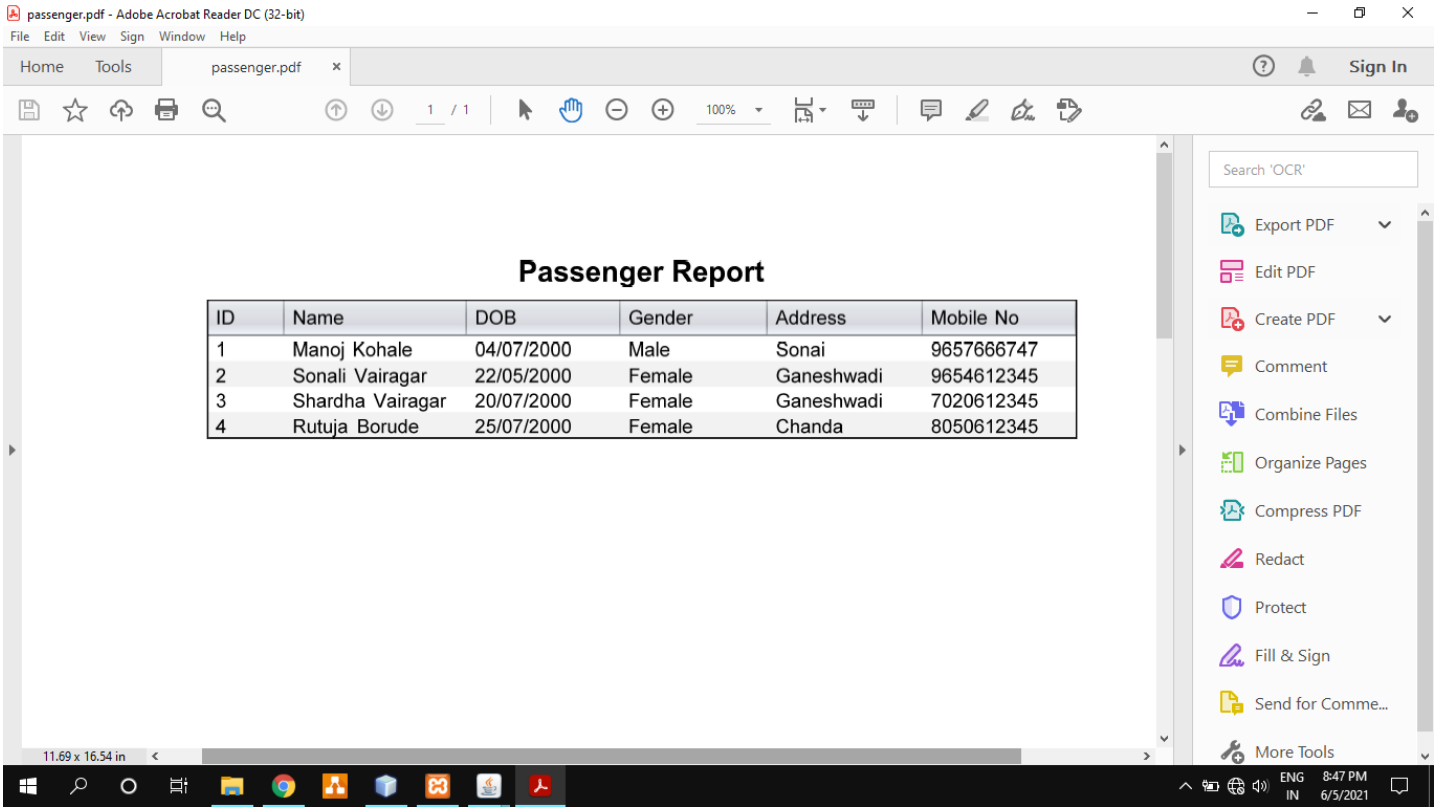
Train Schedule:

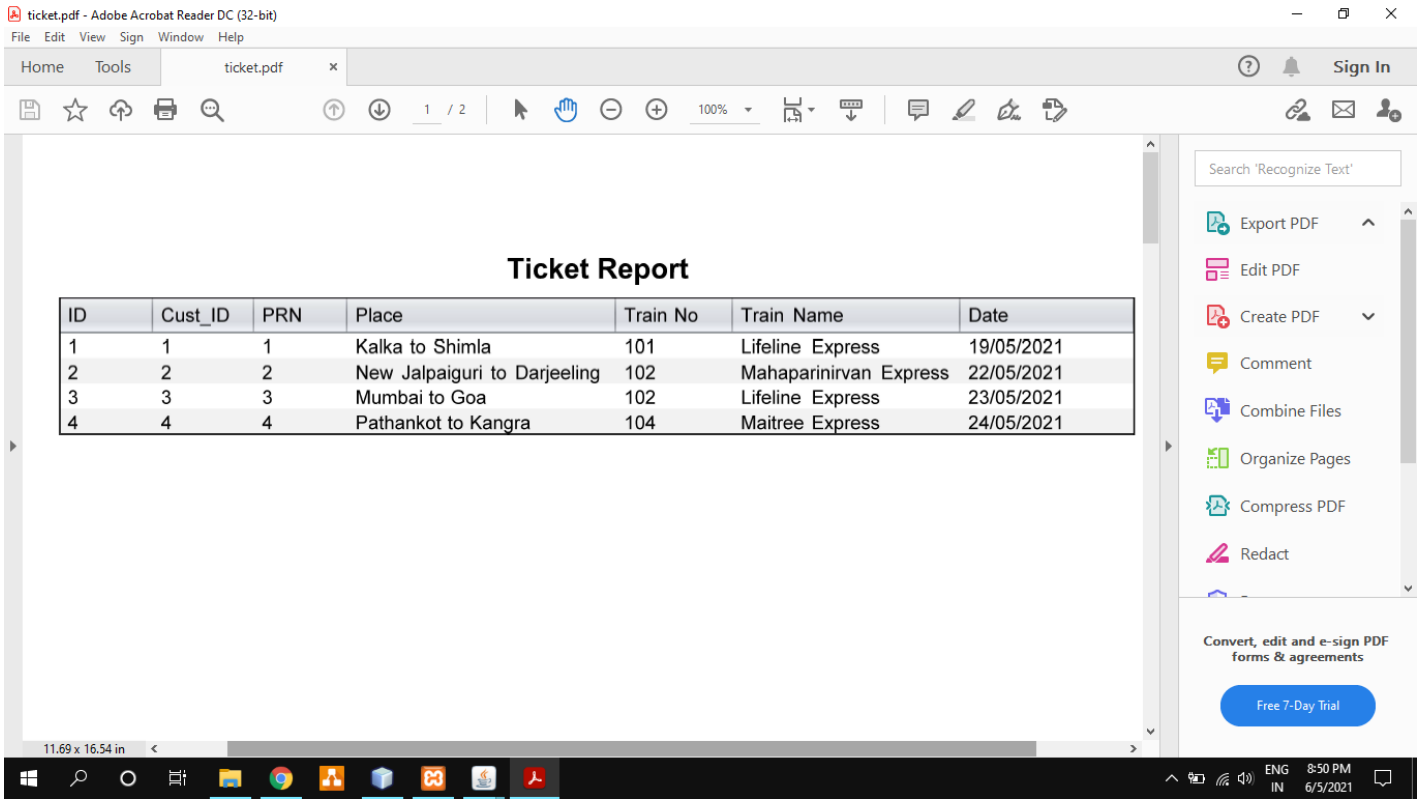


Bill:


Master Transaction
Bill
Id
4
Passenger_id
4
Name
Rutuja Borude
Price
5500
Save
Delete
Cancel
Reset
Print
ID
Passenger ID
Name
Price
1
1
Manoj Kohale
6000
2
2
Sonali Vairagar
5500
3
3
Shardha Vairagar
4500
Bill
Successfully Registered
OK
ENG
IN
8:57 PM
6/5/2021

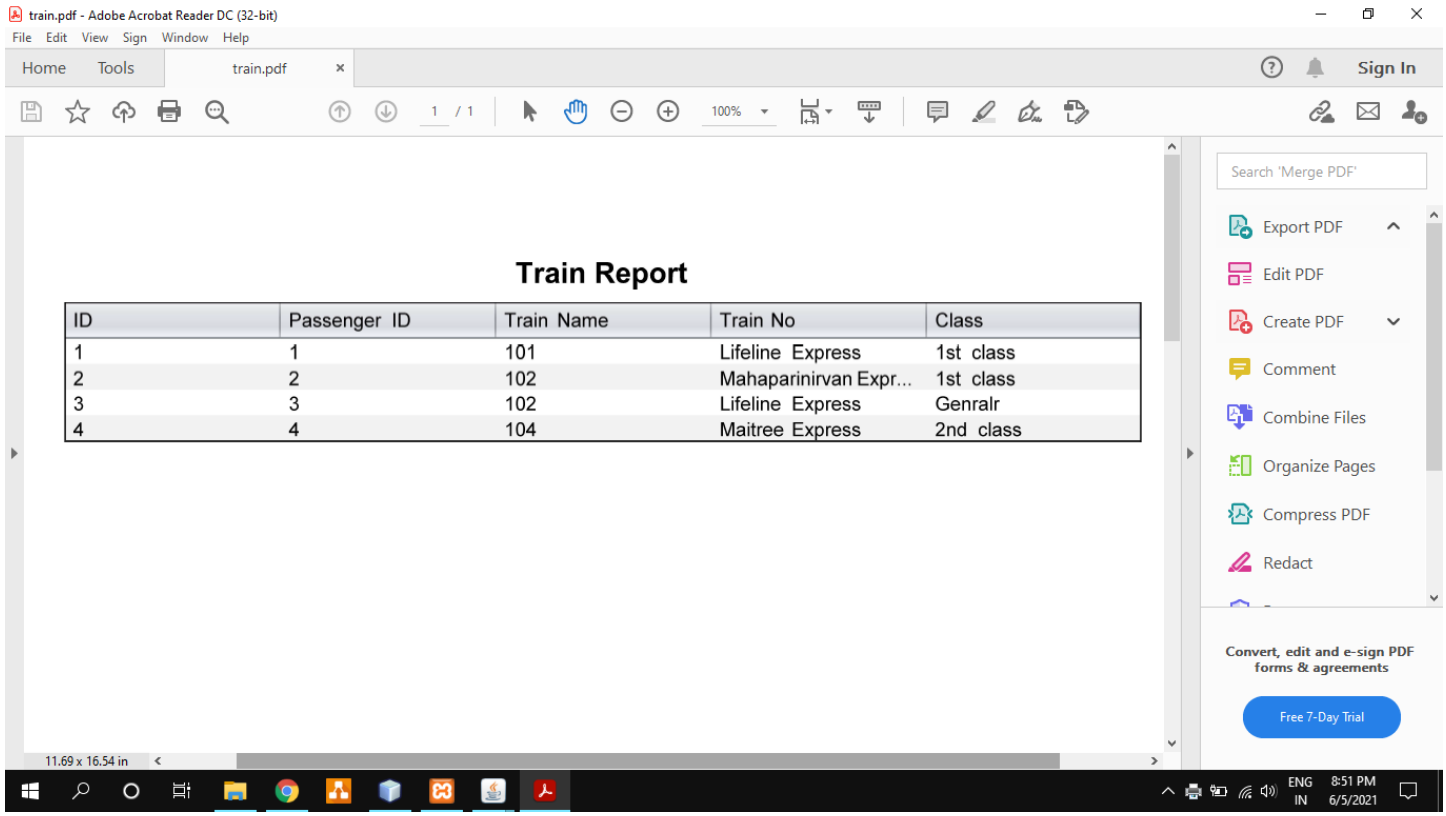
Report:

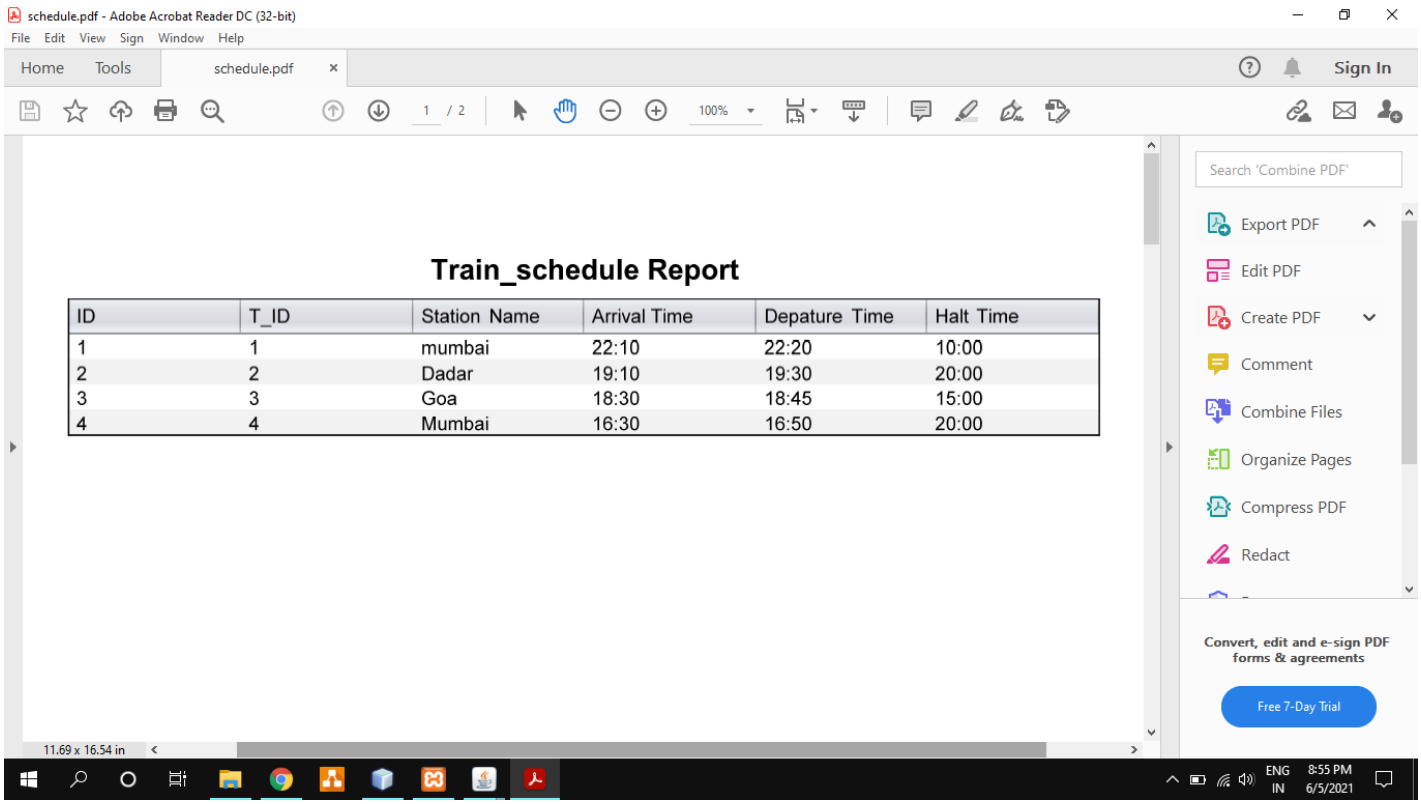

passenger.pdf - Adobe Acrobat Reader DC (32-bit)
File Edit View Sign Window Help
Home Tools passenger.pdf
Sign In
Passenger Report
ID | Name | DOB | Gender | Address | Mobile No
1 | Manoj Kohale | 04/07/2000 | Male | Sonai | 9657666747
2 | Sonali Vairagar | 22/05/2000 | Female | Ganeshwadi | 9654612345
3 | Shardha Vairagar | 20/07/2000 | Female | Ganeshwadi | 7020612345
4 | Rutuja Borude | 25/07/2000 | Female | Chanda | 8050612345
Search 'OCR'
Export PDF
Edit PDF
Create PDF
Comment
Combine Files
Organize Pages
Compress PDF
Redact
Protect
Fill & Sign
Send for Comme...
More Tools
11.69 x 16.54 in
ENG IN
8:47 PM 6/5/2021



Ticket Report

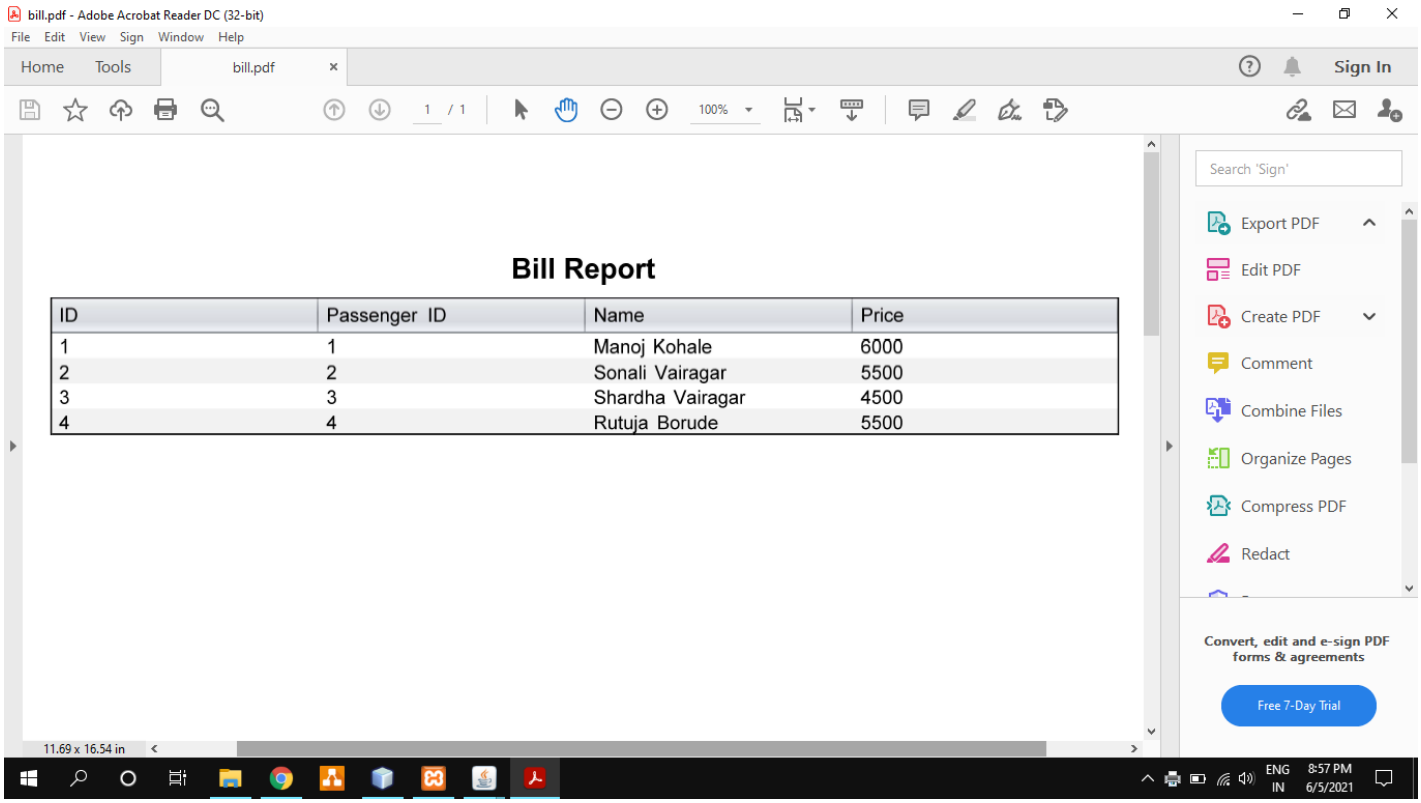
ID	Cust_ID	PRN	Place	Train No	Train Name	Date
1	1	1	Kalka to Shimla	101	Lifeline Express	19/05/2021
2	2	2	New Jalpaiguri to Darjeeling	102	Mahaparinirvan Express	22/05/2021
3	3	3	Mumbai to Goa	102	Lifeline Express	23/05/2021
4	4	4	Pathankot to Kangra	104	Maitree Express	24/05/2021


train.pdf - Adobe Acrobat Reader DC (32-bit)
File Edit View Sign Window Help
Home Tools train.pdf
Sign In
Train Report
ID | Passenger ID | Train Name | Train No | Class
1 | 1 | 101 | Lifeline Express | 1st class
2 | 2 | 102 | Mahaparinirvan Expr... | 1st class
3 | 3 | 102 | Lifeline Express | Genralr
4 | 4 | 104 | Maitree Express | 2nd class
Search 'Merge PDF'
Export PDF
Edit PDF
Create PDF
Comment
Combine Files
Organize Pages
Compress PDF
Redact
Convert, edit and e-sign PDF forms & agreements
Free 7-Day Trial
11.69 x 16.54 in
ENG IN
8:51 PM 6/5/2021



Train_schedule Report

ID	T_ID	Station Name	Arrival Time	Depature Time	Halt Time
1	1	mumbai	22:10	22:20	10:00
2	2	Dadar	19:10	19:30	20:00
3	3	Goa	18:30	18:45	15:00
4	4	Mumbai	16:30	16:50	20:00



Bill Report

ID	Passenger ID	Name	Price
1	1	Manoj Kohale	6000
2	2	Sonali Vairagar	5500
3	3	Shardha Vairagar	4500
4	4	Rutuja Borude	5500

ADVANTAGES AND LIMITATIONS

Advantages:-

1. Easy to keep record.
2. Easy to add new Passengers Details.
3. Easy to add ticket details.
4. Easy to generate Bill.
5. Easy to maintain Customer details.

Disadvantages:-

1. Less security (Login Information not encrypted).
2. Not available for online users.
3. Single user Interface.

FUTURE ENHANCEMENT

1. Multiuser interface implementation.
2. More security to data.
3. Online availability.

BIBLOGRAPHY

Books:-

- Effective Java
  -By Joshua Bloch
- Practical Java Project
  -By B.M. Harwani

Websites:-

- www.stackoverflow.com
- www.w3school.com