PROJECT REPORT

ON

RAILWAY RESERVATION SYSTEM

COURSE TITLE: DATABASE MANAGEMENT SYSTEM LABORATORY

COURSE CODE: CSE-312

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DATE OF SUBMISSION: 12-03-2018

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ABSTRACT

Designing the application and of railway reservation system for the purpose of reserving railway tickets and database maintenance about train and passenger details by the railway department only. This database helps railways to retrieve data as and when required in future. The scope of project included evaluation of the application and was primarily concerned with the transactions related to booking of tickets from the terminals operated by the railway personnel. Application controls and simulation were used to evaluate data validation and program logic. The selected data, as made available, for substantive checking of the completeness, integrity and consistency of data using computer assisted applications such as microsoft sql server. The records maintained in the database of the railways reservation center were also reviewed. Discussions were held with the database users to gain understanding regarding the various functional aspects of the system. The booking database has passenger's details like name, total number of passengers traveling, date of travel.

INTRODUCTION

In this emerging world of computers, almost all-manual system has switched to automated and computerized system. Therefore, we are developing the software for "**railway reservation system**" to model the present system and to remove the drawbacks of the present system. This project explore show computer technology can be used to solve the problem of user. This being a big step in terms of improvement in the railway system it is widely accepted across the country. Rather than designing manually, we have made use of computer. Use of computer has solved many problems, which are faced during manual calculation. Once data are fed, it can perform accurate functions. Therefore, this project introduces railway reservation system. It explains how reservation is being done **Bangladesh railways**. All most all the header files have been used in this project. The customers are required to register on the server for getting access to the database and query result retrieval. Upon registration, each user has an account that is essentially the 'view level' for the customer. The account contains comprehensive information of the user entered during registration and permits the customer to get access to his/her past reservations, enquire about travel fare and availability of seats, make fresh reservations, and update his account details. The railway administrator has the right to modify any information stored at the server database.

FEATURES

- This application is an automated railway ticket booking system.
- First the Ticket counter clerk will check for availability for the seats in a particular train on a specified date of journey. If it is available the clerk will reserve seats.
- The administrator should be able to enter any change related to the train information like change in train name, number etc.
- The system should be able to reserve seat in a train for a passenger.
- The system should be able to print the report like it should be able to generate reservation chart, train report, reservation ticket which will have train no and name, date of journey, boarding station, destination station, person name.
- The system should be able to cancel a reservation.
- The system should be able to print the cancellation ticket which will have total fare and the amount deducted.

SOFTWARE & HARDWARE REQUIREMENT

USER INTERFACE:

- Keyboard and Mouse

HARDWARE REQUIERMENT:

- Printer
- Computer or Smart Phone
- Internet Connection

SOFTWARE REQUIERMENT:

- MY-SQL Server 2000/2005
- PHP MY-Admin
- Google Chrome or Any Browser

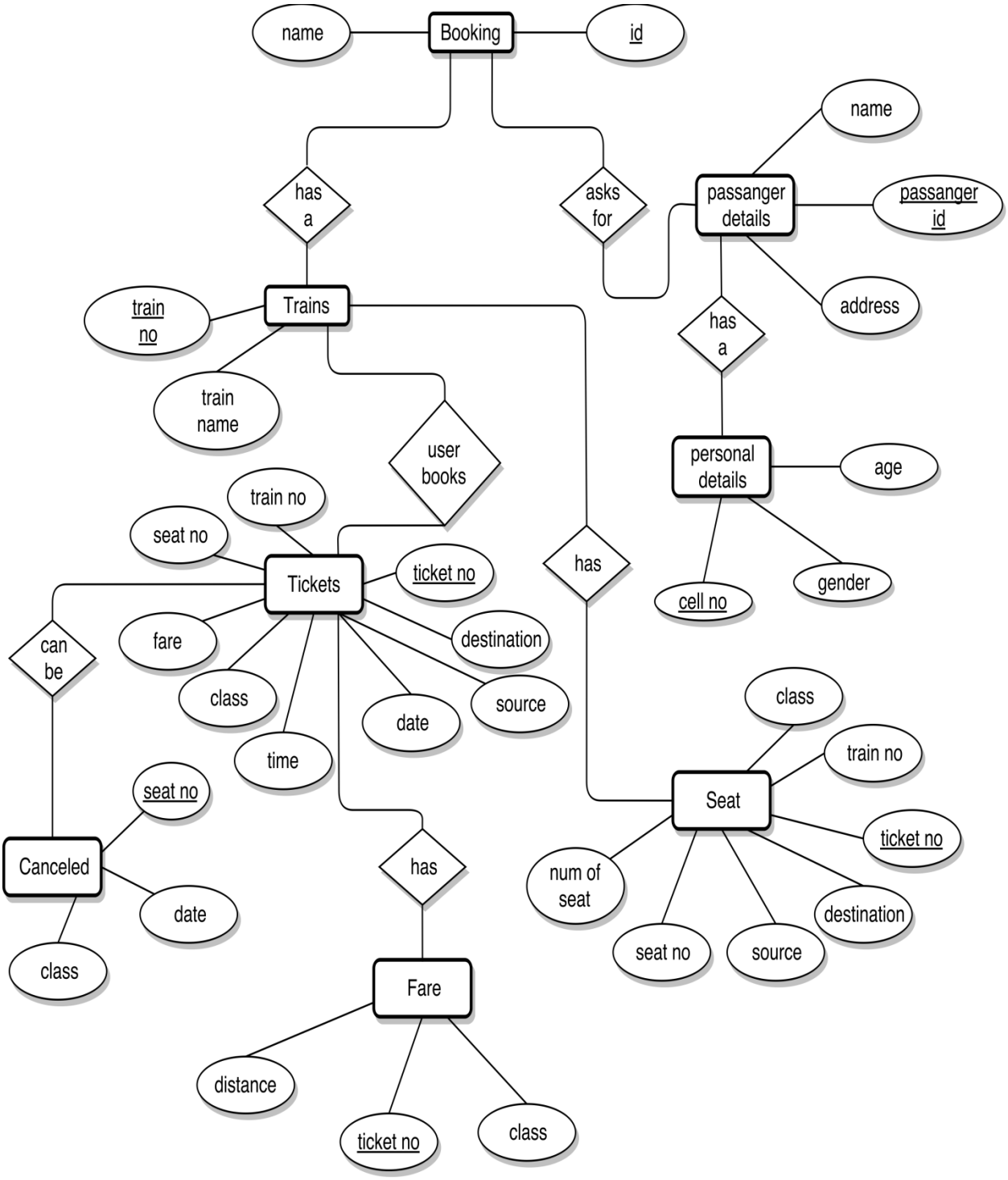
OPERATING ENVIRONMENT:

- Windows XP or Later
- Android 4.2 or later

SCHEEMA

- Booking (id, name)
- Canceled (seat_ no, class, date)
- Fare (ticket_ no, class, distance(KM))
- Passenger_details (passenger_id, name, address)
- Personal_details (cell_no, gender, age)
- Seat (ticket_no, train_no, class, seat_no, number_of_seat, source, destination)
- Tickets (tickets_no, train_no, seat_no, class, source, destination, fare, date, time)
- Trains (train_no, train_name)

ER DIAGRAMS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train no
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destination
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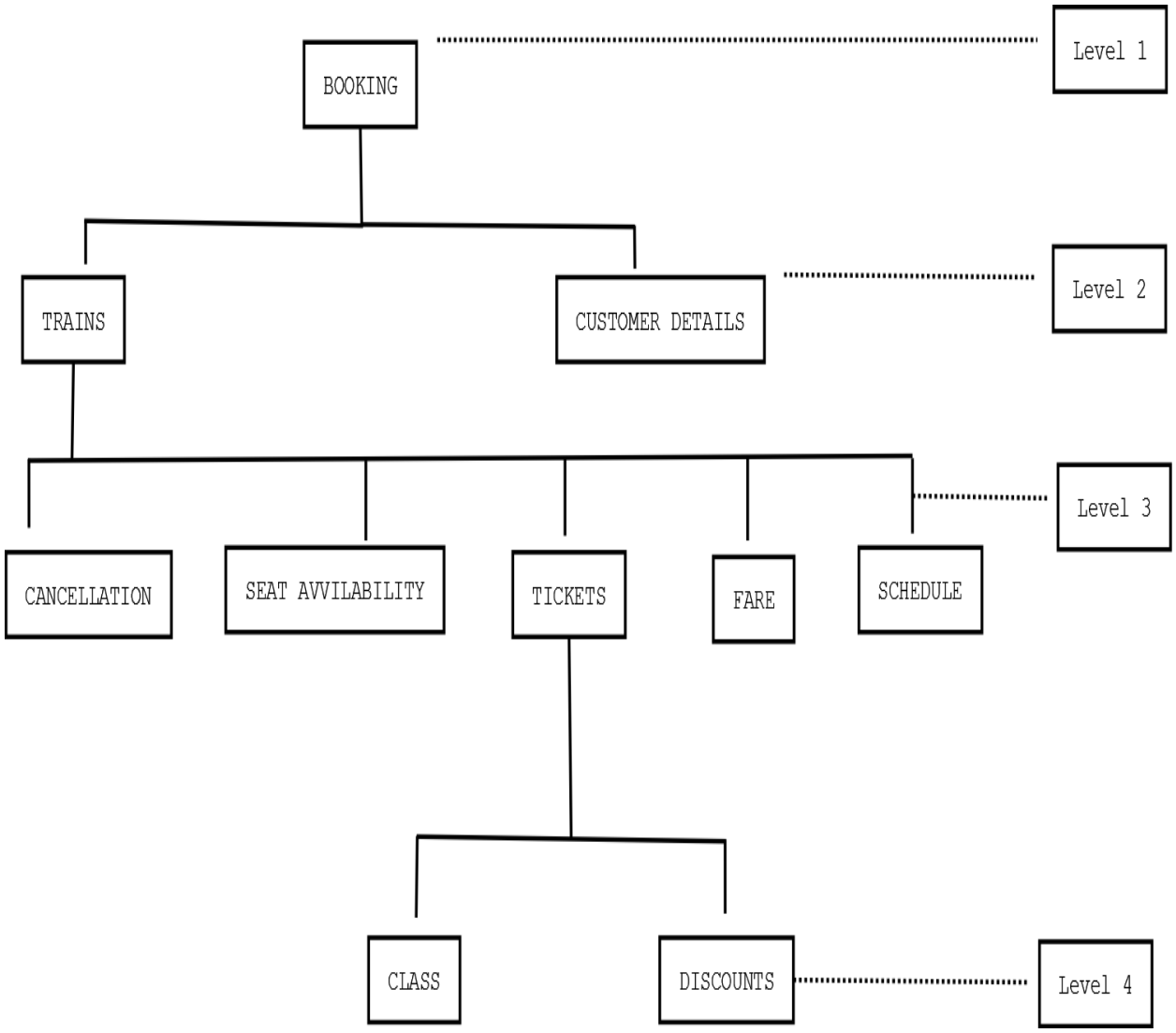
seat no
num of seat

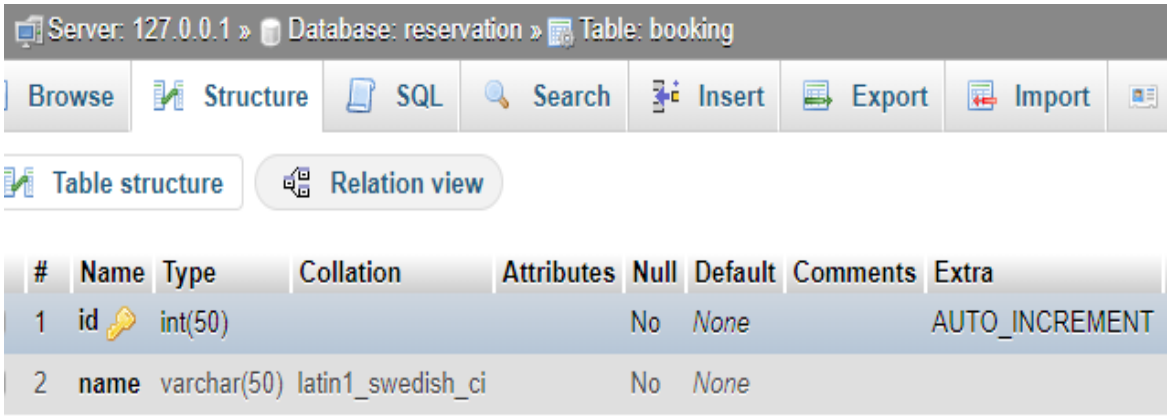
STRUCTURED CHART



SCREEN SHOT

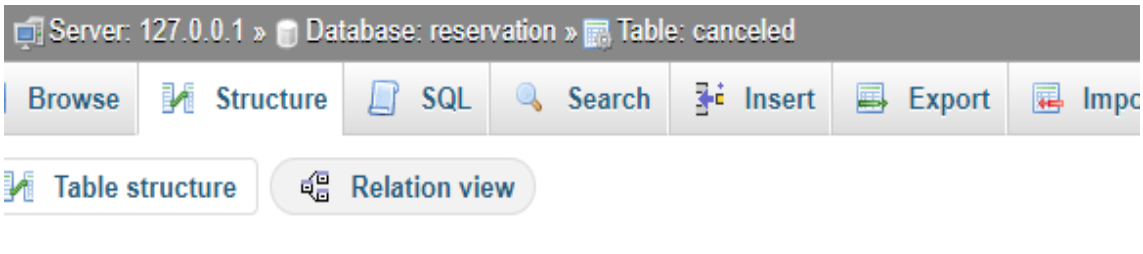
LOGICAL DESIGN:

- **BOOKING**



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(50)			No	*None*		AUTO_INCREMENT
2	name	varchar(50)	latin1_swedish_ci		No	*None*		

- **CANCELED**

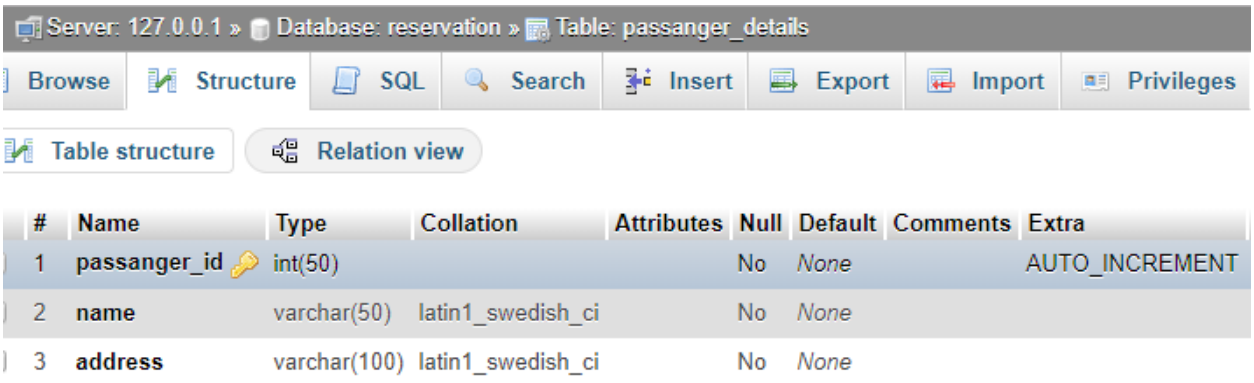


#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	seat_no	int(10)			No	*None*		
2	class	varchar(10)	latin1_swedish_ci		No	*None*		
3	date	date			No	*None*		

➢ FARE

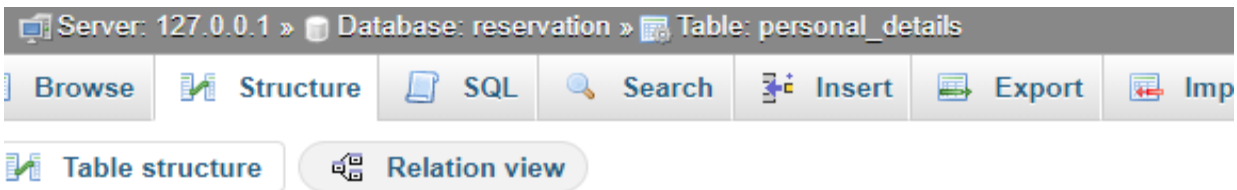
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ticket_no	int(255)			No	None		AUTO_INCREMENT
2	class	varchar(10)	latin1_swedish_ci		No	None		
3	distance(KM)	int(5)			No	None		

➢ PASSANGER_DETAILS



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	passanger_id	int(50)			No	None		AUTO_INCREMENT
2	name	varchar(50)	latin1_swedish_ci		No	None		
3	address	varchar(100)	latin1_swedish_ci		No	None		

➢ PERSONAL_DETAILS



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	cell_no	int(20)			No	None		
2	gender	varchar(10)	latin1_swedish_ci		No	None		
3	age	varchar(3)	latin1_swedish_ci		No	None		

➢ SEAT

Server: 127.0.0.1 » Database: reservation » Table: seat

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges

Table structure | Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ticket_no	int(255)			No	None		AUTO_INCREMENT
2	train_no	int(10)			No	None		
3	class	varchar(10)	latin1_swedish_ci		No	None		
4	seat_no	int(3)			No	None		
5	number_of_seat	int(3)			No	None		
6	source	varchar(50)	latin1_swedish_ci		No	None		
7	destination	varchar(50)	latin1_swedish_ci		No	None		

➢ TICKETS

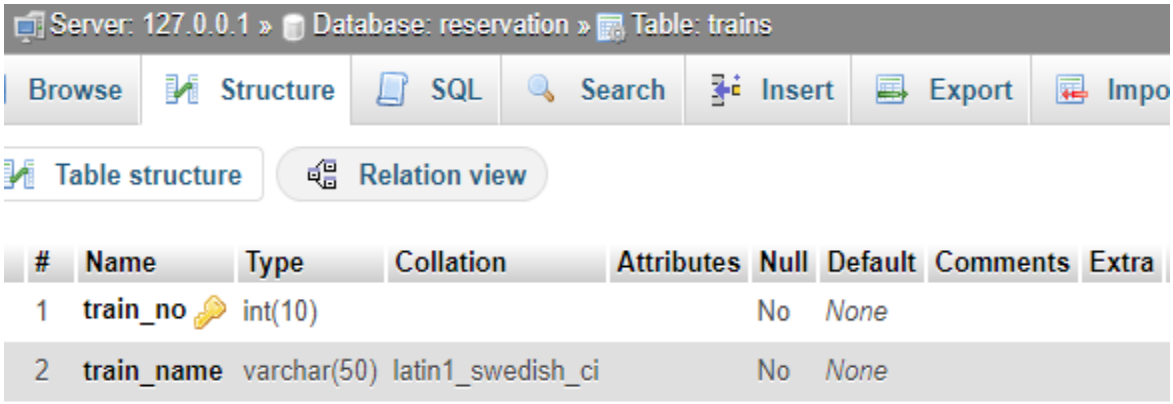
Server: 127.0.0.1 » Database: reservation » Table: tickets

Browse | Structure | SQL | Search | Insert | Export | Import | Privil

Table structure | Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ticket_no	int(255)			No	None		AUTO_INCREMENT
2	train_no	int(50)			No	None		
3	seat_no	int(2)			No	None		
4	class	varchar(10)	latin1_swedish_ci		No	None		
5	source	varchar(50)	latin1_swedish_ci		No	None		
6	destination	varchar(50)	latin1_swedish_ci		No	None		
7	fare	int(10)			No	None		
8	date	date			No	None		
9	time	time(6)			No	None		

➢ TRAINS



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	train_no	int(10)			No	None		
2	train_name	varchar(50)	latin1_swedish_ci		No	None		

❖ RAILWAY RESERVATION SYSTEM FULL DATABASE:

ADVANTAGES

Now one can easily plan the journey comfortably as the process is efficient and fast with being easy to access. Reservations can be made through the Bangladesh railways site or at the sample reservation centers all over the country. Also now there are authorized agencies which provide reservation facility on behalf of **Bangladesh railways** and without waiting in long line one can easily book a ticket. The booking is done through an e- ticket issue which have a Pin number of which one has to take a print and just have to show at the station it not only provide reservation but cancellation can also be done through this system at ease and one can use a credit card to complete the process. This being a big step in term of improvement in the railway system it is widely accepted across the country.

DISADVANTAGES

If you don't have internet access, online booking does not work. More complex if you’re not a technical person. Generally, it all depends on your requirements. But most of the booking system make your life simpler.

FUTURE WORK

If anyone wants to extend this project then he / she can make an additional database of train fare. And database for updated availability of seats which is available after the cancellation of ticket on that specific train etc. He / she can also add some more command buttons in the existing software and extend working of the existing software. Implementations of this project idea are in industrial use. Hence, this can be used for suggesting improvements in design, performance and greater usability. Apart from the industrial applications, it is a research-oriented project as well, the task of performance evaluation of different database designs, for efficiency, is in this spirit.

CONCLUSION

This project proposes digital devices that are implemented by which manual and chart systems are eliminated, by which revenue of railway is increased procurement of tickets by touts is eliminated. It also attempts to reserve each and every seat even vacant for one station to next station. Rather than designing manually we have made use of computer as once that data are input it performs accurate function. There is no chance of fault or miscalculation if the data are faced correctly. This is not the end but beginning of the versatile, efficient railway reservation system. This is the one which is compatible to all operating system. By making this we project we made a small footstep towards the path of progress of platform independent railway reservation system.