. Objective:

The purpose of this source is to describe the railway reservation system which provides the train timing details, reservation, billing and cancellation on various types of reservation namely,
• Confirm Reservation for confirm Seat.
• Reservation against Cancellation. • Waiting list Reservation.
• Online Reservation.
• Tatkal Reservation.
The origin of most software systems is in the need of a client, who either wants to automate the existing manual system or desires a new software system. The software system is itself created by the developer. Finally, the end user will use the completed system. Thus, there are three major parties interested in a new system: the client, the user, and the developer. Somehow the requirements for the system that will satisfy the needs of the clients and the concerns of the users have to be communicated to the developer. The problem is that the client doesn't usually design the software or the software development process and the

developer does not understand the client's problem and the application area. This causes a communication gap between the parties involved in the development of the project.

The basic purpose of Software Requirement Specification (SRS) is to bridge this communication gap. SRS is the medium through which the client's and the user's needs are accurately specified; indeed SRS forms the basis of software development.

Another important purpose of developing an SRS is helping the clients understanding their own needs. An SRS establishes the basis for agreement between the client and the supplier on what the software product will do.

An SRS provides a reference for validation of the final product.A

high quality SRS is a prerequisite to high quality software and it also reduces the development cost.

A few factors that direct us to develop a new system are given below -:

1. Faster System

2. Accuracy

3. Reliability

4. Informative

5. Reservations and cancellations from anywhere to any place

scope

“Railways Reservation System” is an attempt to simulate the basic concepts of an online Reservation system. The system enables to perform the following functions:

SEARCH FOR TRAIN
BOOKING OF A SELECTED FLIGHT PAYMENT

CANCELLATION

Freight Revenue enhancement

Passenger Revenue enhancement

Improved & optimized service

3.1 Function Requirements

3.1.1 performance requirements:

- User Satisfaction: - The system is such that it stands up to the user expectations.

- Response Time: -The response of all the operation is good. This has been made
possible by careful programming.

- Error Handling: - Response to user errors and undesired situations has been taken care of to ensure that the system operates without halting.

- Safety and Robustness: - The system is able to avoid or tackle disastrous action. In other words, it should be foul proof. The system safeguards against undesired events, without human intervention.

- Portable: -The software should not be architecture specific. It should be easily transferable to other platforms if needed.

- User friendliness: - The system is easy to learn and understand. A native user can also use the system effectively, without any difficulties.

3.1.2 Design constrian:

There are a number of factors in the client's environment that may restrict the choices of a designer. Such factors include standards that must be followed, resource limits, operating environment, reliability and security requirements and policies that may have an impact on the design of the system. An SRS (Software Requirements Analysis and Specification) should identify and specify all such constraints.

Ø Standard Compliance: -This specifies the requirements for the standards the system must follow. The standards may include

the report format and accounting properties.
Ø Hardware Limitations :- The software may have to operate on some existing or predetermined hardware, thus imposing restrictions on the design. Hardware limitations can include the types of machines to be used, operating system available on the system, languages supported and limits on primary and secondary storage.
Ø Reliability and Fault Tolerance: - Fault tolerance requirements can place a major constraint on how the system is to be designed. Fault tolerance requirements often make the system more complex and expensive. Requirements about system behavior in the face of certain kinds of faults are specified. Recovery requirements are often an integral part here, detailing what the system should do I some failure occurs to ensure certain properties. Reliability requirements are very important for critical applications.
Ø Security: - Security requirements are particularly significant in defence systems and database systems. They place restrictions on the use of certain commands, control access to

data, provide different kinds of access requirements for different people, require the use of passwords and cryptography techniques and maintain a log of activities in the system.

. 3.2.1 Security:

The system use SSL (secured socket layer) in all transactions that include any confidential customer information. The system must automatically log out all customers after a period of inactivity. The system should not leave any cookies on the customer's computer containing the user's password. The

system's back-end servers shall only be accessible to authenticated management.

3.2.2 Reliability:

The reliability of the overall project depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes. Also the system will be functioning inside a container. Thus the overall stability of the system depends on the stability of container and its underlying operating system.

3.2.3 Availability:

The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. A customer friendly system which is in access of people around the world should work 24 hours. In case of a of a hardware failure or database corruption, a replacement page will be shown. Also in case of a hardware failure or database corruption, backups of the database should be retrieved from the server and saved by the Organizer. Then the service will be restarted. It means 24 x 7 availability.

3.2.4 Maintainability:

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the project will be done. Also the software design is being done with modularity in mind so that maintainability can be done efficiently.

3.2.5 Supportability:

The code and supporting modules of the system will be well documented and easy to understand. Online User Documentation and

Help System Requirements.