RAILWAYS RESERVATION SYSTEM

* INTRODUCTION:

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS purpose ,scope, definitions, acronyms, abbreviations, references and overview of SRS.A Software Requirements Specification (SRS) - a requirements specification for a software system - is a complete description of the behaviour of a system to be developed. It includes a set of use cases that describe all the interactions the users will have with the software. Use cases are also known as functional requirements. In addition to use cases, the SRS also contains non-functional (or supplementary) requirements. Non-functional requirements are requirements which impose constraints on the design or implementation (such as performance engineering requirements, quality standards, or design constraints). The aim of this document is to gather and analyse and give an in-depth insight of the complete Marvel Electronics and Home Entertainment software system by defining the problem statement in detail. This is a documentation of the project Railways Reservation System done sincerely and satisfactorily by my group members. A Software has to be developed for automating the manual Railway Reservation System.

• RESERVE SEATS – Reservation form has to be filled by passenger. If seats are available entries like train name, number, destination are made.

• CANCEL RESERVATION- The clerk deletes the entry in the System and changes in the Reservation Status.

• VIEW RESERVATION STATUS-The user need to enter the PIN number printed on ticket.

* 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.

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

* PROJECT FUNCTIONS:

Booking agents with varying levels of familiarity with computers will mostly use this system. With this in mind, an important feature of this software is that it be relatively simple to use. The scope of this project encompasses: - ¨ Search: This function allows the booking agent to search for train that are available between the two travel cities, namely the "Departure city" and "Arrival city" as desired by the traveller. The system initially prompts the agent for the departure and arrival city, the date of departure, preferred time slot and the number of passengers. It then displays a list of train available with different airlines between the designated cities on the specified date and time. ¨ Selection: This function allows a particular train to be selected from the displayed list. All the details of the train are shown :-

1. Train Number

2. Date, time and place of departure

3. Date, time and place of arrival

4. TRAIN Duration

5. Fare per head

6. Number of stoppages – 0, 1, 2…

¨ Review: If the seats are available, then the software prompts for the booking of train. The train information is shown. The total fare including taxes is shown and flight details are reviewed. ¨ Traveller Information: It asks for the details of all the passengers supposed to travel including name, address, telephone number and e-mail id. ¨ Payment: It asks the agent to enter the various credit card details of the person making the reservation.

1. Credit card type

2. Credit card number

3. CVC number of the card

4. Expiration date of the card

5. The name on the card

¨ Cancellation : The system also allows the passenger to cancel an existing reservation. This function registers the information regarding a passenger who has requested for a cancellation of his/her ticket. It includes entries pertaining to the train No., Confirmation No., Name, Date of Journey, Fare deducted.

* FUNCTION 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.

* NON-FUNCTION REQUIREMENTS:

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.

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.

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. Computer Engineering, BE-6 Page 16 Railway Reservation 16

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.

Supportability:

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

* REFERENCES:

1. IEEE SRS Format

2. Yatra.com

3. Irctc.co.in

4. Indianrail.gov.in

5. [www.google.com](http://www.google.com)

* SRS DOCUMENTATION BY:
* **MONIKA.K**
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