

Software Requirements Specification (SRS) for Railway Reservation System

1. Introduction

1.1 Purpose of this Document

The purpose of this document is to define the requirements for the Railway Reservation System, which is an online platform for booking and managing train tickets. The document explains the system's functional and non-functional requirements, design constraints, interface requirements, and performance requirements.

1.2 Scope of this Document

This document outlines the overall working and main objective of the Railway Reservation System. It explains the value it will provide to the customer and describes the estimated cost and time required for development. The scope also includes a description of the product's user community.

1.3 Overview

The Railway Reservation System is an online platform that enables users to search for available trains, view train schedules, book tickets, and make payments online. The system should be user-friendly, reliable, and secure.

2. General Description

The Railway Reservation System aims to provide a convenient and efficient method for users to book and manage their train tickets online. The system should be accessible to all users, regardless of their technical expertise. The user community includes customers, administrators, and support staff.

3. Functional Requirements

The functional requirements of the Railway Reservation System include user registration, train search and booking, seat availability, payment processing, cancellation and refund, user profile management, and an admin panel.

4. Interface Requirements

This section outlines the software interfaces required by the Railway Reservation System to communicate with other software programs or users. It includes the methods of communication, such as shared memory, data streams, and user interfaces. Each interface is described in detail, including its purpose, input requirements, output requirements, and any associated business rules.

5. Performance Requirements

The performance requirements of the Railway Reservation System include the system's ability to handle a large number of users simultaneously without affecting its performance. The system should respond to user requests in a timely manner and should be reliable and available at all times.

6. Design Constraints

The design constraints of the Railway Reservation System include the limitations or restrictions that the design team must consider when developing the system. Examples of design constraints include the use of a particular algorithm, hardware and software limitations, and compatibility with third-party APIs.

7. Non-Functional Attributes

The non-functional attributes of the Railway Reservation System include the attributes required by the system for better performance, such as security, portability, reliability, reusability, application compatibility, data integrity, and scalability capacity.

8. Preliminary Schedule and Budget

The preliminary schedule and budget for the Railway Reservation System include the initial version and budget of the project plan. It includes the overall time duration required and overall cost required for the development of the project.