**1. Introduction**

The Bus Reservation System is a software application designed to automate and manage the process of booking and managing bus tickets. It is intended to serve passengers, bus operators,

**2. Scope**

This project aims to develop an online bus reservation system that allows users to:

* Search for available buses.
* Book tickets for desired routes.
* Cancel reservations.

The system will support both desktop and mobile web browsers and will be accessible by passengers and administrators via secure login credentials.

**3. Functional Requirements**

* **User Registration & Login:** Passengers can create an account and log in.
* **Search Buses:** Search buses based on source, destination, and date.
* **Seat Selection:** Real-time seat availability and booking.
* **Booking Confirmation:** Generation of e-ticket upon successful payment.

**4. Non-Functional Requirements**

* **Performance:** The system should respond to user actions within 2 seconds.
* **Scalability:** Should handle up to 1000 concurrent users.
* **Security:** Passwords must be encrypted; all transactions must be secure (HTTPS).
* **Usability:** The UI must be intuitive and user-friendly.