Project Title: Bus Reservation System

1. Introduction

- **Purpose:** Define the objectives of the Bus Reservation System (BRS), including online booking, seat allocation, cancellation, and schedule management.
- **Scope**: The system will allow passengers to search buses, reserve seats, make payments, and receive tickets. Admins can manage bus schedules, routes, fares, and reservations.
- **Definitions, Acronyms, Abbreviations:**
  - o BRS: Bus Reservation System
  - o UI: User Interface
  - o DBMS: Database Management System
- **References**: IEEE SRS guidelines, institutional project standards, and bus transport policies.

Overall Description

- **Product Perspective**: The system is a web/mobile application integrated with a central database.
- **Product Features:**

o User registration/login

o Bus search by route/date

o Seat reservation and cancellation

o Online payment gateway

o Ticket generation (PDF/Email/SMS)

o Admin dashboard for bus/fare management

- **User Classes and Characteristics:**
  - o Passenger: Books and cancels tickets.

o Admin: Manages buses, routes, and reservations.

o System: Handles seat allocation, payments, and notifications.

- **Operating Environment**:

o Web application (HTML, CSS, JavaScript, PHP/Java/Python)

Database (MySQL/PostgreSQL)

Mobile app (Android/iOS optional)

- **Constraints:** o Secure payment handling

o Real-time seat availability

o Compliance with transport regulations