

Employee Bus Route Management System

**Software Requirement Specification (SRS) Document Sprint Implementation**

**Project Timeline: 20.10.2022 - 27.10.2022**

|  |  |
| --- | --- |
|  | **INDEX** |
| 1. Introduction |  |
| 1.1. Purpose | --------------------------------------------------- 3 |
| 1.2. Intended audience | --------------------------------------------------- 3 |
| 1.3. Intended use | --------------------------------------------------- 3 |
| 1.4. Scope | --------------------------------------------------- 3 |
| 2. Overall description | --------------------------------------------------- 4 |
| 2.1. Assumptions and dependency | --------------------------------------------------- 4 |
| 3. System feature and requirements | --------------------------------------------------- 4 |
| 3.1. Functionality | --------------------------------------------------- 4 |
| 3.1.1. add\_user | --------------------------------------------------- 4 |
| 3.1.2. del\_user | --------------------------------------------------- 4 |
| 3.1.3. mod\_user | --------------------------------------------------- 4 |
| 3.1.4. add\_req | --------------------------------------------------- 4 |
| 3.1.5. opt\_out\_req | --------------------------------------------------- 4 |
| 3.1.6. see\_user | --------------------------------------------------- 4 |
| 3.1.7. see\_bus | --------------------------------------------------- 4 |
| 3.1.8. see\_queue | --------------------------------------------------- 5 |
|  |
| 3.2 System requirement | --------------------------------------------------- 5 |
| 3.2.1 Tools to be used | --------------------------------------------------- 5 |
| 3.3 System feature | --------------------------------------------------- 5 |
| 4. Data Flow Diagram |  |
| 4.1 DFD level 0 | ---------------------------------------------------- 6 |
| 4.2 DFD level 1 | ---------------------------------------------------- 7 |

# Introduction

The introduction of the software requirement specification provides an overview of the entire software. The entire SRS with overview description purpose, scope, tools used and basic description. The aim of this document is to gather, analyze and give an in-depth insight into the complete Employee Bus Route Management System by defining the problem statement in detail. The detailed requirements of Employee Bus Route Management System application is provided in this document.

* 1. **Purpose**: **-**The purpose of this project is to manage the seats availability on various bus routes. Admin can modify/delete/add user from the data base accordingly. The user can request to avail the transport facility or can opt out from it.
  2. **Intended Audience: -**This document is intended to be read by Client.

# Intended Use: -

* + - Development Team
    - Maintenance Team
    - Clients

Since this a general-Purpose Software Thus any one Can access it.

* 1. **Scope: -**.

# Overall Description: -

It is a Employee Bus Route Management System used to manage the seats availability on various bus routes. This consists of the database which will store the information of the users. The admin can add/delete/modify the users. According to the request provided by the user the admin can allocate the seat to the particular bus route if the seats are available. If the seats are not available, the user will add to the queue. All the user details can be accessed and modified by the admin.

# Assumptions and Dependency: -

* + - System should have Ubuntu Linux installed.
    - System should have either 4GB or more RAM.
    - The service is used preferably on a desktop or laptop.

# System Features and Requirement :-

* 1. **Functionality :-**
     1. **EBMS\_01 :** add\_user: It will add the user to or user data base.
     2. **EBMS\_02 :** del\_user : : It will delete the user from the data base who is no longer interested to take the bus service.
     3. **EBMS\_03 :** mod\_user : It will modify the user details which are present in data base.
     4. **EBMS\_04 :** add\_req: The user will request the admin for the seat allotment in a particular bus route.
     5. **EBMS\_05 :** opt\_out\_req : The user no longer want to avail the facility he sends the opt out request.
     6. **EBMS\_06 :**see\_user: It will list all the details of the user which are present in the user data base.
     7. **EBMS\_07 :**see\_bus: It will display all the details of the bus routes
     8. **EBMS\_08 :**see\_queue: The users can add to the queue if there no availability

of seats in the bus.

# System Requirement :-

* + 1. **Tools to be used :-**
       - C Language
       - File Handling
       - Val grind
       - Splint

# System Features

* + - Supportability: The system is easy to use.
    - Design Constraints: The system is built using only C language.
    - Usability: The Employee Bus Route Management System is used to replace the old system for taking appointment where person have to visit the bus routes department clinic for registering himself. By using this Management system user can request the seat with the admin according to the desired need.
    - Reliability & Availability: The system is available 24/7 that is whenever the user would like to use the system, they can use it up to its functionalities.
    - Performance: The system will work on the user’s terminal.

# Data Flow Diagram: -

* 1. **Level 0 DFD: -**



# Level 1 DFD: -

Diagram

Description automatically generated