Software Requirements Specification

For

Online Bus Ticket Booking

Prepared By

Vikas Landge (Employee Id: 140099)

Shubham Kadam (Employee Id: 140094)

Paurnima Salve (Employee Id: 140096)

Birlasoft

24-04-2019

Table of Contents

Table of Contents ii

Revision History ii

1. Introduction 1

1.1 Purpose 1

1.2 Document Conventions 1

1.3 Intended Audience and Reading Suggestions 1

1.4 Product Scope 1

2. Overall Description 2

2.1 Product Perspective 2

2.2 Product Functions 2

2.3 User Classes and Characteristics 2

2.4 Operating Environment 2

2.5 Design and Implementation Constraints 2

2.6 User Documentation 2

2.7 Assumptions and Dependencies 2

3. System Features 3

**4. Software Requirements**

**5. Other Nonfunctional Requirements……………………………………………………………..4**

5.1 Performance Requirements 4

5.2 Safety Requirements 4

5.3 Security Requirements 4

5.4 Software Quality Attributes 4

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |

# Introduction

## Purpose

Now days use of bus travelling is a growing business in each country. There are multiple competitors are in this business, But it is growing business Hence we are providing better customer satisfaction to our customers by web based application. The Online Bus Ticket Reservation System is a web-based application that allows visitors check bus ticket availability, buy bus ticket and pay for the ticket online. This Online Bus Reservation System provides bus transportation system, a facility to reserved seats, cancellation of seats and different types of enquiry which need an instant and quick reservation. This system can be used by the users in performing online reservation via internet for their all business and personal purposes. Users can use this program directly on their websites and no need to install it.

## Document Conventions

This document uses the following conventions.

* DB - Database
* OS – Operating System

## Intended Audience and Reading Suggestions

Online Bus Ticket Booking System provides service to the large number of audience who intended to travel from one city to another.

* Bus Agencies: Bus Agencies are providing buses and get seats reserved via online ticket booking System. Agencies gives their bus information to allocate seats to customers by their choice.
* Bus Booking People: Who want to travel, they will reserve seats by their preference on website online bus ticket booking system.

## Product Scope

Online Bus ticket booking system web portal is a total internet ticketing operations offering the benefit of total in mobility management of bus schedules, ticket bookings, ticket sales, booked ticket slip generation, and other business functions associated with ticket sales.

It also offers the power of decision making to customers to make a ticket booking through bus operator’s popularity, performance and ranking.

**Future scope: -** Future scope of this is to provide the live tracking of the bus with time of bus arrival.It will suggest hotels when you reach at destination

# Overall Description

## Product Perspective

Online bus ticket booking system provides flexibility to access web application from anywhere to reserve tickets. Customer can check bus provider’s popularity, ranking and prices to select comfortable bus to begin journey. It can reduce the efforts of the customer to go to travels office and book ticket.

## Product Functions

* **Search bus:** User can search buses between selected source and destination and mention the date when he wants to travel. After search it shows the buses available on the same route.
* **Select Seats:** After selecting bus next task is to select the preferred seat from available seats.
* **Confirm Seat**: Selected seat will be confirmed by providing passenger details. User needs to provide authorized document of filled information at the boarding time.
* **Ticket Print:** Print the ticket.
* **Offers:** Seasonal offers are available that gives discount to the main ticket price.
* **Popularity, Ranking:** Depends on user rating generate the ranking or rating of bus provider.
* **Add routes:** Administrator adds new routes on website.
* **Add Bus Provider:** Administrator adds new bus provider on website.

## User Classes and Characteristics

Users who want travel from one city other city for their personal or business purpose online bus booking system plays vital role. To book ticket by his choice such as seat, date, time and bus provider

Administrator registers bus providers by verifying provider’s credentials. It also

**ROLES:**

**1) Administrator:**

1) Administrator register himself on portal by providing name, email-id, password, DOB, phone number.

2) After successfully registered, admin enter his login credential on portal and get logged in.

3) Administrator is responsible for adding new buses in the web application.

4) Administrator is also responsible maintaining the customer details to provide offers to customer depending on their loyalty points.

5) In case of any help such as driver is not available on time we need contact bus operator and give details to customer. Then customer directly contact to driver.

6) Administrator verify the signup details of all other users.

**2) User:**

1) User put his name, email, phone number, DOB and password for register.

2) User login himself on portal by providing email-id and password.

3) Search bus, Book seat, add promo code and print ticket.

4) Search popular buses.

**3) Bus Provider:**

1) Register by providing their details like name, organization, email, contact information and password.

2) Login into portal by providing email-id and password.

3) Gives bus details such as bus number, insurance, PUC, date of availability.

4) Reserve seats offline then update on web portal.

## Operating Environment

* RAM: Minimum 512MB or more.
* Hard Disk: Minimum 80GB or more.
* Operating System: Windows, Mac OS, Linux.

## Design and Implementation Constraints

* Add buses with their proper information.
* Create a centralized database where all details will be stored.

## User Documentation

We provide online helps to users related to all modules implemented in this project.

## Assumptions and Dependencies

In this following application:

* The user will provide genuine review of bus provider
* Bus provider charges standard price rates.
* Admin verify user reviews and bus provider information.

# System Features

The main feature of this application is, in the less time we can easily book bus ticket with seat and bus preference gives users comfortable journey. User takes benefit of their loyalty points to gain promo codes.

# External Interface Requirements

## Software Requirements

* Front-end software: HTML,CSS,Bootstrap,.net version
* Back-end software: Microsoft SQL Server, Asp.net MVC,C#
* Operating System - Windows
* Database - Microsoft SQL

# Other Nonfunctional Requirements

## Performance Requirements

1. Bus booking system portal provides all users visiting to the portal want faster access to website.
2. Available by 24\*7.
3. Accessible to the Admin as well as customer and peoples to maintain transparency.

## Safety Requirements

1. Customers need to use seat belts and get health insurance is beneficial or safety of him.
2. Verify the customer information by government id proof at boarding time.

## Security Requirements

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

## Software Quality Attributes

* **Availability:** The portal will be available all the time to the users.
* **Correctness:**  Ambiguous data should need to remove.

The problems should be correct and donations given to right hands.

* **Maintainability:** Admin is responsible to maintain all activities.
* **Usability:** Maximum number of villagers may use this portal