Software Requirements Specification Documents for

Transport Management Services for Public

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1. Introduction

1.1. Purpose

This document is meant to detail the features of the software being developed, this is used as a guide for the developers and a software validation document for the clients to check if all the requirements have been satisfied after the development of the software.

1.2. Scope

This management system uses a rotational data base system thus it is a easy method to the customers to plan their journey in best route with their best class and book tickets online and instantly, and also know the current status and previous history status of the bus to plan their journey in a better way

1.3. Product Prospective

1.3.1 System interfaces

This is a software that runs in the latest version of Chrome, Firefox or any web browser on Windows, Linux and Mac..

1.3.2 User interfaces

The software user interface has menus, toolbars, buttons, text boxes, hyperlinks allowing the user to control the software with the help of a mouse and keyboard.

1. Login Page
2. Registration page
3. Page displaying travel related with best buses with journey time with searching option on centre portion with source, destination, date, time (forenoon or after noon), bus type.
4. Page displaying sorted result list of buses with type, journey time, Routes, source time, destination time, fare details and payment link. Beyond that display the buses run in other week days

5. Page display to add passenger details, there they can select seat which are available, if any one wish to book a bus with 60 seats, the full bus is given to the customer with no extra cost with in their service area before 48 hrs of journey .
6. Page with payment gateway get displayed
7. The details of the payment including the amount will be displayed. And will be sent to the customer via their registered email and registered number

1.3.3 Hardware interface

The system needs a proper internet connection for the software to work properly.

1.3.4 Software interface

The system works on a client-server manner. Communication with the server is done with the help of scripting language PHP. It also requires Data Base for the storage of details of the customer's and the details of the shops and also the products for that we use MYSQL. DNS is used for the purpose of naming the application on the internet.

1.3.5 Communication interface

The communication architecture follows the client server model. Communication between the client and server should be served over HTTPS. The communication must follow stateless protocol.

1.3.6 Memory constrains

This application needs only a large amount of memory for storage and processing.

1.4. Product constrains

This web application is used mainly to reduce the complexity and increase the promise of getting reserved tickets on time. It will much easier than a customer to book a ticket on bus stand. Even foreigners can also use this facility in simple way thus they can explore the places. Some of the main functions of this application is listed below

1.4.1. Customer Sign-Up
1.4.2. Manager Sign-Up
1.4.3. Station master Sign-Up
1.4.4. Add routes
1.4.5. Add bus categories
1.4.6. Add route details with timing
1.4.7. Add seats availability
1.4.8. Add travel details
1.4.9. Payment
1.4.10. Login for customer/manager
1.4.11. Add details about the Buses

1.5. User characteristics

The main users of this system are the customers. They create account for making their journey in good and on on-time. The administrator is the one who controls the system rectifies the issues that happens in between and also maintains the system to be active all the time. Then comes the management who can add and modify bus routes and bus schedule for the entire days requested before starting a new service/fare change/route change it will be notified to every customer before 48 hours.

1.6. Assumptions and dependencies

For the smooth working of the software internet connection is must. The customers and the management section should need a contact number for completing the registration and for the purpose of contacting for queries.

1.7. Acronyms and abbreviations

We use bold letters to represent the main functions of the system. The underline will represent a hyperlink. Italics represents notes. We will be using some of the acronyms throughout this document. Below shown are the abbreviations and definitions of some terms used in this document.

1.7.1. Admin

Admin is the person who has full control over the web application and he/she is responsible for managing the functions in the system.

1.7.2. Database

Database is the storage space for storing all the information related to the web application in tabular format.

1.7.3. Field

A field is a cell inside a form.

2. Requirements

2.1. External Interfaces

There are many interfaces related to software in software engineering. Some of the important interfaces are User Interface, Software Interface and Hardware Interface.

2.1.1. User Interfaces

User interface is the page with which the customer interact which is build using HTML and Php. The forms that user interact is designed using HTML.

2.1.2. Hardware Interfaces

The local address of the system will be in IPV6 format.

2.1.3. Software Interface

The system must interact with the configurator to identify all available components. The system should

communicate with the content manager to obtain routes/buses specifications.

2.1.4. Communication Interface

In communication interface we use the HTTPS which is the secured file transfer protocol used for communication between the client and the server. This project uses a client server architecture.

2.2. Functions

2.2.1. Registration of customers

Customers should add their details for registration like name, contact etc and also they should add their contact number and mail address its should be mandatory for getting updates about the ticket and journey.

2.2.2. Registration of station masters

Station masters should add their basic details about there stand and also the details of routes and buses operated by his/her stand. including the account number to which the amount should be credited.

2.2.3. Registration of manager

Manager should add there details about whole servicing areas and including the account number to which the amount should be credited.

2.2.4. Login for Customers/Station master

Customers can login and Station master can add the service details. The customers can book a ticket in a specific routes and make payment according to his/her need.

2.2.5. Adding passenger details

Customer can add 10 passenger in a ticket including the customer. When they add the passenger details the the reservation available for the customer based on fare get based on age and category get displayed and also the total amount that they need to pay will also be displayed.

2.2.6. Payment

Payment methods can be selected by the customers according to their convenience. The different payment methods include cash on delivery, card payment or upi payment.

2.2.7. Adding routes/bus details

Adding routes/bus details is the function done by the station masters. They can add there services and and update the seat availability and also make changes in the details of the routes and buses based on there services.

2.2.8. Adding review

Customers can add review about the service, route, buses, staffs, etc.. in detail.

2.3. Usability requirements

The software should be easy to use for all the users. The customer and Station master & managers belong to different age group so for all the users different functions assigned to them should be easily accessible.

2.4. Performance requirements

The performance of the software should not be slow the initial screen should load as fast as possible. There should not be any lagging in between the operations that are done behind the user interface.

2.5. Database requirements

Database requirements include the store of data that comes from the software in a secure manner. All the confidential data

related to the users should be kept in the database after encrypting the data. So that the data will be safe.

2.6. Design constraints

Design include the budget for designing and also the time that is allocated for designing. The designing part of the software should be simple that is it should not effect the performance of the software like the time taken for loading a page should not increase. It should be attractive and also should be easy to maintain.

2.7. Software system attributes

The application should run in latest chrome, fire fox or safari. It should not send any data to internet all the data should be kept confidential. It can analyze all the inputs made by the users.

3. Verification

In verification we check all the above given requirements are completely present in the final ticket. All the functional and non-functional requirements are satisfied and also the ticket accomplishes the task for which the application was developed. The stake holders check if all the requirements listed by them are satisfied in the ticket.

4. References

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http://srs-transportmanagementblog.com