Software Requirements Specification

For

Civil Supply Management System

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1. Introduction

1.1 Purpose

This document presents a detailed explanation of the objectives, features, user interface and application of the Civil Supply Management System in real life. The main objective of the system is to maintain all the daily work of a ration shop in our locality. This project has many features to which are generally not available in normal ration shop management systems like facility computerize the functioning of a ration shop. It will also describe how the system will work and under what it should operate. This document will also show the user interface. Both stakeholders and system developers can benefit from this document.

1.2 Scope

This system will help to manage the in a systematic way. The objective of this system is to manage and stock allotting to different retail dealers based on demand and manages distribution, based on various customer levels. In this management system, we will provide an application that customers can view the details of items available in the ration shop. Customers can also submit feedback through this app. So that the shop owner can evaluate the entire system. Customers can view the ration shop's current discount facilities for each card. Customers can also view the current status of their ration card. The system demands greater levels of communication between admin and the system. Civil Supplies Management System fulfilling the demands of an administrator, sub-admin, shop-owner and customer in a ration shop.

1.3 Product Perspective

The civil supply management system helps the shop owner to manage the ration shop more effectively by computerizing sales details and stock details, billing, customer details, customer complaints and inventory control.

1.3.1 System interfaces

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

1.3.2 User interface

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

1. Login Page
2. Registration page
3. Page displaying the products that are available in the nearby ration shops.
4.. The details of the payment including the amount will be displayed and will be sent to the customer via their registered mobile number.

1.3.3 Hardware interface

The system needs a proper internet connection for the web application 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 Communications 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 constraints

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

1.4 Product Functions

The entire function will be executed in this order

- The admin allocate each items to each sub-admins
- Sub-admin allocate shop items to each shops
- Inform the availability of items through the registered mobile number to each customers
- The customers can come to the shop for buying the available items for them with the registered mobile number to generate the OTP for the confirmation of sales
- After generating the OTP, the customer can buy the items for their card.
- Payment can be done according to card type.
- The billing will sent to the mobile number
- Customer reviews

1.5 User Characteristic

The Civil Supply management system has five activity systems and one cooperation system. Customers can access the system and check the details via Wi-Fi connection. The admin and sub-admin can see the details of customers, and the shop owner's needs and customer's complaints and they can solve the issues. Then the customer can obtain the item confirmation from the shop owner through the system and allocate each items to each card according to their card type and the customer can buy the items from the ration shop. The cashier can access the system and receive payment from the customer and can sent the bill to them. Administrators can edit prices and calculate total income, expenses, stock, sales and all.

1.6 Assumptions and Dependencies

If the system has IOS and Windows applications, then customers using such smartphones (Windows and ios) will benefit a lot. If there are more stock per ration card, the overall system performance will be better.

1.7 Definitions, Acronyms and Abbreviations

We will also use bold letters to emphasize the main themes and for all the main functions of the system. The underline will represent a hyperlink. Italics will represent acronyms and helpful notes. We will use some acronyms throughout this document. Below are the abbreviations and definitions of some useful elements that we will use:

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 product 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

The registration of sub-admin is done by the admin with the given data such as name, area, mobile number etc. The sub-admin register the shop owner with the given details. Each registration they get the confirmation and login details through the registered mobile number.

2.2.2 Registration of customer

The registration of customer is done by the shop owner with the details such as card type, card number, name, mobile number etc.

2.2.3 Viewing item details

Customers can view the details of items that are allocated to them according to the card type. Its price, stock details, quantity are also shown there.

2.2.4 Adding items

Customer can add different products available in different shows to their cart. When they add the products the quantity they add and the amount of each product will be displayed and also the total amount that they need to pay will also be displayed.

2.2.5 Adding product details

Adding product details is the function done by the vendors. They can add the products in their shop and update the stock and also make changes in the details of the product.

2.2.6 Adding review

Customers can add review about the product and also about the shop.

2.3 Usability requirements

The software should be easy to use for all the users. The customer and vendors 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 analyse all the inputs made by the users.

3. Verification

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

4. References

Software Requirements Specification Document for ReqView