**2 SOFTWARE REQUIREMENT SPECIFICATION**

**2.1 Introduction**

Software requirement specification describes completely an external behavior of the proposed software. The software requirement specification is a document that completely describes what the proposed software should do without describing how the software will do it. It lays out functional and non-functional requirements.The basic purpose of SRS is to bridge the communication gap between the user and developer. Another important purpose is if developing the SRS is helping the clients to understand their own needs. Boundaries of software products are defined set of requirements. The software developer team designing, implements, tests, and delivers these requirements to client. This software requirement specification document will be the basic for final system. A high-quality software specification is a pre-requisite to high quality software and to reduce development cost.

**2.2 Overall Description**

This section describes the function of the project and their aim. It also includes the constraints and the requirements of the project.

**2.2.1 Product Perspective**

**2.2.1.1 System Interface**

This application runs in the latest version of Chrome or Firefox browser on windows, Linux, and mac.

* + - 1. **User Interface**
* **GUI (Graphical user interface)** is used to interact between user and system through different components.
* Each part of the user interface is designed to be as user-friendly.
  + - 1. **Hardware Interface**
* **Processor:** 1.9 gigahertz (GHz) x86- or x64-bit dual core processor. Recommended- 3.3 gigahertz (GHz) or faster 64-bit dual core processor.
* **RAM:** Minimum 4GB or higher
* **Storage:** Minimum 64GB is needed.
  + - 1. **Software Interface**
* Windows Xp and higher version and any compatible browser like chrome, Edge, Internet explorer.
* Xampp and MySQL

**2.2.1.5 Communication Interface**

Stable internet connection and browser.

**2.2.1.6 Interface with Server**

This application allows to interface with SQL Server, Xampp.

**2.2.2 Product Function**

**2.2.2.1 Admin:** Admin can add, remove, update the price, item, and dealer.

**2.2.2.2 Dealer:** Dealer can view the customer details and he can generate bill.

**2.2.2.3 Customer:** customer order the products and view the bill.

**2.2.3 User Characteristics**

**2.2.3.1 Admin:** He/she should have the knowledge of manipulating web applications.

**2.2.3.2 Dealer:** Basic knowledge of using computer and smartphone.

**2.2.3.3 Customer:** He/she should know how to use the browser and computer.

**2.2.4 General Constraints**

Not applicable

* + 1. **Assumption and Dependencies**
* For windows 11 1 gigahertz (GHz) or faster with 2 or more cores on a compatible 64-bit processor or System on a Chip (SoC). 4 gigabytes (GB). 64 GB or larger storage device.
* The system is dependent on the availability of an Apache Tomcat Server to run.

**2.3 Special requirements**

Not applicable

**2.4 Functional requirements**

**2.4.1** **Login module**

In this customer/dealer/admin can login to their system using username and password.

**Input:** username, password

**Process:** Check for username, password

**Output:** If username, password is valid customer/dealer/admin can login to their system.

**2.4.2 Registration module**

**2.4.2.1 Customer registration**

**Input:** Details of the customer

**Process**: Details are stored in database.

**Output**: Registration successful message will be displayed.

**2.4.2.2 Dealer registration**

**Input:** Details of the Dealer

**Process**: Details are stored in database.

**Output**: Registration successful message will be displayed.

**2.4.3 Admin module**

**2.4.3.1 Product management**

**2.4.3.1.1 Add**

**Input:** Enter the product name, price, image, description, stock, unit.

**Process:** It validates the product details. If it is valid then it stores into database otherwise shows error message.

**Output:** product details are stored in database and Successful message will be displayed.

**2.4.3.1.2 Update**

**Input:** Enter the product name, price, image, description, stock, unit which is to be updated.

**Process:** It validates the product details.

**Output:** Product will be updated, and successful message will be displayed.

**2.4.3.1.3 Active/Inactive**

**Input:** Select the toggle button to active or inactive the products

**Process:** Enables/disables the products which is added.

**Output:** Display the respective message.

**2.4.3.2 Dealer Authorization**

**Input:** Select accept or reject button for authenticating dealer.

**Process:** operation is used accept/reject dealer.

**Output:** Dealer status will be updated in database and gets respective message.

**2.4.3.3 Dealer Allotment**

**Input:** click on allot button.

**Process:** Assigning dealer based on order to supply orders.

**Output:** Dealer Id will be assigned to every order in database.

**2.4.3.4 Region management**

**2.4.3.4.1 Add**

**Input**: Enter Region name, pin code.

**Process:** It validates the region details. If it is valid then it stores into database otherwise shows error message.

**Output:** Display the successful message.

**2.4.3.4.2 Update**

**Input:** click on update and change region name, pin code

**Process:** It validates the updated region details. If it is valid then it stores into database otherwise shows error message.

**Output:** Region details will be updated in database anddisplay the successful message

**2.4.3.4.3 Active/Inactive**

**Input:** Select the toggle button to active or inactive the region

**Process:** Enables/disables the region which is added.

**Output:** Display the respective message.

**2.4.3.5 View Feedback**

**Input:** click on view Feedback

**Process:** Feedback will be retrieved from database.

**Output**: Feedback will be displayed.

**2.4.4 Dealer**

**2.4.4.1 Active orders**

**Input:** Click on active orders.

**Process:** Orders will be retrieved from the database.

**Output:** Active order will be displayed.

**2.4.4.2 Previous order**

**Input:** Click on previous orders.

**Process:** Dealer assigned order will be retrieved from database.

**Output:** Previous orders will be retrieved from the database.

**2.4.4.2 Bill Generation**

**Input:** Click on bill generate.

**Process:** The bill will be generated stored to database.

**Output:** Bill will be displayed.

**2.4.5 Customer**

**2.4.5.1 Cart**

**2.4.5.1.2 Modify cart**

**Input:** Products will be loaded and select increase/decrease button.

**Process:** Product quantity can be increased or decreased.

**Output:** Changes are updated in database.

**2.4.5.1.2 place order**

**Input:** click on place order

**Process:** Order will be placed and updated in database.

**Output:** Display the successful message

**2.4.5.2 Previous order**

**2.4.5.2.1 view bill**

**Input:** Select orders.

**Process:** Calculation of amount and bill generation.

**Output:** Bill will be displayed.

**2.4.5.2.2 Feedback**

**Input:** click on feedback and report.

**Process:** Process the id and feedback or report and stores it.

**Output:** Notification message will be shown regarding feedback or report.

**2.4.5.3 Active orders.**

**Input:** Click on active orders.

**Process:** Orders will be retrieved from the database.

**Output:** Active order will be displayed.

**2.5 Design Constraints**

**2.5.1 Hardware Constraints**

**RAM:**4 GB or higher

**Storage:**64 GB or higher

**2.5.2 Software Constraints**

HTML, CSS, PHP, MySQL, Internet, Browser.

**2.5.3 Fault Tolerance**

At the time of verification and validation invalid information will be removed.

Only valid data will be stored in the database.

**2.5.4 Security**

Only authorized user can access the application by using their username and password.

**2.5.5 Standard Compliances**

Not applicable

**2.6 System Attributes**

* **Availability**

Available for 24x7

* **Portability**

This application is machine independent and can be used in any systems.

* **Reliability**

This application is reliable and works efficiently. All input data will be verified and validated to avoid system failure.

* **Maintainability**

The application is maintained in a better way by providing updates. If any requirement needed it should be updated immediately.

* **Scalability**

The application’s functionalities can be changed as per the user’s demand. Software will remain stable and works constantly while making changes or updating or upgrading software.

**2.7 Other Requirements**

Not applicable