**SOFTWARE REQUIREMENT                 SPECIFICATION              For**

**E-Commerce Website**

**Prepared by                                                                         SIMON NGWONJU AND KOM JORIS**

**Date: 04 JULY2022**

**TABLE OF CONTENT**

[Date: 04 JULY2022](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.ucn9nyh2qom4)

[1 INTRODUCTION](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.fo218xa3qo99)

[2.6 Assumptions and Dependencies](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.x0wuz2rqkk62)

[The assumptions are:-](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.54vk39ze8hh2)

[3.1  User Interfaces](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.7c8wkgaggii4)

[3.2  Hardware Interfaces](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.5e4pnwt7fj6)

[4.0    System Features](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.v6b9y1y6x0y0)

[5.0 Other Nonfunctional Requirements.](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.ij4r3knx6jdq)

[5.2  Performance Requirements](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.uk6vxkv2807o)

[6.0    Other Requirements](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.j9h0z5mv6liv)

[6.0 Appendix A: Glossary](https://docs.google.com/document/d/19UBOwl2WFxbtYAOYW_V_YNy38eMNIt21vIWWtrALvv4/edit#heading=h.bikha1s0ecza)

 1 INTRODUCTION

1.1  Purpose

The Sinoshop Store (SS) web application is intended to provide complete solutions for vendors as well as customers through a single gateway using the internet as the sole medium. It will enable customers to set up   accounts using the web app, customers to browse through the shop and purchase them online without having to visit the shop physically.The main purpose of this web application is to  easily provide access to our products to the available audience who may not be around to visit the onsite shops but really admire and want our products .

**1.2 Intended Audience and Reading Suggestions**

1)  Customer: These are the main people to whom our products and services are targeted and our aim is to satisfy their needs and desires.

2)  Authority: These have to do with the legal rules or orders which are governing the development of this software and most be followed correctly

3)  Developers: This has to do with the persons developing the software in place.

**1.3Product Scope**

Secure registration and profile management facilities for Customers

 •Adequate searching mechanisms for easy and quick access to particular products and services.

 •Creating a Shopping cart so that customers can shop ‘n’ number of items and checkout finally with the entire shopping carts. Customers can add or delete items in the cart.

•Regular updates to registered customers of the online shop about new arrivals.

 •Uploading ‘Most Purchased’ Items in each category of products in the Shop.

•Strategic data and graphs for Administrators and Shop owners about the items that are popular in each category and age group.

•Maintaining a database of regular customers of different needs.

 •Shop employees are responsible for internal affairs like processing orders, ensuring home delivery, getting customer's delivery-time feedback, updating order's status and answering client's queries online.

 •Feedback mechanism, so that customers can give feedback for the product or service which they have purchased. Also facility rating of individual products by relevant customers.

 •Adequate payment mechanism and gateway for all popular credit cards, cheques and other relevant payment options, as available from time to time.

**1.4 References**

[www.wikipedia.Com](http://www.wikipedia.com)

[www.Google.com](http://www.google.com)

[www.academia.com](http://www.academia.com)

**2.0 Overall Description**

**Product Perspective**

Sinoshop is aimed towards the vendors who want to reach out to the maximum cross-section of customers and common people who can be potential customers. This project envisages bridging the gap between the seller, the retailer and the customer. Sinoshop is intended to be a stand-alone product and should not depend on the availability of other software. It should run on the Windows operating system.

**2.1 Product Functions**

 The main purpose of this project is to reduce manual work.

 Functions: A Customer can browse through the shops and choose products to place in a virtual shopping cart. The shopping cart details can be viewed and items can be removed from the cart. To proceed with the purchase, the customer is prompted to login. Also, the customer can modify personal profile information (such as phone number and current  address) stored by the application. The customer can also view the status of any previous orders, and cancel any order that has not been delivered  yet.

**2.2  User Classes and Characteristics**

The user should be familiar with the Shopping Mall that is some terms used in shopping online. Related terminologies include;

Credit card: A card which is used for payment.

Momo payment: The most simple means of payment out there now

The user should be familiar with the Internet, that is the user should be able to manipulate and use the internet freely so as to reduce the chances of problems occurring.

**2.3  Operating Environment**

The product will be operating in all browsers.  Sinoshop system is a website and shall operate in all famous browsers, for a model we are talking Microsoft Internet Explorer, Google Chrome and Mozilla Firefox. The only requirement to use this online product would be the internet connection.

The hardware configuration includes Hard Disk,Monitor,inch Color monitor, Keyboard.

The basic input devices required are keyboard, mouse and output devices are monitors.

**2.4      Design and Implementation Constraints.**

Some of these constraints include; functional and non functional constraints, commercial constraints.

Example: commercial constraints which are constraints linked to the business resources such as time, budget, labor.

**Functional requirements**

* The system shall display all the products that can be configured
* The system shall allow the user to select the product to configure
* The system shall allow the user to complete the current configuration
* It shall show or display detailed description of any selected product such as the price and quantity available
* The system shall allow the user to enter the search text on the screen
* The system shall allow a user to navigate through the searched items and see detailed information about each iterm.
* It also allows a user to create a profile and insert his or her credentials
* The system shall allow a user place an order for a particular product
* The system shall allow a user select from the available means of payment
* The back end of the system shall be encrypted and accessed only by authorized users
* The costumer's password can't be saved by the system but can only be resetted
* The system shall use a icons and toolbars for better navigation

**2.5  User Documentation**

The product will include a user manual. The user manual will include product overview, complete configuration of the used software (such as SQL server), technical details, backup procedure and contact information which will include email address. There will be no online help for the product at this moment. The databases will be created in MySQL.

**2.6 Assumptions and Dependencies**

The assumptions are:-

 1)  The coding should be error free, if not the whole program might not even work at all     2)The system should be user friendly so that it is easy to use for the users. Since the main aim is to get customers to the site if it isn't user friendly then we might not even have customers for the system

3)   The system should have more capacity and provide fast access to the database.

4)       The system should provide a search facility and support quick transactions.

5)       The sinoshop system is running twenty four hours a day.

6)   Users may access from any computer that has internet browsing capabilities and an internet connection.

7)   Users must have their correct usernames and passwords to enter into their online accounts and do transactions.

      So, if these assumptions are wrong, it may affect the system in several ways like; poor functioning of the system, poor transactions in the system, searching in the system will be poor, ineffectiveness of the database.

 The dependencies are:-

 1)       The roles and tasks should be predefined in the system because if not the system may not function properly.

2) the user must contain enough data connection if not he or she may not be able to browse through the available products

**3.0   External Interface Requirements**

 3.1  User Interfaces

 The user interface for the software shall be compatible with any browser such as Internet Explorer, Mozilla or Google chrome by which user can get access to the system.The user interface shall be implemented using any tool or software package like Java Applet, MS Front Page, EJB.

**3.2  Hardware Interfaces**

Since the application must run over the internet ,all the hardware shall be required to connect .The internet will be a hardware interface for the system .Examples of the hardwares include ; WAN-LAN,ethernet  cross cable.

**.** Processor: high processor

**.** Ram: good and higher quality

Also, since the application must run over the internet, all the hardware required to connect to the internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

**3.3 Software Interface.**

Operating system: unix, linux, Mac, windows.

**.** Development tools: PHP, JavaScript.

**.** Database: MySQL. Also,

**.** The online  shall communicate with the content manager to get the product specifications, offerings and promotions.

**.** The online system shall communicate with billPay system to identify available payment methods , validate the payments and process payment.

**.** The online  system shall communicate to the credit management system for handling financing options.

**.** The online  system shall communicate with the CRM system to provide support.

**.** The online system shall communicate with the Sales system for order management.

. The application shall communicate with the content manager to get the product's specification , offerings and promotions.

. It shall communicate with the sales system  for  order management .

.It shall communicate with a selected payment method for handling financial issues

   3.4   **Communications Interfaces**

The online system shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite. Also, the website order system shall send an email confirmation to the customer that the items they have ordered will be delivered to the shopping address along with user identification.. It shall use the HTTP transfer protocol for communication over the internet

**4.0    System Features**

The system shall function as follows :  when a customer likes a certain category of product from the dashboard he or she can now select it and keep in the costumer's purchased boardThen the system automatically calculates the amount to be payed and also including the delivery money .Once a product is being uploaded into the website its price is also being attached to it so the customer already knows its price. The system will function in a way that if the customer takes a particular amount of products he or she must have a particular amount for discount.There shall be a dashboard where products are displaced and also a costumers dashboard where his or her ordered products are displayed also before a user can get into the system his or her information is collected and stored in a database using a sign in form. The website authority should ensure the customer provides a real product. Customer support is available from the authority .  Customer information security confirmed. Manage customer information.  To increase efficiency of managing the authority work.

**5.0 Other Nonfunctional Requirements.**

Those requirements which are not the functionalities of a system but are the characteristics of a system are called non functional requirements. Every software has non functionalities. Some non functional requirements include;

**.** Performance constraints :

   This system must be fit according to the performance predicted. It should use less memory and will be easily accessible by the user. Memory management should be done wisely so that none of the memory part goes wasted.

**.** Hardware limitations:

   It should be designed in such a way that cheap hardware must be installed to access and use effectively. It should be platform independent. There should be no hardware limitations. It should be designed to work with the low specification hardware so that it could  easily work with high specification hardware.

**5.2  Performance Requirements**

There is no performance requirement in this system because the server  request and response is dependent on the end user internet connection.

**5.3 Safety Requirements** The database may get crushed at any certain time due to virus or operating system failure. Therefore it is required to take the database backup so that the database is not lost. Proper UPS/ Inverter facility should be there in case of power supply failure.

**5.4   Security Requirements**

System will use a secured database.

Normal users can just read information but they cannot edit or modify anything except their personal and some other information.

System will have different types of users and every user has access constraints.

**5.5  Software Quality Attributes**

There may be multiple admin’s creating the project, all of them will have the right to create changes to the system. But the members or other users cannot make changes.

The project should be open source.

 The quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.

 The user is able to easily download and install the system.

**5.5 Business Rules**

A business rule is anything that captures and implements business policies and practices. A rule can enforce business policy, make a decision, or infer new data from existing data. This includes the rules and regulations that the system users should abide by. This includes the cost of the project and the discount offers provided. The users should avoid illegal rules and protocols. Neither admin nor members should cross the rules and regulations

**6.0    Other Requirements**

Software quality attributes:

The quality of the system is maintained in such a way that it can be very user friendly to all users. The software quality attributes are assumed as under;

**.** Accurate and reliable

**.** Secured

**.** Fast speed

**.** Compatibility.

**6.0 Appendix A: Glossary**

The following are the list of conventions and acronyms used in this document and the project as well:

 User: Normally users can comment or view details of robo shop availability.

Client: Intended users for the software.

SQL: Structured Query Language; used to retrieve information from a database.

SQL Server: A server used to store data in an organized format.

 Layer: Represents a section of the project.

  User Interface Layer: The section of the assignment referring to what the user interacts with directly.

 Application Logic Layer: The section of the assignment referring to the web server. This is where all computations are completed.

 Data Storage Level: The section of the assignment referring to where all data is recorded.

 Use Case: A broad level diagram of the project showing a basic overview.

Class diagram: It is a type of static structure diagram that describes the structure of a system by

showing the system’s cases, their attributes, and the relationships between the classes.

 Interface: Something used to communicate across different mediums.

Unique Key: Used to differentiate entries in a database.