SOFTWARE REQUIREMENT SPECIFICATION DOCUMENT

FOR

ISLAND ONLINE SHOPPING

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04th February 2021.

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1.0 INTRODUCTION

Software Requirement Specification is a document designed by a developer of the system which describes the agreement between the customer (who will use the system) and the developer of the system regarding the specification of the software product requested. Its primary purpose is to provide a clear and descriptive "statement of user requirements" that can be used as a reference in further development of the software system.

This document describes the software requirement specifications for Island online shopping which will be developed specifically to let customers / people to make their orders online by using their electronic devices (Android) such as mobiles, tablets, etc. Throughout this document, Island online shopping will sometimes be referred as "this software" or "this application".

This application will show variety of products, where a user can search for specific product, add to cart, add to wish list and get it's list, share product link, see a product detail with easy to choose color and size, etc.

2.0 RATIONALE

In March 2020, much of the world went into lockdown, forcing many businesses to temporarily shut down. As of this writing, cities are gradually relaxing restrictions, but the future is still uncertain. Even businesses that are reopening have restrictions enforcing social distancing, the wearing of masks, and limits on how many customers can enter a space at one time.

When traditional shopping becomes difficult, or may even be scary, people are increasingly inclined to shop online. The fact that consumers were already embracing Amazon and other online retailers with open arms made this transition considerably easier.

Online revenue growth as of April 2020 was up 68%. There's a good chance that this trend will continue in the post-quarantine world. The advantages of online shopping aren't going to disappear even when retail businesses reopen fully. All of this points explains why this is the ideal time to either start or double down on your e-commerce efforts.

Factors that will continue to drive e-commerce growth:

❖ The rapid growth of mobile devices is making it easier than ever to browse and shop online. Customers can place orders one-handed from the device that is likely in their hand or pocket at all times.
❖ Even as some items became scarce in physical stores there were options for ordering online.
❖ It becomes more convenient for consumers to shop anywhere, any time, on and across multiple devices.

2.1 SCOPE

This system will be an e-commerce software system (Android based system) which will be designed to help peoples who are busy in today's word. Despite consumers' continuation to buy from a physical store, some users or buyers feel very convenient to online shopping as it's confidential and provides round the clock services at all times even in midnight.

The system will be designed to allow a user to perform the following functions:

❖ Register an account and log on as a customer

❖ View different items in categories

❖ Search for a specific item he will need

❖ Add a product to a shopping cart and view it's list (cart list)

❖ Add a product to a wish list and view it's list (wish list)

❖ Change a password (Update a new password)

❖ Edit personal information (Updating)

❖ Place or cancel an order

❖ Add or delete a comment

❖ Pay for the placed order

Also the system will be designed to allow administrator (a store owner) to perform the following functions:

❖ Login using a default username and password

❖ Change a password (Update)

❖ View the list of all registered users

❖ Register or delete categories of the products

❖ Register or delete products

❖ View all placed orders of different customers

❖ View all comments from customers

❖ View all placed orders

2.2 GENERAL OBJECTIVES

The objective of this software is to create an environment which helps peoples in buying what they want at any time at a reasonable price through internet by using android devices.

This system will offer products that best serve our customer's needs.

2.3 SPECIFIC OBJECTIVES

❖ Increasing the number of loyal customers

Customers are the core of all business strategies. Therefore, ensuring the great customer experience is of prime importance for the growth of the business. You need to meet your customers where they spend their time. More than 60% of consumers look for purchasing goods online. If you meet your customers where they are already active, the chances of them, interacting with your business increases two folds. You can increase the number of loyal customers by giving the best experience to your already existing customers as well as bring in newer customers.

❖ Reduce management costs

This software aim at reducing the costs incurred for the betterment of their revenue. Automating the ecommerce business can help in reducing the management cost significantly. Moreover, the right use of digital marketing can help in reducing the cost spent on driving customers to such an extent that businesses can bring customers for free of cost.

❖ Increasing sales

The other objective of this software which will always remain continuous and constant for an e-commerce business is to increase sales as many peoples can interact with the system at a time different from traditional shops as it has a limit place. Having this system will boost the sales constantly.

❖ Developing business relations

With ecommerce as the primary use, business development can be easily achieved. The direct communication between a company and the customer, the business relationship can be boosted. Eventually, the ecommerce market shall be expanded.

2.4 DELIVERABLES

❖ Software (Website and Mobile Application)

In developing this project, I will develop a website side where it will involve the administrator (seller) and a mobile application where it will involve all users (customers) who will interact with the system.

❖ Reports and System Documentation

Proposal, final project report and software requirement specification document are written documents that are provided during the development of this project.

Proposal report: is the document which is used to present an idea that brings a solution to a specific problem.

Final project: report is the project which will explains in summary the outcomes of the project, the success of the project, lessons learned along with the screenshots of the system on how it works and this report is prepared after the development of the system.

System requirement specification (SRS): is the document designed by a developer of the system which describes the agreement between the customer (who will use the system) and the developer of the system regarding the specification of the software product requested.

3.0 FUNCTIONAL AND SECURITY REQUIREMENTS

3.1 FUNCTIONAL REQUIREMENTS

A functional requirement is a description of the service that the software must offer. It describes a software system or its component. A function is nothing but inputs to the software system, its behavior, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform.

Various functional modules that can be implemented by the system will be:

Table 1 : Functional Requirements

FREQ ID	Requirement Description
FREQ001	System will allow user registration
FREQ002	System should capture all registered users
FREQ003	System should allow registration of various categories
FREQ004	System should display all registered categories
FREQ005	System should allow registration of various products in categories
FREQ006	System should display all registered products
FREQ007	System should allow users to place their orders
FREQ008	System should capture and display all placed orders
FREQ009	System should let user add any product in his wish list
FREQ010	System should let user view a list of his wish list
FREQ011	System should allow a user to cancel the placed order
FREQ012	System should allow interaction (communication) between customer and supplier
FREQ013	System should allow comments
FREQ014	System should display all comments
FREQ015	System should allow various ways of payments for placed orders
FREQ016	System should capture and display all paid orders
FREQ017	System should provide reports

3.2 SECURITY REQUIREMENTS

Security requirements ensure that the software is protected from unauthorized access to the system and its stored data. It considers different levels of authorization and authentication across different user's roles. For instance, data privacy is a security characteristic that describes who can create, see, copy, change, or delete information. Security also includes protection against viruses and malware attacks.

Security Requirement needed for Island online shopping:

Table 2 : Security Requirements

S. REQ ID	Requirement Description
SREQ001	This system must protect the confidentiality and integrity of transmitted information by using sessions
SREQ002	This system must protect the confidentiality and integrity of transmitted information by using cookies
SREQ003	System will have to encrypt all inserted passwords
SREQ004	System should control the login process by using authentication (accepting credentials from the entity and validate them against an authority)
SREQ005	System should control access controls by using authorization (confirms the service requestor's credentials)
SREQ006	System will have data protection (securing both data integrity and privacy)
SREQ007	System will have text validation
SREQ008	System will have numeric validation
SREQ009	System will have email validation
SREQ010	System will use filters to validate input and output
SREQ011	System will secure data by keeping off-shore backup
SREQ012	System will not have default password for their users

4.0 CONCLUSION

With the continued evolution in technology, and increasing of using electronic devices especially android mobiles, e-commerce is becoming more and more essential now-a-days, where customers or user of the system or application can freely buy an item at any time without physical interaction with the store owner and a user can even buy one item at a time and the item will be delivered as required by a buyer.

This is where Island online shopping was chosen to be developed, which it will provide the functionality of e-commerce and let users (customers) interact with the store owner.

This software solves some of the problems faced by customers like:

❖ In order for a customer to buy a product, he have to go to physical shop, which can cost him a lot of time, energy and cost as some of the shops are limited by the geographical area.

❖ Traditional commerce is difficult to perform more business as each customer needs attention, so it's hard for one or two sellers to satisfy many customers at a time and there are limited items in each store.

❖ When a customer purchase an item, there are limited ways of payments, cash payment is mostly used.

This system will provide round the clock services at all times even in midnight. So the customers do not require visiting a physical market if they need something during the night. It is the most convenient option for the people who are usually busy with their working schedules. So it helps you to be available for your customer 24*7

And finally, this system will use JSP on the administrator side (Web based) and Android on the client or user side (Android based) along with other programming languages such as HTML5, CSS3, MySQL, Java, etc.