

Software Requirements Specification for E-commerce Website with Analysis Tools

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Table of Contents

1. Introduction

- 1.1 Purpose
- 1.2 Scope
- 1.3 Definitions, Acronyms, and Abbreviations.
- 1.4 References
- 1.5 Overview

2. The Overall Description

- 2.1 Product Perspective
 - 2.1.1 Software Interfaces
 - 2.1.2 User Interfaces
 - 2.1.3 Memory Constraints
- 2.2 Product Functions
- 2.3 User Characteristics
- 2.4 Constraints
- 2.5 Assumptions and Dependencies
- 2.6 Apportioning of Requirements.

3. Specific Requirements

- 3.1 External Actor Descriptions
 - 3.1.1 Human Actors
 - 3.1.2 Hardware Actors
 - 3.1.3 Software System Actors
- 3.2 Performance Requirements
- 3.3 Software System Attributes
 - 3.5.1 Reliability
 - 3.5.2 Availability
 - 3.5.3 Security
 - 3.5.4 Maintainability
 - 3.5.5 Portability
 - 3.5.6 Other quality characteristics

4. Change Management Process

5. Supporting Information

Change Log

Version 1.0 (10-29-2016): Document created.

1. Introduction

1.1 Purpose

This Software Requirements Specification is intended to document the requirements for the E-commerce Website with Analysis tools. The requirements were gathered through consultation with Professor Suneil.

1.2 Context (or scope)

The E-commerce Website with Analysis tools serves as a platform to retailers needing to put their products online for sale. The E-commerce Website with Analysis tools will offer an interface that effectively aggregates the needs of retailer and customer with an analyst role added in system to enhance the user Experience.

E-commerce website which will be used by

1. Customers to place orders navigating through categories as filters, place, manage and track orders.
2. Analyst/Manager to generate reports and develop marketing strategies like coupons and offers
3. Admin to manage stock, vendors and warehouses etc.

1.3 Definitions, Acronyms, and Abbreviations

None at this time

1.4 References

None at this time

1.5 Overview

This document is designed to provide information to both the client and the technical designers and developers of the E-commerce website. Section 1 provides a brief overview of the product, including definition, acronyms, and references. The definitions and acronyms section is meant to clarify the terms used through this requirements specification. Section 2 provides a general description of the product requirements from the end-user's perspective. It includes some general constraints while making the software, assumptions, and functional and data requirements. Section 3 provides detailed product requirements from the technical developer/designer's perspective. These are the requirements that the product is expected to deliver with functional requirements being communicated with various use cases. Section 4 discusses the Change Management Process that will be used to manage changes to this document as the project scope and/or requirements change. Section 5 includes supporting information in the form of Appendices.

2. The Overall Description

2.1 Product Perspective

The E-commerce website is independent and integrated platform for Customer to buy products ,Retailers to put products online for sell. And Analyst can generate reports and Enhance the user experience.

2.1.1 Software Interfaces

The E-Commerce website will be made available in the form of a server application and client application with client can use web browser for this application. The server application will run within a JEE Application Server, which is a prerequisite for the E-commerce website, such as Tomcat or the SpringSource dm Server. The client will support any browser and will be made available in the form of a URL .

The external libraries/platforms required are described below.

- (1) Java Standard Edition Development Kit or Java Standard Edition Runtime Environment 8
- (2) JDK 8 or JRE 8
- (3) Version 1.6
- (4) Sun Microsystems (<http://java.sun.com/javase/downloads/index.jsp>)
- (5) Development of the server-side/client-side E-commerce application will require a Java Development Kit

- (1) SpringSource dm Server v2.0
- (2) SDS v2.0
- (3) Version 2.0
- (4) SpringSource (<http://www.springsource.com/products/dmserver>)
- (5) The E-commerce consists of a JEE-based server application based on the Spring Web MVC framework that will execute within the SpringSource dm Server (JEE Application Server)

2.1.2 User Interfaces

The user will have user interface as a browser.

2.1.3 Memory Constraints

No memory constraints exist.

2.2 Product Functions

The functionality of E-Commerce website was discussed earlier to some extent. In this section, use cases will be presented for the one class of user that the E-commerce will have. The requirements were gathered by researching the concept of Online product selling, thinking about the advantage of Enhance user experience with analytical tools in such an area, and discussion with the professor.

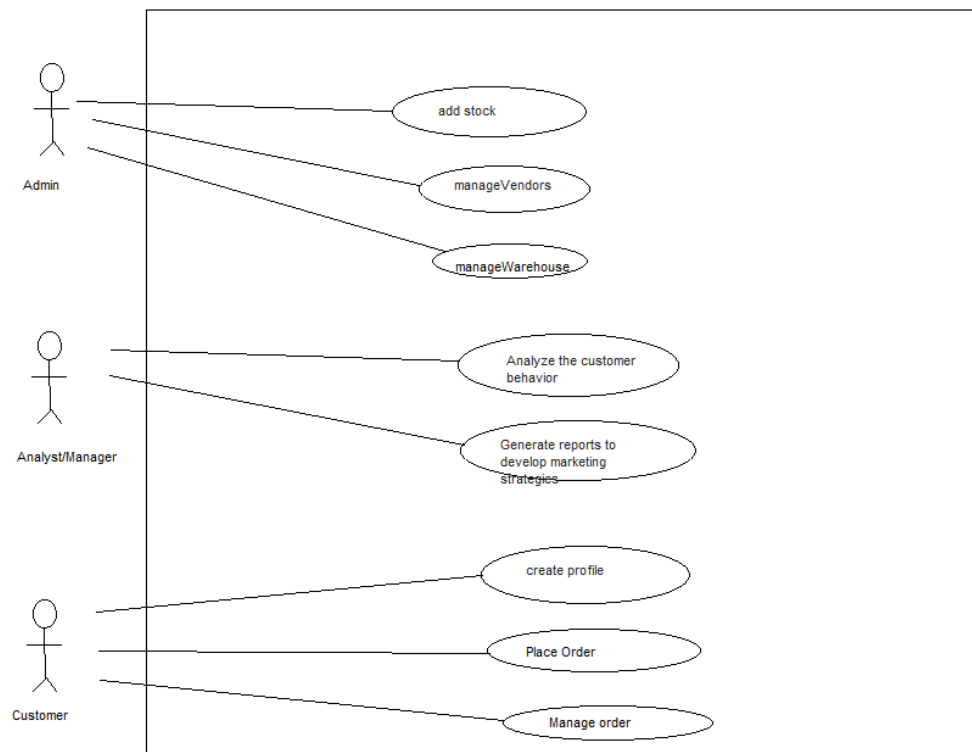


Figure 1.1 E-commerce Website User Use Case Diagram

Use Case descriptions:

- **Add Stock:** - Admin will add stock and manage Vendors and Warehouse using the system.
There are two ways of adding stock 1. Adding by GUI.
2. Feeds upload by CSV file.
If there is some product out of stock, or less than a certain count the system will alert the admin user by generating emails or through pop-ups.
- **Manage Vendors:** Admin can add ,Delete ,Modify vendors information to the system
- **Manage Warehouses:** Admin can add ,Delete ,Modify Warehouses information to the system
- **Analyze the Customer behavior :** Analyze the customer behavior and shopping pattern for predictive analytics.
- **Create Profile:** user will create their profile through sign up , In this profile user will insert their username, password, personal information, shipping address and all other contact information. Users will have their own profile where they can manage their data.
- **Place order:** Users will navigate through the user interface and select Products from categories, applying filters. Add multiple products to cart. Then while during check out user will be provided

with the choice to select the shipping address and place the order .After the order is placed a mail will be sent to customer email id.

- **Manage Order:** Users can view their orders whenever they log into the system. They can track the order, view previous orders, review, and rate products

2.3 User Characteristics

The target clients for thee-Commerce website are any online shopper who wants to buy products and retailer who wants to sell their products online . The user is expected to have basic proficiency with websites and any web browser that will enable him or her to use the E-commerce website in the performance of their day-to-day online shopping.

2.4 Constraints

No constraints have been identified.

2.5 Assumptions and Dependencies

No assumption or dependencies identified.

2.6 Apportioning of Requirements.

Some ideas for future versions of the E-commerce follow. This application offers a website to shop online with enhanced user experience.

3. Specific Requirements

3.1 External Actor Descriptions

3.1.1 Human Actors

Admin : Who is super user who will add stock, manage things like warehouses and vendors.

Analyst :Who is intermediate user who analyze the user behavior and print repots and make business strategies.

Customer : The user who Places order after creating their account and manage the orders.

3.1.2 Hardware Actors

No Hardware Actors exist for the E-commerce website.

3.1.3 Software System Actors

No Software System Actors exist for the E-commerce website

3.2 Performance Requirements

There are no specific performance characteristics for the E-commerce website that have been uncovered during requirements gathering..

3.3 Software System Attributes

3.3.1 Reliability

Other than as a result of an operating system error, Network error ,server errors E-commerce website shall never crash or hang.

3.3.2 Availability

Available online all the time.

3.3.3 Security

Secure website.

3.3.4 Maintainability

All code shall be fully documented and the code shall be modular to permit future modifications.

3.3.5 Portability

All the user will get Enhanced user experience.

4. Change Management Process

This will be a living document and so a Change Log will be created and maintained with this document. Each change requested by the client must be discussed by all of the project stakeholders and accepted only after careful analysis of the risk involved with introducing the change. Communication with the client will happen on an on-going basis and so changes to requirements would likely be brought up during one of these meetings. The client may then submit via email a description of the change requested and why the change is being requested.

5. Supporting Information

No additional supporting information at this time