E-Commerce Site_SRS

Contents

1 Introduction

1.1 Purpose

The purpose of this document is to describe the requirements for the E-Commerce Site (ECS). The intended audience includes all stakeholders in the potential system. These include the following: Administrator, developers, seller, and customers. This ECS e platform with a centralized product catalog, streamlined order management, and accessible product information.

Developers should consult this document and its revisions as the only source of requirements for the project. They should not consider any requirements statements, written or verbal as valid until they appear in this document or its revision.

1.2 Scope

The proposed software product is the E-Commerce site (ECS). The system, a web application will be used to cater to day-to-day grocery needs. It is intended to act as a virtual supermarket, providing a hassle-free shopping experience to its customers, doorstep delivery of the products and Analysis tools for better profits. Requirements statements in this document are both functional and non-functional.

1.3 Definitions, Acronyms, and Abbreviations

ECS	E-Commerce Site
HTTP	Hyper Text Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
SRS	Software Requirements Specification
Web Based Application	An application that runs on the internet.
Administrator	A person responsible for managing the site and all the activities associated with it.
Customers	People who will buy products from the site
Seller	Person who sells products on-sit
Visitors	People who just occasionally visit the site without the intention of buying anything

1.4 References

1. Software Engineering by Dr. Rajib Mall

2. Demo SRS of Hospital Management System provided by Jaydeep Pati Sir

2 Overall Description

2.1 Product Perspective

The ECS is a web-based product, which will be used by many users such as the seller and the customer. ECS should be user friendly, interactive and reliable software for the above purpose. It should run on laptop, mobile and tablet.

2.2 User Characteristics

2.2.1 Administrator

The administrator is responsible for following:
1. Maintain all the databases associated with the site like customer information, product and stock management, order shipment, delivery, payment collection etc.
2. See different analyses of different products for increasing profitability.

2.2.2 Customers/Visitors

Functionalities of the customers/visitors include:

1. Browsing through the site, choosing products, and placing them in a shopping cart.

2. To proceed with the purchase, the customer is prompted to login/sign up.

3. Also, the customer can modify personal profile information stated by aplication.

4. The customer can also view the status of any previous orders and cancel any order that has not been shipped yet.

2.2.3 Seller

Functionalities of the seller include:
1. Add/Edit/Remove products from his/her inventory.
2. Can modify personal profile stated by application.
3. See different analyses of different products for increasing profitability.

2.3 General Constraints

1. Limited to HTTP/HTTPS

2. No multilingual support.

3. If the shopping cart value is below Rs. 500, shipping charges will be applicable.

2.4 Operating Environment

The ECS is a website that shall operate in all Browsers and all the processors that

support Internet Browsing.

2.5   Assumptions and Dependencies

1. Users of the software are familiar with shopping terminologies like shopping cart/check out/transaction/shipping.

2. The customers have computers with a browser and are familiar with Internet.

3   Specific Requirement

3.1   External Interface Requirement

External Interface requirements refers to needs of this software's front end to work efficiently, the requirements are further classified into certain topics, which are as:

3.1.1   User Interface

For the efficient working of the User Interface, i.e. the Front End of the system, the OS must be having at least Internet Explorer 8 installed. To log into the website.

3.1.2   Hardware Interface

For the hardware requirements, the SRS specifies the logical characteristics of each interface between the software product and the hardware components. It specifies the hardware requirements like memory restriction, cache size, processor, RAM etc. which are required for software to run. Minimum Hardware Requirements:

1. Processor Pentium IV

2. HDD 40 GB

3. RAM 128 MB

4. Cache 512 kb

Preferred Hardware Requirements:

1. Intel Core i3 (or any latest one)

2. HDD 100 GB

3. RAM 2 GB

4. Cache 6 MB

3.1.3 Software Interface

1. For Hosting: Any Windows or Linux Operating System and Visual StudioCode for development. A working internet connection is mandatory.

2. For Using: Any type of Operating System with at Least Internet Explorer installed and having a minimum of 512 kbps working internet compulsorily.

3.1.4 Communication Interfaces

This e-commerce website provides users with a streamlined process to raise queries and submit feedback. Users can easily record complaints, seek assistance, and share their feedback using dedicated query submission forms. The website employs STRIPE for payment processing and relies on POSTMAN for user sign-up, ensuring a straightforward and efficient user experience.

3.2 Functional Requirements

3.2.1 Registration

New users can register themselves on the online website with their credentials to log in. Already registered customers can directly log in for further use.

3.2.2 Cart

Users can browse their cart to view the product list as well as add or delete products to the cart. The cart will be used to keep track of user's product choices.

3.2.3 Login

Users can log in to the website by entering their credentials.

3.2.4 Receive Order

After confirmation of the order for the customer, the order is received.

3.2.5 Payment collection

The customer will be provided various methods for payment following which the customer will be provided with an invoice and statement.

3.2.6 Shipping items

Once the order is confirmed by the Shipping agent the items are shipped to the customer.

3.2.7 Managing product

Seller can Add/Edit or delete products by managing his inventory.

3.2.8 Managing Account

Administrator, seller and user can change their profile detail on the platform.

3.2.9   Analysis of Products

Administrator and seller can analysis various products which are been seen & sold more.

The user can log in, add or remove items to the car and register as well as pay. Admin can have privileged login and they can change or modify the catalogue as well as maintain user data. After adding items to the cart they can make an order. The orders are stored in an ordered database. The orders are processed and items from the warehouse are delivered to the customer by the shipping agent.

3.3   Logical Database Requirement

1. Profile: Database of all the users accessing the system that includes their information like email id, password, phone number and other details

2. Order: It is the database of all the order the site or the administrator has

3. Shopping Cart: Contains the products that the customer is planning to purchase. Entities can be added to or removed from the cart.

4. Warehouse: Database of all the warehouses.

5. Invoices: It contains the billing information.

6. Transaction: Payment information of all the customers.

7. Product Database: The database will contain information regarding

    product availability, stock etc.

8. Catalogue: This is the brochure containing all the products the system has to offer its customers.

3.4   Design Constraint

The software is a web-based application

3.5   Non-Functional Requirement

3.5.1   Security

Only the authorized user to edit details in the profile and item tables.No one can enter the system without a username and password.

1. Administrator Identification (Login ID): The system requires the administrator to identify himself /herself.

2. User Identification (Login ID): The system requires the user to register to purchase the book.

3. Modification: Any modification (insert, delete, update) for the Database shall be synchronized and done only by the administrator.

4. The administrator shall be able to view and modify all information associated with the system.

5. The system will have different users and every user has access constraints.

6. Normal Users/Viewers can only read information but cannot edit/modify anything.

3.5.2 Performance Requirements

1. Good working pc with all the requirements.

2. Works for medium size information databases.

3. System Should not be overloaded.

4. Response System: The response time to view information shall not be more than 3 seconds to appear on the screen.

5. The time for search a product will not be more than 3 seconds.

6. The time to print the stock evaluation will not be more than 3 seconds.

7. The time taken to update the database or to get information from the database will not be more than 2 seconds.

8. The time taken to prompt the message box will not be more than 2 sec.

9. Capacity: The system shall accommodate a high number of items and users without any fault.

10. User interface: The user interface screen shall respond within 5 seconds.

11. Conformity: The systems must conform to the Microsoft Accessibility guidelines.

3.5.3 Maintainability

To make the maintenance of the system easy for the ECS Administrator, the user manual and the system manual are provided at the delivery. Each module is designed independently so that any change of a request can be modified easily.

1. Back Up: The system shall provide the capability to back up the Data.

2. Errors: The system shall keep a log of all the errors. ECS shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period

3.5.4 Reliability

The system is thoroughly tested at the time of delivery so that computational errors are minimized.

3.5.5 Availability

The system should be available all the time.

3.5.6 Safety Requirements

1. Except visitors all other users of the software shall have Login ID andpassword.

2. Personal information of all the customers will be kept confidential.

4 Conclusion

Table 1: E-Commerce Site

Serial No.	Role	Responsibility
1.	Administrator	Maintenance of database of customers and product
2.	Customer	Buy products from e-commerce site
3.	Seller	Sell products on e-commerce site
4.	Visitor	Surfs through the e-commerce site

5 Data Dictionary

1. Item: String

2. Quantity: Integer

3. Price: integer

4. Customer- ID: Integer

5. Customer-Name: String

6. House No.: String

7. Street No: String

8. City: String

9. Pin: Integer

10. Date: year+ month +day

11. Year: Integer

12. Month: Integer

13. Day: Integer

14. Order: Customer-ID + items+ quantity + order No.

15. Order no.: Integer /*unique order no generated by the program*/

16. Bill: Item+ quantity + price +total amount+ customer address+ order no.

17. Customer address: Name+ house no. + street no. + city + pin

18. Total amount: Integer

19. View Count: Integer