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# Software Requirements Specification

for

## E-Commerce Website

Version 1.0 approved

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## Revision History

Name	Date	Reason For Changes	Version

# 1. Introduction

## 1.1 Purpose

*In this digital world, it is easier to reach people all over the world. We can make use of this technology to develop a business. For that it is essential to have an ecommerce website. So that people from different countries are able to buy your products.*

## 1.2 Document Conventions

*IEEE format standard is being followed in this document.*

## 1.3 Intended Audience and Reading Suggestions

*This document describes the overall process and functions involved in designing an ecommerce website. This document is intended for web developers who are trying to create an ecommerce website using react js as frontend , node js as backend and mysql as a database. This ecommerce website is useful for large businesses and startups who need a digital market for selling their products across the world.*

## 1.4 Product Scope

- Products has a world wide reach
- Buying a product through e commerce saves lots of time and energy
- Accountings are made simple
- Pre-deals, subcontracts, and supply
- Business to organization
- Commercial exchanges, requesting, conveyance installment

## 1.5 References

<https://reacts.com/system-requirements/#webapp>

# 2. Overall Description

## 2.1 Product Perspective

*This project acts as a bridge between seller, customer and retailer. ecommerce is aimed towards the vendors who want to reach out the maximum number of customers and common people around the world. This website is intended to be a stand alone project and does not depend on any other software / project. This website can run on any device.*

## 2.2 Product Functions

- *Recommendation of products based on previous purchases of the customer*
- *Adding best seller tag on the product post*
- *sorting based on ratings*

## 2.3 User Classes and Characteristics

### 2.3.1 Seller:

Sellers are people who have permission to add or manage products.

### 2.3.2 End users / Customers:

Customers are the end users who can search and buy products based on their needs from the website. Each customer is given a username and password during the sign up process through which they can logIn into the website.

## 2.4 Operating Environment

- *Processor base frequency of 1.8 GHz or Higher*
- *Minimal screen resolution: 1366x768 pixels*
- *4 GB RAM or more*
- *75 MB of available disk space or more*
- *Windows Os along with a Chrome Browser*

## 2.5 Design and Implementation Constraints

*E-commerce website is a virtual shop where customers can browse catalog and select products of their interest. The selected items can also be collected in a shopping cart. Before buying, customers need to give their address to proceed with delivery.*

## 2.6 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 product will be compatible with Internet Explorer 6.0 or higher. The databases will be created in*

## 2.7 Assumptions and Dependencies

- *The project depends on the users ability to understand the features of the online shopping website and be able to use the best of his or her use.*
- *The employee has to be to access most of the features of the website.*
- *the system which uses the product will have to be able to install this component.*

## 3. External Interface Requirements

### 3.1 User Interfaces

*In the USER interface the user will have a login option and an option to register .Once the user logs in ,there will be a wide range of actions for them to perform like, buy,sell,view,add to cart,sort according to different categories etc.And If the user registers for the first time,In the register screen there will be different columns asking the user information like Name,Address,Mobile number,Email etc.*

### 3.2 Hardware Interfaces

- Hard disk: 40 GB
- RAM: 512 MB
- Processor: Pentium ® Dual-core CPU

### 3.3 Software Interfaces

- Operating System: Windows, Linux, MAC
- REACT JS (The Front End)
- Visual Studio Code (Coding platform)
- MySQL (Database Management)
- Node js (The Back End)

### 3.4 Communications Interfaces

*The customer can access the website by connecting to the Internet. The source of the internet can be a modem,a broadband Internet,broadband connection with an internet provider etc.Once the user connects to the internet they can perform all the actions without any interruption with a stable internet connection.*

## 4. System Features

### 4.1 Showing Top Selling product

*Adding a tag to the highest selling product in the particular category.*

#### 4.1.1 Description and Priority

*In this feature, products which have the highest selling rate in a particular category are given with the tag named Best Sellers. This feature helps the customers to quickly choose the best product in the market.*

#### 4.1.2 Stimulus/Response Sequences

*When most of the customers buy the same product and give top ratings, they will have a tag named top selling.*

#### 4.1.3 Functional Requirements

REQ-1: Product should athletes have 4 star rating

REQ-2: There should be a considerable selling rate for that product

## 4.2 Product Recommendations

Recommending products based on the previous purchases of the particular customer.

### 4.2.1 Description and priority

To give a better experience for users on our website, we included this product recommendation based on previous purchases. This enables users to choose more related products.

### 4.2.2 Stimulus/Response Sequences

This feature will work only after the first purchase of a user/customer. At first ,when a customer login into his account, this feature will collect the history of all the products purchased by that customer and show those products at the front row of the products list. So that customers can choose their favorite products easily and quickly.

### 4.2.3 Functional Requirements

These features make use of the purchase history of the customer. From this it is clear that inorder to enable this feature a customer should make at least one purchase.

Req 1 : Data of products which has high selling rate on a particular category.

## 4.3 Sorting Products

### 4.3.1 Description and priority

To make this website more user friendly we included this system feature. This feature include sorting of products based on rating, price(low to high), price(high to low)

### 4.3.2 Stimulus/Response Sequences

This feature works when users click the buttons such as sort by rating, sort by price. After this stimulus from the user, the product list gets sorted based on the function they choose.

### 4.3.3 Functional Requirements

Req 1: data regarding raings of the products are required

Req 2: price of the products must be known

## **5. Other Nonfunctional Requirements**

### **5.1 Performance Requirements**

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

### **5.2 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.*

### **5.3 Security Requirements**

*The application is password protected and also any update of new product entries and order processing is done by only privileged users.*

### **5.4 Software Quality Attributes**

- *Any one can create an account by providing a specific user name and password*
- *The project should be open source*
- *The quality of database is maintained in such a way sa that it can be very user friendly to all the users of the database*

### **5.5 Business Rules**

*A business rule is anything that implements business policies and practices. This includes the cost of the project . The user should avoid illegal rules and protocols. Neither admin nor members should cross the rules and regulations.*

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