

Software Requirements Specification For

eMarketPlace

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Revision History

Version	Date	Name	Description
1	09/12/19	Rudaiba Adnin Abhik Bhattacharjee	Initial Document

1. Introduction

1.1 Overview

The **eMarketPlace** software will be a website based software available to computer users having internet access. This is basically an e-commerce website. This software will provide customers with facilities to search and order desirable products and provide reviews on consumed products. It will allow vendors to add new product and advertise their products.

This document provides information on the requirements for the **eMarketPlace** software. Project goals, scope and definitions are given in the introduction. Design constraints and application environment are described in the following section. Non-functional requirements are outlined for later verification. Functional requirements are given to show the system features and expected user interaction.

1.2 Goals and Objectives

The main objective of this project is to ease the lives of customers and vendors so that customers don't need to waste their time and energy by going to the market to buy necessary products whereas vendors can easily advertise their products and reach more customers online. It aims at building a platform for buyers and sellers from all over the country.

1.3 Scopes

eMarketPlace website will:

1. Provide separate interfaces for customer(user) and vendor.
2. Allow customers to search and order products of different categories and prices easily, review and rate products when they are delivered
3. Allow vendors to provide advertise for their products, control their products' price and see the reviews of their products

1.4 Definitions

eMarketPlace Website – the product that is being described here; the software system specified in this document.

Project – activities that will lead to the production of the eMarketPlace website.

Client – the person or organization for which this eMarketPlace website is being built.

User – the person or persons who will actually interact with the eMarketPlace .

Use case – describes a goal-oriented interaction between the system and an actor. A use case may define several variants called scenarios that result in different paths through the use case and usually different outcomes.

Scenario – one path through a user case

Actor – user or other software system that receives value from a user case.

Developer – the person or organization developing the system, also sometimes called the supplier.

Stakeholder – anyone with an interest in the project and its outcomes. This includes clients, customers, users, developers, testers, managers and executives.

2 General Design Constraints

2.1 eMarketPlace Website Environment

The eMarketPlace system will include a website designed to work on a computer browser. This system will interface with a server of our design. The proxy server will allow more efficient maintenance of the software system.

2.2 *User Characteristics*

eMarketPlace Users: People of all ages who can operate a computer and have access to the internet. Customers(Users) can be any person with a valid email ID. But Vendors' accounts must be approved by the central admin.

2.3 *Mandated Constraints*

The system will run on web based platform. This platform was chosen based on experience with PHP and team consensus.

3 Nonfunctional Requirements

3.1 *Operational Requirements*

Usability: 95% of users will not need to read the user manual to be able to use the application.

3.2 *Performance Requirements*

Maintainability: Changes made to the interface or adding extra feature can be adopted without altering the website design.

3.3 *Security Requirements*

The **eMarketPlace** website has some main features. One of the main features is ordering of items by the consumers(users). It is ensured that order can not be placed until a user's login is authenticated. Moreover, all the passwords of users and vendors and central admin are kept in an encrypted form in the database.

3.4 *Documentation and Training*

The **eMarketPlace** system will be delivered to the users as a website with no documentation guidelines. A user guide and system documentation will be provided to project stakeholders.

3.5 *External Interface*

3.5.1 *User Interface*

The user interface will be eye-catching and visually appealing. When users visit the website, the interface will provide a smooth transition in the home page which has a straightforward, understated look and feel. From there he/she can navigate to other pages and he/she can find the way of navigation just by moving the mouse of the computer.

The interface will be intuitive. As a website it will be streamlined and simple to use. No training will be provided and it is expected that 95% of users will be able to use the app without any training.

4 *Functional Requirements*

4.1 Required Features

4.1.1 Use Case: 1

Description: Searching and Ordering of Products

Actors: any eMarketPlace user

Value = high

Cost = high

Basic Path

1. User types the url address of the eMarketPlace website.
2. User sees the home page for eMarketPlace.
3. Then user can choose a product in one of the following ways:
 - (a) From the advertisement icons shown on the home page, user can click one icon to view the details of that product.
 - (b) In the search box of the home page, user writes a search string and get the product(s) icons of the name. He/she selects one of them and navigates to the products details page.
 - (c) In “Categories” box of the home page, user can select a category and get the products icons of the category. He/she selects one of them and moves to the products details page.
4. In the product details page, the user provides desired attribute values of the product if it is necessary, then clicks on the “Add to Cart” button, which adds the product having the given attribute values to the cart.
5. User does steps 3-4 for each of the product he/she wants to buy currently.
6. There is a cart icon on the top right corner of the window where the number of products added to the current cart is also shown in a circle.
7. Then to complete the order, he/she has to click on the cart icon which will pull out a drawer interface from the right side. There, for each cart item, he sees a “Remove” button. If he wants to remove the product, then he clicks on it.

8. In the drawer interface, below the list of the products currently in the cart, there are 2 buttons. There are mainly 2 options for the user to proceed to the next step:

- (a) The user clicks the “Checkout” button.
- (b) If the user clicks the “View Cart” button, he/she will be navigated to the Cart Management page. There he/she can increase the amount the current product by clicking the ‘+’ icon on the right side of the current amount or decrease it by clicking the ‘-’ icon on the left side. After clicking the “Update Cart” button, the product amounts are updated. Then if he/she wants to continue shopping then he can click on the “Continue Shopping” page which will navigate it to the home page. If he/she wants to checkout, he/she clicks on the “Proceed to Checkout” button.

9. After clicking the “Checkout” or “Proceed to Checkout” button one of the following scenarios happens:

- (a) If the user is already logged in, he/she is navigated to the checkout page
- (b) Otherwise he/she is told to login. After typing the correct username and password and clicking on the “Login” icon, he/she is navigated to the checkout page.

10. In the checkout page, the user sees the necessary delivery information if they were provided before. If there is any information missing, he/she has to fill them up. He can also edit existing delivery address. After that if he/she knows any available coupon code then he/she can write the coupon code in the text box beside the “Apply Coupon” button. If the code is correct, then, after clicking on the “Apply Coupon” button, it will be obvious to the user in the order details. If it is incorrect, a warning prompt will be shown.

11. Then he/she clicks on the “Place Your Order” button which will navigate him/her to the orders list page.

4.1.2 Use Case: 2

Description:

Actors:

4.2 Optional Features

4.2.1 Use Case: 3

Description: Rating and review of products

Actors: any eMarketPlace user

Value = medium

Cost = high

Basic Path

1. User types the url address of the eMarketPlace website.
2. He/she logs in to the system by giving the correct username and password.
3. He/she searches for the product by name or by category or can simply select it from the home page as described earlier.
4. If that product has been delivered to him/her, in the products details page, he/she sees four options below the “Add to Cart” button, one of them is “Write Review” on the right side of “Item Review”. He clicks on the button.
5. Then he/she sees a “Give A Review” option and “rating out of 5” written below it, below of which there are 5 blank stars.
6. The user hovers the mouse icon over the stars and click on a certain position of a star according to the output points shown. Then in the “Comment(optional)” box, he/she writes his/her reviews on the product.
7. After clicking on the “Submit” button below the box, the review given by the user is stored to the database.