

Web Based Solution for Trading Agricultural Products

Software Requirements Specification Document

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1 Introduction

1.1 Purpose

There are numerous platforms available for farmers to trade their products online. But, none of them are being used country wide by farmers. We have identified these reasons as the main causes for this issue.

- Inconvenient User Interface
- Not available 24/7
- No proper description about the policy when it comes to user data
- Users are reluctant to use online payment methods.

So our objective is to come up with a trading platform which will address all above mentioned issues.

1.2 Scope

The objective of the project proposal is to develop a web-based solution for trading agricultural food/crop products. This business will be developed in two phases. The first phase will contain up to the checkout of products and will take six weeks to complete from the start to finish.

The advantage would be a simple and user-friendly user interface that is easy to understand by all types of users and responsive for mobile, tablets and desktops.

The platform will have following functionalities

Admin Panel

- Login
- Dashboard
- Administrator
- User Management
- Product Management
- Order Manager

Registration

This section allows new users to create new registration account on the site

- Fill the registration form with all required fields
- Enter Profile details like name, email id, password
- Enter address details like Country, State and Zip Code
- Submit Form

User Login

This section allows user to enter the website by adding login details created during registration Enter authenticated Email Address and Password to login

- Forgot Password Link
- Recover password through mail
- New User? Sign up link available

Registered Member/Seller Panel

- Login to site
- Manage Account
- My Profile
- My products
- Manage products
- Logout

My Account

- Personal Information
- Change Name, Login, E-mail Address or Password
- Manage Address Information

My Products

- View all own available products

My Selling Bucket

- All current received orders
- View receiving order details

History/Receipts

- View all the completed orders
- View order id, status, date ordered

Delete Account

Sign out

Registered Member - Buyer Panel

- Login to site
- Manage Account
- My Profile
- Checkout
- Logout

My Account

- Personal Information
- Edit Name, Address, Login, E-mail Address, Password, etc.

My Orders

- View Details of all the orders made
- View order no/ order date/ amount/ quantity
- View order id, status, date ordered

Last Order

- Displays the last order made

Delete Account**Sign Out****View Shopping Cart**

- Displays products added to the shopping cart with a small product image, subtotal, shipping amount link to “Update” and “checkout” and link to “See entire shopping Cart”.
- Remove Product from the Cart
- Update Quantity and Recalculate Subtotal.

Checkout

- Review Order
- View Total Order Summary

Visitor/Viewers Features

- View Home page
- Browse Products
- View Product Details
- View Static Pages (Contact Us, AboutUs, Terms& Conditions etc.)

1.3 References

2 Overview

This product aimed towards farmers and buyers. Farmers can sell their export agricultural products directly to the buyers without going through intermediaries.

Buyers can easily browse through the product catalogue and buy products which suit their needs without any hassle.

2.1 Overall Description:

The “Web Based Solution for Trading Agricultural Products” application enables farmers (vendors) to set up online stores, customers to browse through the products in the stores, and system administrators to manage sellers/buyers and maintain products and lists of product categories. The system will use the internet as the sole method for selling goods to its consumers.

2.2 User Characteristics

User should be familiar with the terms like login, registration, order system etc.

2.2.1 Principle Actors

Principle Actors are Customer, Seller and Administrator.

2.3 General Constraints

A stable internet connection requires.

3 Specific Requirements

3.1 Functional Requirements

This section provides requirement overview of the system. Various functional modules that will be implemented by the system will be described in the section 1.2 of this document.

3.1.1 Product Description

Each product will have descriptions and selectable properties (quantity)

3.1.2 Browse Product Catalog

Buyers will be able to browse through product catalog and choose different products

3.1.3 Add New Products for Trading

Farmers (Sellers) will be able to add new products to their online stores

3.1.4 Registration

If one wants to buy or sell, then he/she must be registered, unregistered users can't purchase.

3.1.5 Login

User logs in to the system by entering valid user id and password.

3.1.6 Payment

In this system we are dealing the mode of payment by Cash. We will extend this to online payments in the phase II of the project.

3.1.7 Logout

After ordering or surfing for the product user has to logout, or will be logged out automatically after a specific time period.

3.1.8 Report Generation

After ordering for the product, the system will send an email to the seller about the relevant order.

3.2 Non-Functional Requirements:

Following Non-Functional Requirements will be there,

- User friendly user interfaces for both mobile and PCs
- Secure access to consumer's confidential data.
- 24X7 availability.
- Better component design to get better performance at peak time.
- Various other Non-Functional Requirements are:
 - Security
 - Reliability
 - Maintainability
 - Portability
 - Extensibility
 - Reusability
 - Compatibility
 - Resource Utilization

3.3 Performance Requirements

In order to maintain the server at an optimum state, captcha will be implemented in the 2nd phase of the development of the system to mitigate denial of service attacks.

Connection speeds will depend on the attributes of the user like his location, and bandwidth.

3.4 Technical Requirements

This system will work on client-server architecture. It will require a server which will run an instance of Apache Tomcat Server. The system should support some commonly used browser such as IE, MozillaFirefox,Chrome etc.

3.5 Interface Requirement

- Main interfaces of the system will be,
- Login Page
- Registration Form
- Product Page
- Product Catalog
- Shopping Cart

3.6 Server Requirements

- Operating System:Linux/Windows
- JDK

3.7 Hardware Interface Requirements

Hardware requirements for insurance on internet will be same for both parties which are as follows.

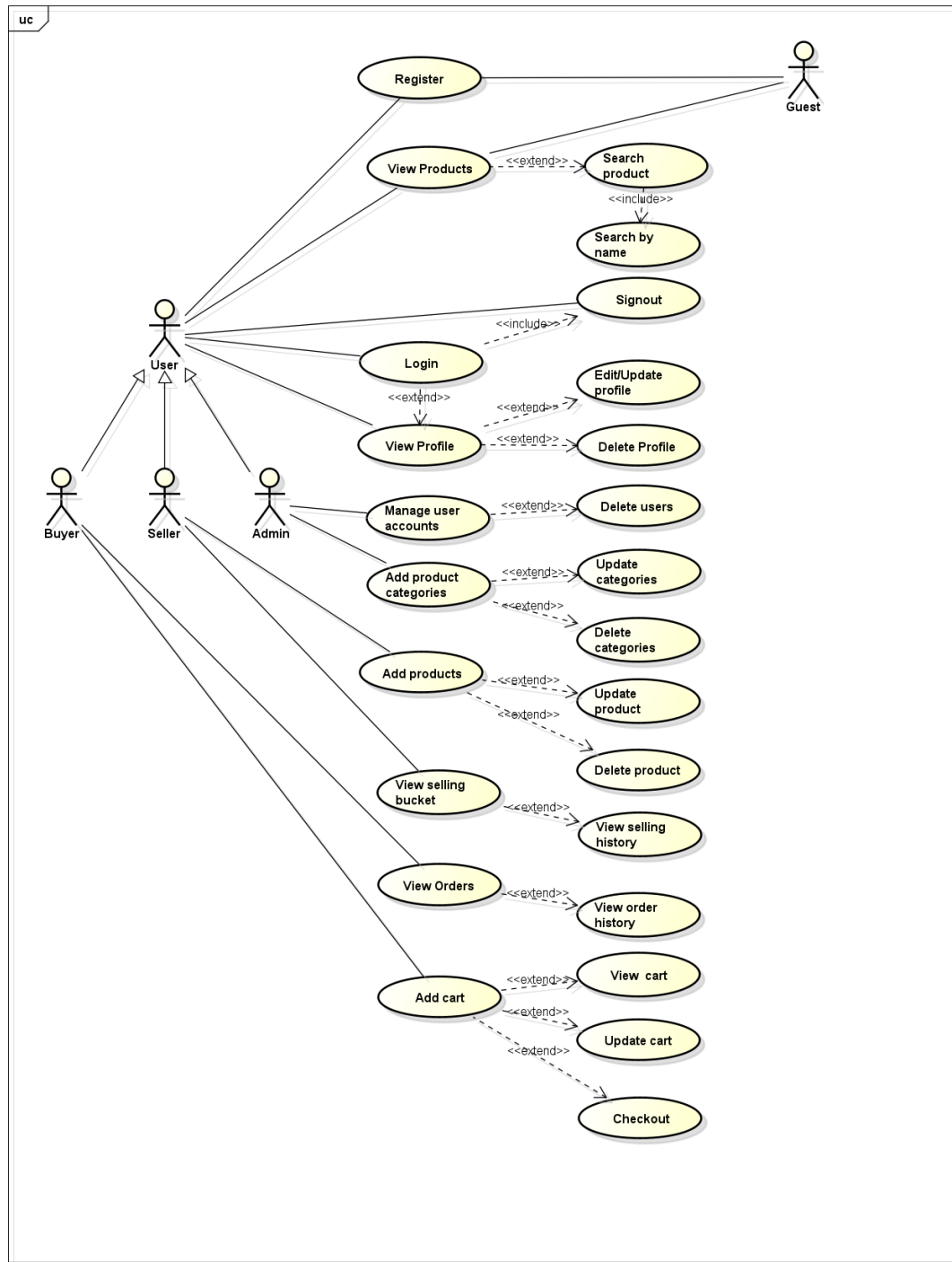
- Processor:Dual Core
- RAM:2 GB
- Hard Disk:320 GB

3.8 Communication Interfaces:

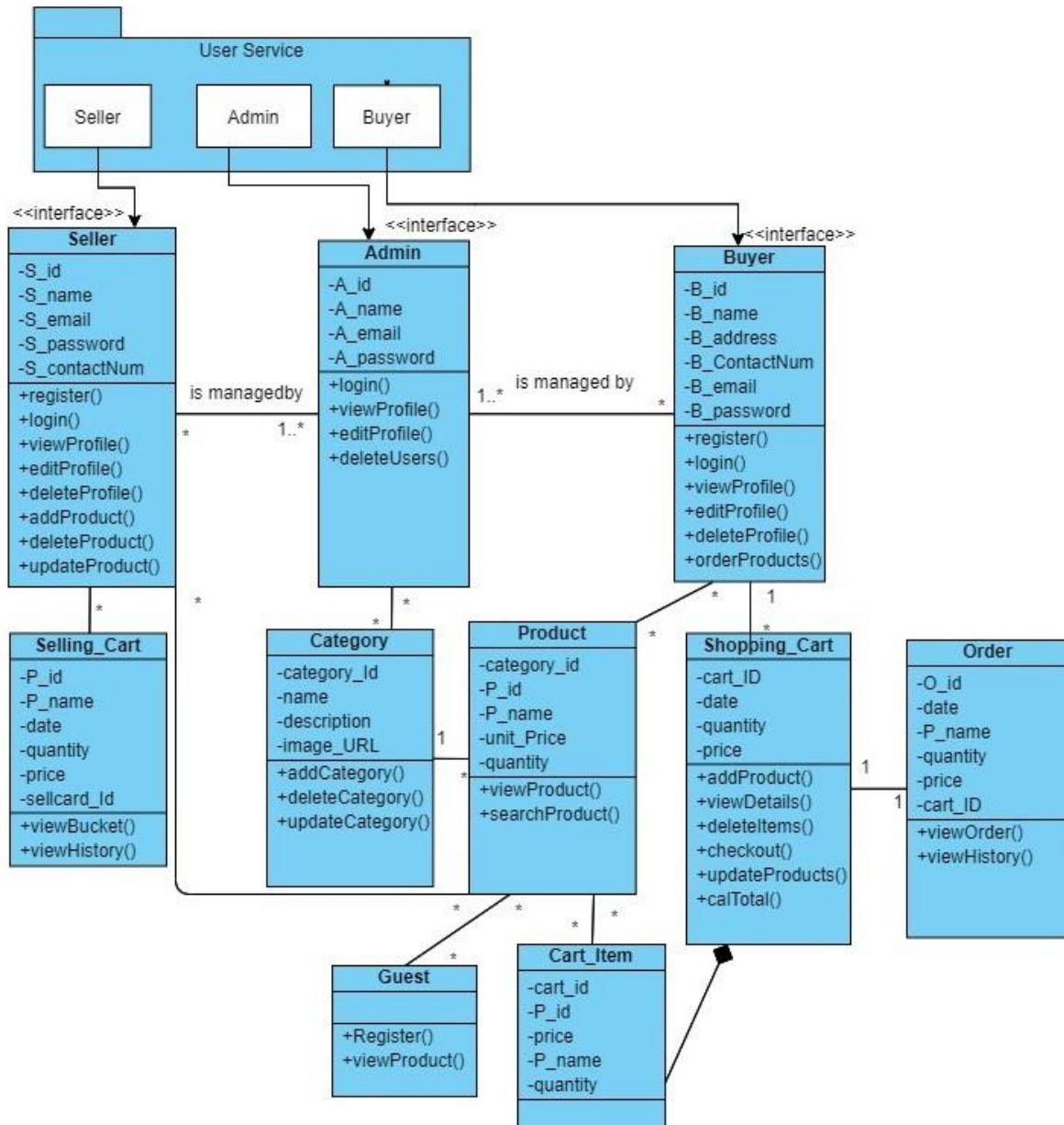
All users should have a stable internet connection in order to use the system

4 System Design Specification

4.1 Use Case Diagram



4.2 Class Diagram



4.3 Deployment Diagram

