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**BATCH:- 4**

**EXPERIMENT NO. 6**

**Aim: To develop Software Requirement Specification (SRS) document in IEEE format for the selected case study.**

Software Requirement Specification (SRS) for e-commerce farming website

1. Introduction

This document specifies the software requirements for an e-commerce farming website that connects the agriculture industry from farm to fork. The website will allow farmers to sell their products directly to consumers, and consumers to purchase fresh, locally grown produce directly from farmers.

2. Scope

The e-commerce farming website will be a web-based application that will be accessible to both farmers and consumers. The website will provide the following features:

* Product catalog: Farmers will be able to create and manage a product catalog of the produce that they have for sale. The product catalog will include information such as the product name, description, price, and availability.
* Shopping cart: Consumers will be able to add products to a shopping cart and purchase them from farmers. The shopping cart will allow consumers to calculate the total cost of their purchase and checkout using a variety of payment methods.
* Order management: Farmers will be able to view and manage incoming orders from consumers. Farmers will be able to accept or decline orders, and track the status of shipments.
* Customer support: Both farmers and consumers will have access to customer support. Farmers will be able to get help with creating and managing their product catalogs, and consumers will be able to get help with placing orders and tracking shipments.

3. Definitions

* Farmer: A user who sells produce on the website.
* Consumer: A user who purchases produce from the website.
* Product: A type of produce that is for sale on the website.
* Order: A collection of products that a consumer has purchased from a farmer.

4. Non-Functional Requirements

The e-commerce farming website will meet the following non-functional requirements:

* Performance: The website must be able to handle a large number of concurrent users and transactions without any performance degradation.
* Security: The website must be secure and protect the privacy of user data.
* Scalability: The website must be scalable to accommodate future growth in the number of users and transactions.

5. Specific Requirements

The following specific requirements are defined for the e-commerce farming website:

Product catalog

* Farmers must be able to create and manage a product catalog of the produce that they have for sale.
* The product catalog must include information such as the product name, description, price, and availability.
* Farmers must be able to upload images and videos of their products.
* Farmers must be able to manage their product inventory.

Shopping cart

* Consumers must be able to add products to a shopping cart.
* The shopping cart must allow consumers to calculate the total cost of their purchase.
* Consumers must be able to checkout using a variety of payment methods.

Order management

* Farmers must be able to view and manage incoming orders from consumers.
* Farmers must be able to accept or decline orders.
* Farmers must be able to track the status of shipments.

Customer support

* Both farmers and consumers must have access to customer support.
* Farmers must be able to get help with creating and managing their product catalogs.
* Consumers must be able to get help with placing orders and tracking shipments.

Functional Requirements

The e-commerce farming website shall meet the following functional requirements:

* Product catalog: The website shall have a searchable catalog of all products available for purchase, including detailed product descriptions, images, and pricing information.
* Shopping cart: The website shall have a shopping cart where users can add products to purchase and checkout.
* Payment processing: The website shall have a secure payment processing system that accepts a variety of payment methods.
* Shipping and delivery: The website shall have a shipping and delivery system that allows users to choose their preferred shipping method and delivery address.
* User accounts: The website shall allow users to create accounts so that they can track their orders, manage their shipping and billing information, and save their favorite products.
* Farmer profiles: The website shall allow farmers to create profiles so that they can showcase their products and connect with consumers.
* Farmer forum: The website shall have a forum where farmers can share information, resources, and collaborate on new initiatives.

Non-Functional Requirements

The e-commerce farming website shall meet the following non-functional requirements:

* Performance: The website shall be able to handle a high volume of traffic and transactions without any performance degradation.
* Security: The website shall use industry-standard security measures to protect user data and financial information.
* Scalability: The website shall be scalable to accommodate future growth.
* Usability: The website shall be easy to use and navigate for both farmers and consumers.

6. Overview

The e-commerce farming website will be a web-based application that is accessible to users on any device with a web browser. The website will be hosted on a cloud-based server and will use a relational database to store product data, user data, and order data.

The website will be implemented using the following technologies:

* Programming language: HTML, CSS AND JS
* Web framework: MERN
* Database: Moongo DB
* Front-end framework: React JS

7. System Requirements

The e-commerce farming website will be hosted on a cloud-based server and will use a relational database to store product data, user data, and order data. The following system requirements are recommended:

* Operating system: Linux or Windows
* CPU: 8 cores or more
* RAM: 16 GB or more