

# **MINI PROJECT – IS2106**

**Seed Seeker – Quality Seed Supplying System**

**Group 35**

**Team CultivatorX**

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# **1. INTRODUCTION**

## **1.1 PURPOSE**

Our system's primary goal is to make high quality seeds easily accessible to clients for a range of agricultural applications.

Its goals include providing a wide range of seeds suitable for different growing conditions and climates along with thorough information to help users make informed decisions.

The website offers both customized recommendations and extensive search functionality in an effort to expedite the seed-seeking process.

By giving farmers ratings and information regarding seed collecting In this approach gives farmers more authority. There are mechanism has been created to determine the state in which the seeds are grown. The place where the seeds were produced can be easily identified by promoting this technique.

## **1.2 SCOPE**

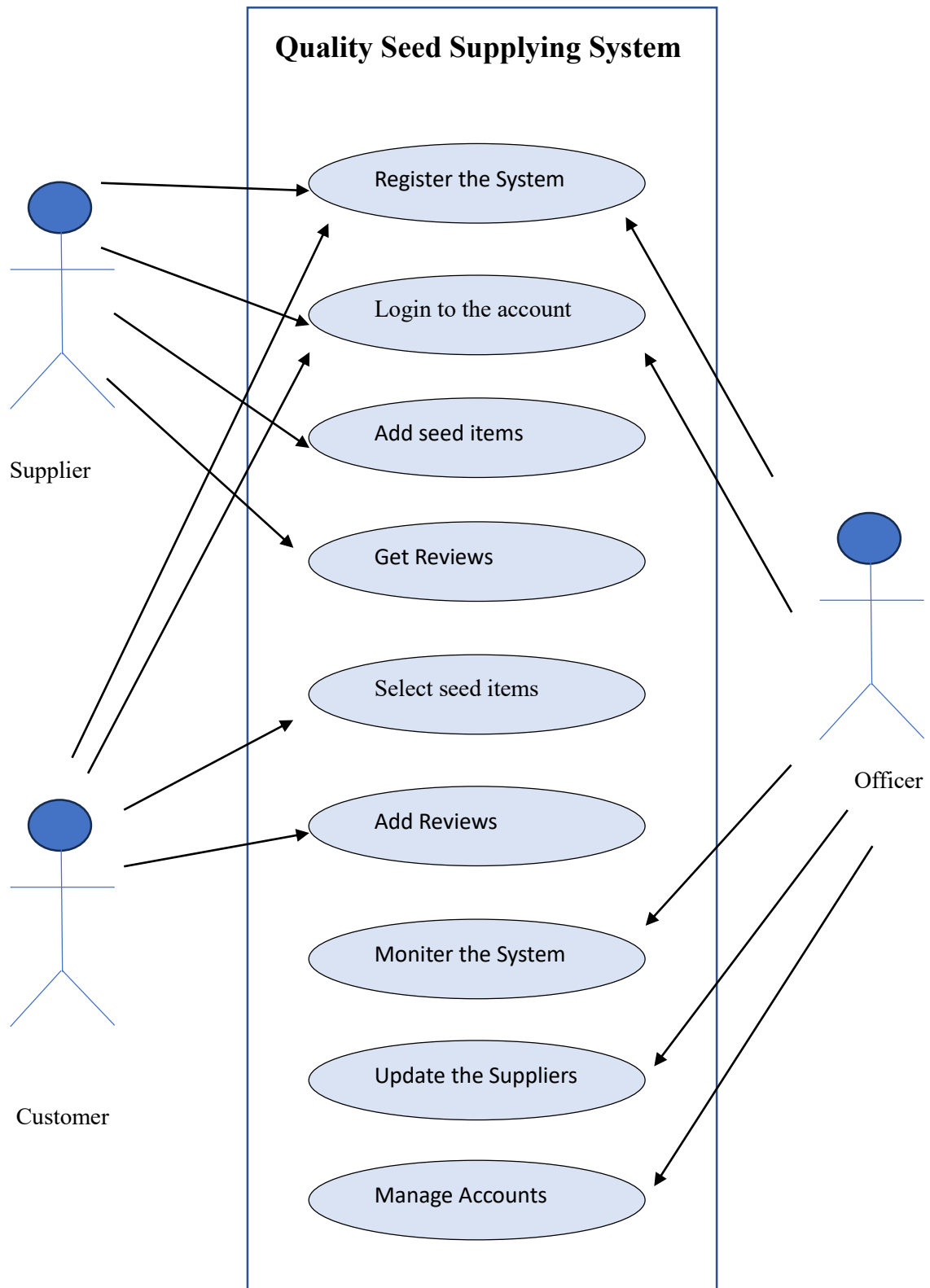
The scope of the project creates quality seed seeking system according to customer's review in Sri Lanka. This platform mainly includes user registration, search functionality, seed catalog, review and rating system, location identification. In addition customers can search the best seeds for their particular needs with the help of this website's tools for seed comparison only they can order seed items to the government officer through this system.

## **1.3 OVERVIEW**

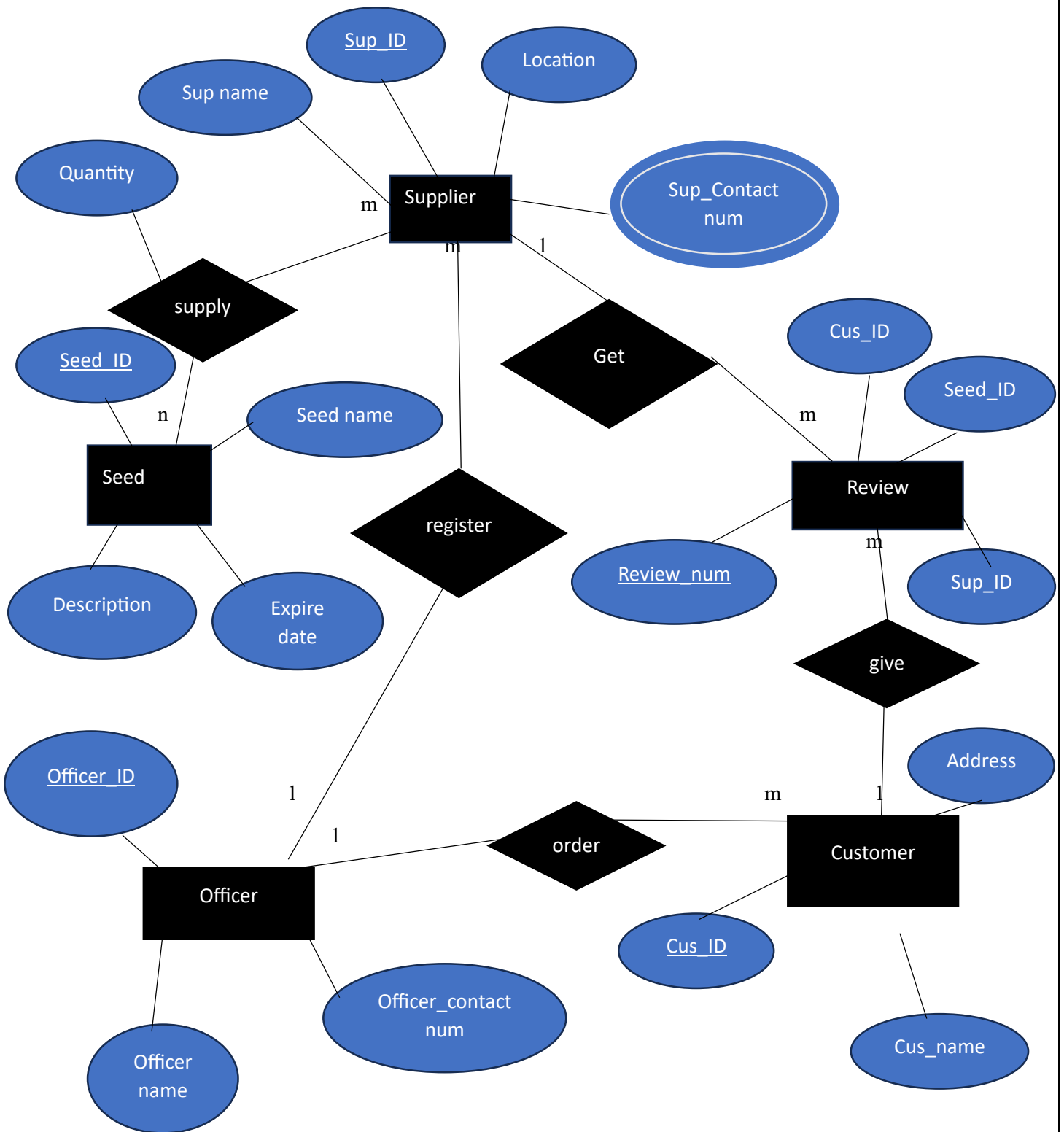
Farmers / Customers searching premium seeds can get all they need or one convenient location on this website. It offers a through platform for customers to access evaluate and choose seed items that are suited to their needs. This system links seed suppliers, customers and government using information of the seed items, review feedback and location transparency.

## 2. SYSTEM ANALYSIS

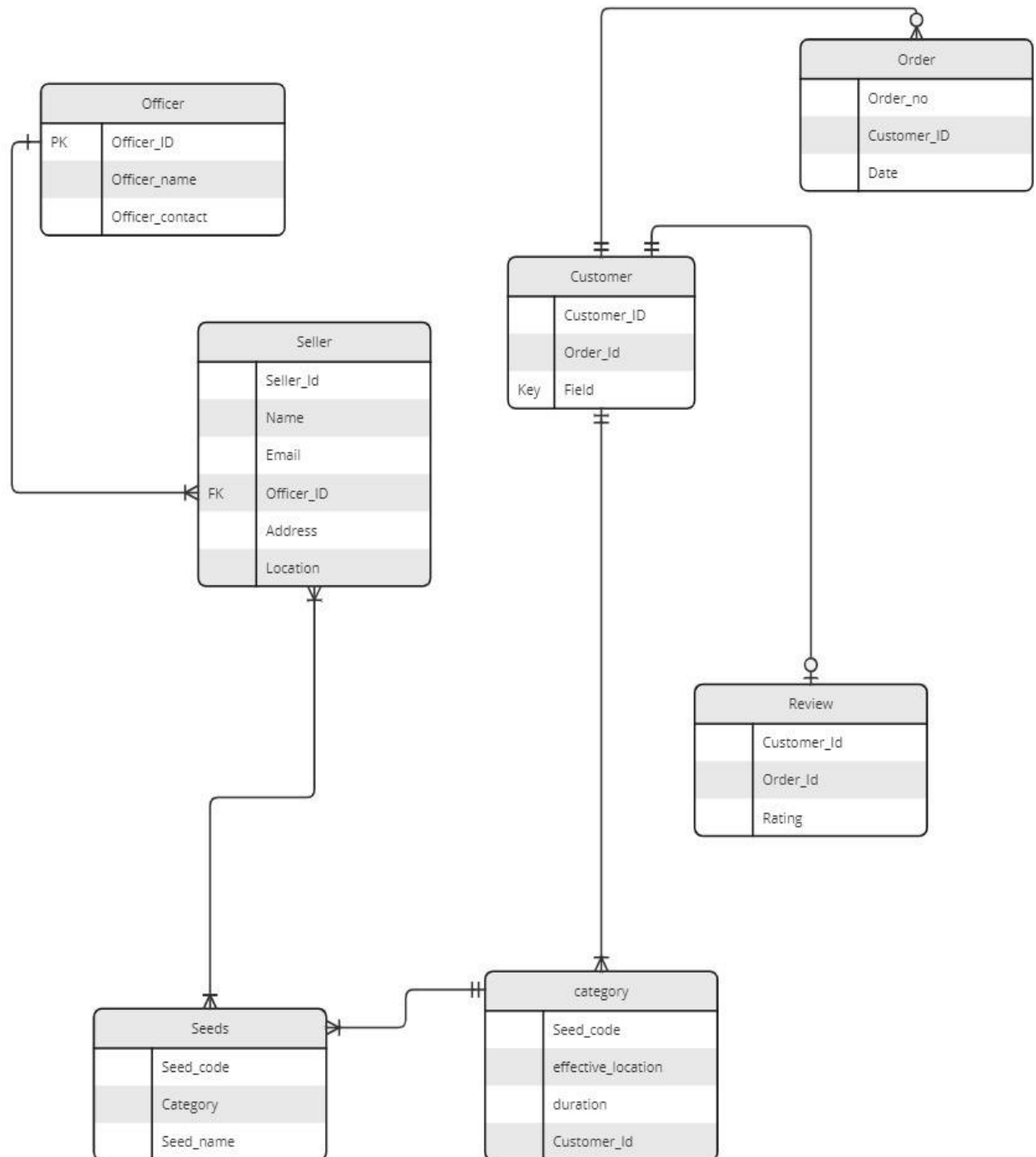
### 2.1 USE CASE DIAGRAM



## 2.2 ER DIAGRAM



## 2.3 DATABASE DIAGRAM



## **3. DEVELOPING ENVIRONMENT**

### **3.1 HARDWARE REQUIREMENT**

- Any Computer Which can use Technologies like React, Nodejs and MongoDB Database.
- Minimum need 8 GB Ram or more.

### **3.2 SOFTWARE REQUIREMENT**

- Browsers – Google Chrome, Mozilla Firefox
- Code Editors – Visual Studio code

### **3.3 TECHNOLOGIES**

- Html
- Css
- JavaScript
- React
- NodeJs
- MongoDB



## **4. TABLES AND STRUCTURE**

### **4.1 MODULES**

#### **4.1.1 Number of Modules**

There are Three Modules in the System. They are Customers, Suppliers and Officers.

#### **4.1.2 Details of Module**

- Customers

The Customer Module Focus on providing access to Seed Details, Suppliers details, and get notify about Sellers reviews. The Sellers can have Contact with sellers and buy product. Finally Customers can review about their Experinces with buying products.

- Officers

Officers are working on Agriculture Department. The officers module register Suppliers to System and knowledge sharing with Suppliers and Customers.

- Suppliers

Suppliers Module enable to show their products to customers and offices. Supplies should have register the system through Government Agriculture officer. The module show their name, seeds category and location the seeds have.

### **4.2 DATA STRUCTURE**

We are going to use NoSQL data Structure.

## **5. SYSTEM FEATURES**

The Online Quality Seed Supplying System will provide central platform for Suppliers, Customers and Offers to interact and engage in variety of Agriculture activities. The users can access this system through their web Brower with using internet connection. They can use different devices to access to website.including Computes, tablets and Smart phones.

### **5.1 Functional Requirements**

#### **User Registration and Authentication**

- It should be possible for users to register and safely log in.

#### **Search Functionality**

- Users can search seeds by crop type, climate zone

#### **Seed Catalog**

- An extensive list featuring thorough descriptions of seeds, including information on growing conditions, yield potential and production site.

#### **Supplier Management**

- A system for keeping track to seed suppliers' details and enabling correspondence between suppliers, officers and farmer.

#### **Comparison Tools**

- Utilize these tools to evaluate various seed options in terms of features, cost and user feedback.

#### **Review and Rating System**

- This is a website where customers have ability to rate and review seeds and suppliers.

#### **Educational Resources**

- A collection of tutorials and blog articles about crop management, planting techniques and seed selection.

#### **Account Management**

- User accounts to order history and wish list.

#### **Location Identification**

- To have to be ability to identify the province where the seeds are produced.

## **5.2 Non-Functional Requirements**

### **Performance**

- The website should simple and smooth user experience for users.

### **Scalability**

- If user base grows and the number of seed offerings increases the system should be scalable.

### **Availability**

- The website should be highly available with minimal downtime.

### **Security**

- Robust security mechanisms should be in place to protect user data.

### **Usability**

- Farmers with different levels of technological skill should be able to easily navigate the user interface.

### **Accessibility**

- People with disabilities should be able to use the website.

### **Mobile Responsiveness**

- Mobile devices should be able to browse and interact with the website with ease.

### **Content Management System (CMS)**

- Website administrators can easily manage website content, instructional materials and seed listings with this user friendly CMS.

### **Customer Support**

- Prompt and efficient customer care to address inquiries, issues and feedback from users.