# Agri-Connect

**Document**: System Requirement Specification Document

Title: Agri-Connect

# Objective:

This application helps farmers for convenient outings for all agricultural products and farming equipment such as pesticides, and crop medicines and to save their costs by comparing products plus navigating them to the respective shop

#### Scope:

The navigation process makes it easier to save the distance and allows to grab nearby shops easily.

The price comparison makes it efficient for farmers to compare products with their product details with ratings.

# **Overview:**

The user interface and the experience are going to be very simple and modest to use, anyone can use the portal and browse the available products, but the user must be a registered user by any means and a login page will be provided at the start. Also, the web application is going to be distributed mainly into 3 parts which are crop medicine, farming equipment and nursery plants for farming and non-farming audiences and the crop suggestion will help the user to decide which crop should yield in the ongoing season.

# **Functional Requirement:**

#### Farmers:

Choosing and comparing products: Can view all available products, compare them, and make a choice for purchasing products. Farmers can browse catalogues and choose products.

After that, the navigation system plays an important role here as the farmer chooses the product for comparison and can navigate them to their chosen product shop saving both cost and time.

# **Shop Owner:**

The role of the shop owner will be to provide all the details to the system admin and update the products buffer stock and details of the products and shop details.

#### Non-Farmers:

These types of users need to register to the portal and continue their shopping for nursery products such as plants, soil, and plant medicines and like farmers these users will also be able to navigate to the respective shop/nursery.

# Subject-matter-expert:

These people play an important role here to advise the required changes in the application based on the target audience and area to launch the application where it is most required and will suggest what kind of products will be available on the portal and add the new user stories based on scrum framework for continuously upgrading the application for continuous deployment of the services.

#### **Visitors**

The role of visitors will be just to recommend the changes required in the web application to make it simple and easy to use.

#### Customer-care:

Responsible for receiving complaints, queries, and feedback from customers.

Provide feasible solutions to the customers on their complaints and queries.

# **Non-functional Requirement:**

#### Performance:

The server must be able to support an unlimited number of devices, i.e., it must place no restrictions on the number of gadgets that can be used simultaneously.

#### Security:

Sensitive data will always be transmitted with encryption. The system will internally maintain a secure communication channel between servers (web servers, application servers, database servers).

# Reliability:

The system should be scalable, with the ability to accommodate a large number of users at once. The site's response time should be as quick as feasible, and it should be able to load and balance the server.

#### Availability:

This application is available for 24 hours anywhere, anytime.

#### Maintainability:

Commercial database software will be used to maintain System Data Persistence. A ready made Web Server will be installed to host an online shopping portal (Web Site) to get over server capabilities. IT operations team will easily monitor and configure the system using Administrative tools provided by Servers. Separate environments will be maintained for the system for isolation in production, testing, and development.

# Portability:

PDA: Portable Device Application

The system will provide a portable User Interface (HTML, CSS, JS) through which users will be able to access the online Agri-connect portal. The system can be deployed to a single server, multi-server, to any OS, Cloud (Azure or AWS or GCP).

# Accessibility:

After authentication, only logged-in users will be able to access the website.

# Efficiency:

The system will be able to manage all the data with isolation and the navigation system.

#### Scalability:

Online Agri-connect portal will be secure from malicious attacks.

Online Agri-connect portal functionalities are protected from the outside with proper configuration.

Online Agri-connect portal will always be kept updated with the latest antivirus software.

Business data will be backed up periodically to ensure the safety of data using an incremental backup strategy.

Role-based security will be applied for Application data and operations accessibility.

# Benefits:

Farmers will be able to compare the products, and their details and can purchase accordingly to save their costs.

As the navigation panel, we provide a location or address of the shop so that they can directly visit to purchase the product they choose to buy this helps them save their time and money.

The portal helps to get the best deal for the product and minimize the efforts.