**B. Tech. CE Semester – VI**

**Farmer Social Network**

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**Purpose :**

The purpose of this document is to outline the functional and non-functional requirements for the **Farmer Social Network Web** **Application**. The system aims to provide a seamless way for **Farmer** And **Agronomist** interact with the platform. The functionalities include user authentication, Post and Discussion, Crop Treatment Resources , Real-time Chat and Notifications.Also Farmer And Agronomist can share their thoughts about the Crops treatement and also share their experience on particular topic related to Crops.Here, Farmer can get the suggestion from Agronomist for particular Crops treatement and other farming related topic.It will help to spread the Farmer interaction and help to give better result in Farming Sector.

**Goal:**

The Main Goal of this system is to aware Farmer and connect them with Modern technologies.so that they can enhance their traditional cultivation process with Modern technologies.

**Scope:**

This document describes the **scope** for Farmer Social Network Web Application System.Here We have the three type of user (i)Farmer (ii)Agronomist (iii)Admin.Farmers can Create an Account.they Will post and Discussion on the relative topic related to farming.They can get the help from Agronomist on relative **farming process** or **Treatement**. Also they can have **Real-time Chat** with eachothers.Agronomists will also provide the help platform for Farmer to enhance their Cultivation Process.Also Admin Can handle user activities.

**Functional Requirement:**

This document describes the functional requirements for the Farmer Social Network Web Appointment System, which includes a web-based platform allowing users (**Farmer** and **Agronomist**) to Post and Discussion, Crop Treatment Resources , Real-time Chat and Notifications.

**User Authentication:**

* Allow farmers and Agronomist to sign up and log in.
* Implement roles (e.g., Farmer, Agronomist).

**Post and Discussion:**

* Enable users to share posts about cultivation techniques.
* Allow others to comment and react to the posts.

**Crop Treatment Resources:**

* Provide a repository for crop treatment techniques.
* Allow users to upload and download resources.

**Real-time Chat:**

* Implement chat functionality for farmers to connect and discuss.

**Notifications:**

* Notify users about new posts, comments, or direct messages.

**Admin Management:**

* Suspend or delete user accounts if needed.
* Take care about user can’t Post about any restricted content.

**Technology/Platform:**

**Frontend (User Interface):**

**React.js:** A component-based JavaScript library used for building interactive and dynamic user interfaces. React allows for fast, responsive, and scalable frontend development.Hare We also provide the **CSS** style to our component.

**Axios:** A promise-based HTTP client used for making API requests from the frontend to the backend, ensuring smooth data exchange.

**Backend (Server-side):**

**Spring Boot:** Spring Boot is an open-source framework built on top of the Spring Framework.Spring Boot is provide plateform to build the Restful API.

**Node.js / Express.js:** A server-side JavaScript runtime used to build scalable backend services. Node.js provides a lightweight and efficient foundation for the system’s backend operations.

**Express.js**: A fast and minimalist web framework for Node.js used to build the RESTful API that handles routing, middleware, and server-side functionality.