REQUIREMENT ANALYSIS

Date	06 NOVEMBER 2023
Team ID	NM2023TMID02250
Project Name	Project- Farmer Insurance Chain
Maximum Marks	4 Marks

FUNCTIONAL REQUIREMENTS:

The functional requirements for a Farmer Insurance Chain describe the essential features and capabilities of the system to ensure it effectively serves the needs of farmers, insurance providers, and other stakeholders in the agriculture and insurance sectors. These requirements can be grouped into various categories:

1.User Registration and Authentication:

The system should provide a user-friendly registration process for farmers, insurance companies, and administrators. Users should be able to create accounts and log in securely to access the platform.

2. Policy Management:

Farmers should be able to view available insurance policies, purchase policies, and manage their policy information. The system should support different types of crop insurance and coverage options.

3. Premium Calculation:

The platform should calculate insurance premiums based on factors such as the type of crop, location, and historical weather data.

Farmers should be able to receive quotes for different policies.

4. Claim Submission:

Farmers should be able to submit insurance claims online, providing relevant documentation and evidence in case of crop loss or damage due to covered events like adverse weather conditions, pests, or diseases.

5. Claim Processing:

Insurance providers and administrators should have the tools to review and process claims efficiently. The system should automate calculations for claim payouts based on policy terms and conditions.

6. Payment Integration:

The system should support payment gateways for farmers to pay premiums and receive claim payouts. It should also ensure secure and transparent transactions using blockchain technology.

7. Crop Monitoring:

The platform may integrate with IoT devices, weather APIs, and remote sensing technology to monitor crop conditions and validate claims.

8. Notifications:

The system should send notifications and updates to farmers regarding policy renewals, weather alerts, and claim status. It should also notify administrators and insurance companies about new claims.

OPERATIONAL:

Operational requirements in a farmer insurance chain involve establishing an efficient and customer-centric system that encompasses various key elements.

This includes a robust digital platform for policy issuance, claims processing, and premium collection, as well as a network of field agents to reach and educate farmers.

Risk assessment tools should be in place to evaluate the unique needs and risks associated with agricultural activities.

Effective communication channels for policyholders, timely disbursement of claims, and continuous monitoring of market dynamics and weather conditions are essential.

Additionally, compliance with relevant regulatory frameworks and the ability to adapt to changing agricultural practices and technologies are crucial to ensure the sustainability and success of the insurance chain in serving the needs of farmers.

TECHNICAL:

Technical requirements in a farmer insurance chain necessitate the implementation of a comprehensive and adaptable technology infrastructure. This infrastructure should support functions like policy underwriting, risk assessment, and claims management through sophisticated data analytics and machine learning algorithms that can assess agricultural risks accurately. Seamless mobile applications and web interfaces are vital for farmer engagement, enabling them to purchase policies, report losses, and access vital information. Integration with satellite and weather data sources for real-time monitoring of crop conditions and climate impacts is crucial.

Secure and scalable cloud-based platforms, as well as robust cybersecurity measures, are essential to protect sensitive customer data and maintain system integrity. Additionally, the system should be designed with the flexibility to accommodate emerging technologies and regulatory changes, ensuring that the farmer insurance chain remains responsive to the evolving needs of agricultural stakeholders.

FLOWCHART:

Insurance Claim Flowchart