

Define a problem statement & give a brief executive summary snapshot.

A) Executive Summary :-

The Farmer's Plant Disease App is a mobile based solution designed to help farmers identify & manage plant diseases. Using image recognition technology and machine learning algorithms, the app will diagnose disease and provide personalized recommendations for treatment & management. The app aims to reduce crop losses, improve yields, & enhance decision making for farmers.

B) Project Description :-

The Farmer's Plant Disease App is an innovative solⁿ to address the significant challenge of plant diseases in agriculture. The app will :-

- Allow farmers to upload images of affected plants.
- Use image recognition technology to identify disease.
- Provide personalized treatment & management recommendations.
- Offer a database of common plant diseases & their symptoms.

- Facilitate a community forum for farmers to share experience & advice.

c) Project Scope:-

* Functional Requirements:-

- User registration & login.
- Image upload & processing
- Disease diagnosis using machine learning algorithms
- Personalised recommendations for treatments & management.
- Community forum for farmers.

* Non-Functional Requirements:-

- User experience & interface.
- Performance & scalability
- Security & data protection.

* Technical Requirements:-

- Front-end :- React native or Flutter.
- Back-end :- node.js or Python.
- Database :- Mongo DB or PostgreSQL
- Machine Learning Library :- TensorFlow or PyTorch.

* Timeline :- 28 Weeks (approximately 6-7 months)

• Resources :-

- Development Team :- 2-3 developers, 1 designer, 1 project manager.
- Equipment :- mobile devices for testing, servers for back-end infrastructure.
- Budget :- Estimated 10,000 - 15,000

The comprehensive project scope outlined the key features, technical requirements, & timeline for developing the Farmer's plant Disease App. It provides a solid foundation for building an effective tool to support farmers in managing plant diseases.