

AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

WEEKLY PROGRESS REPORT (WPR)

For the week commencing: 21/07/2025 – 27/07/2025

WPR 1 Enrollment Number: A41105222180

Program: B-Tech CSE Student Name: ABHISHEK KUMAR SHARMA

Faculty Guide's Name: Bhanu Prakash Lohani

Project Title: AI-Powered Smart Farming Assistant

TARGETS SET FOR THE WEEK

- 1. Define core features (e.g., crop suggestion, pest detection, weather forecast integration, marketplace).
- 2. Identify user personas (e.g., small farmers, Agri-experts).
- 3. Research existing solutions and document gaps.
 - 4. Finalize tech stack (React, Node.js, MongoDB, TensorFlow/ML model, etc.).
- 5. Create wireframes for key pages (dashboard, crop info, chat assistant).

Achievements: Research & Planning Phase

- 1. Clearly defined 4 core features: crop suggestion, pest detection, weather forecast, and marketplace.
- 2. Created 2 user personas: small-scale farmer and agricultural expert.
- 3. Completed competitive analysis of 5 existing farming apps and identified 3 key gaps.
- 4. Finalized tech stack: React + Vite (frontend), Node.js + Express (backend), MongoDB (database), TensorFlow (AI).

FUTURE WORK PLANS

Start UI/UX prototyping and basic frontend setup in Week 2