

AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

WEEKLY PROGRESS REPORT (WPR)

For the week commencing: 01/09/2025 - 07/09/2025

WPR 7 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. Develop smart marketplace for buying/selling crops/tools.
- 2. Add chat assistant UI for Q&A with AI.
- 3. Integrate weather API (e.g., OpenWeatherMap).
- 4. Implement notification system (alerts, updates).
- 5. Refactor code and ensure modular structure.

Achievements:

- 1. Integrated pest detection model using text-based input of symptoms.
- 2. Developed yield prediction model using historical data and tested locally.
- 3. Added AI feedback form for user to rate prediction accuracy.
- 4. Reduced AI API response time by 40% via model optimization.
- 5. Stored AI interactions in MongoDB for future analysis.

FUTURE WORK PLANS

Focus on testing, bug fixing, and deployment preparation in Week 8.