

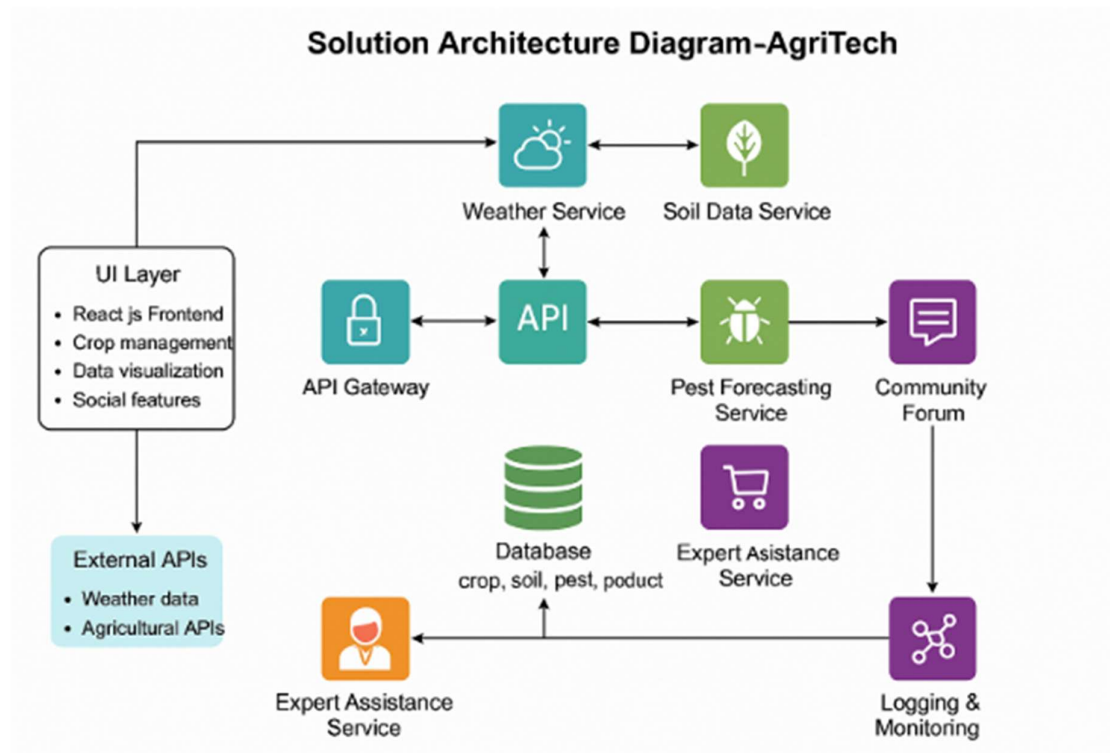
Project Design Phase Solution Architecture

Date	15 February 2025
Team ID	SWTID1743500346
Project Name	Farm-Ease: Revolutionizing Agriculture with Technology
Maximum Marks	: 4 Marks

Solution Architecture – FARMEASE: Empowering Farmers with Technology

The FARMEASE solution architecture is designed to bridge the gap between traditional farming challenges and modern technological solutions. It ensures a seamless experience for farmers, agronomists, and agricultural stakeholders. The architecture focuses on scalability, security, and user-friendliness, catering to the unique needs of rural and semi-urban farming communities.

- Identify the most efficient technological solution to improve crop yield, enable smart decision-making through data analytics, forecast weather and pests, and create a connected ecosystem for farmers.
- Define the structure, key components, behavior, and interactions of the FARMEASE platform, enabling clear communication among stakeholders – including developers, agronomists, farmers, and agri-tech service providers.
- Break down the platform into features and development phases, such as farmer onboarding, real-time soil and crop monitoring, expert consultations, marketplace access, weather forecasting, pest prediction, and community forums.
- Deliver precise specifications for IoT integration, machine learning model deployment, cloud database management, secure access controls, and performance optimization – ensuring the platform remains scalable, reliable, and farmer-friendly



Reference:

https://www.researchgate.net/publication/352395314_Evolution_of_Agritech_Business_40_-_Architecture_and_Future_Research_Directions