



< All problem statements

## AI/ML

# Farmer Supporter

## Summary

Make a significant impact on the agricultural sector by developing a website that assists farmers in making informed decisions. This project focuses on leveraging AI to provide expert advice on crop management, market insights, and real-time problem-solving.

## Requirements

1. Integrate features for adding and managing produce listings.
2. Offer offline storage for articles and chat history.
3. Include agricultural knowledge updates, weather forecasts, and pest alerts.
4. Ensure the AI can guide through complex agricultural decisions.

## Access Free OpenAI API Keys!

Limited OpenAI API keys available at no cost for your hackathon project. Reach out [here](#) with your use case, and get keys for Speech-to-Text, Chat Completions, Embeddings, and more. Keys deleted post-hackathon.

## Explore Models

You have the freedom to explore a wide range of models for your project. Not limited to the following options:

- [OpenAI API - Introduction](#)
- [Mistral 7B - Introduction](#)
- [SeamlessM4T - Introduction](#)

## Additional Resources

Take your project further with these valuable resources:

- [Youtube - Voice Cloning In Multiple Languages - Open Source](#)
- [Youtube - Master Deep Voice Cloning in Minutes](#)
- [GitHub - 🗣️ Text-Prompted Generative Audio Model](#)
- [Notion - 🗣️ Suno's Speaker Library](#)
- [CoLab - SeamlessM4T Notebook](#)
- [ElevenLabs - Voice Cloning: Clone Your Voice in Minutes](#)
- [GitHub - 🐸 A deep learning toolkit for Text-to-Speech](#)

## Suggested Approach

### Day 1 - 2: Project Planning & Setup

#### Product Management & AI/ ML Specialists:

- Define project scope and objectives clearly.

- Identify key AI functionalities needed: NLP for chat, data analysis for market insights, algorithms for weather and pest predictions.
- Establish a roadmap and assign roles.

#### **Frontend & Backend Developers:**

- Set up the basic structure of the website.
- Plan the UI/UX design in collaboration with Product Designers.
- Establish a version control system and project repository (e.g., GitHub).

#### **Data Science & AI/ ML Specialists:**

- Research and select appropriate AI models and datasets for the project.
- Start working on the AI model for the chat interface.

### **Day 3 - 4: Development & Integration**

#### **Frontend Development:**

- Develop the user interface for the website, ensuring it's intuitive and user friendly.
- Implement features for offline access (service workers, cached pages).

#### **Backend Development:**

- Create APIs for AI interactions and data retrieval (market insights, weather, pest alerts).
- Set up the database for produce listings and chat history

#### **AI/ ML & Data Science:**

- Integrate AI models into the backend.
- Test and refine the chatbot's response accuracy and relevance

#### **Product Design:**

- Refine the design based on user flow and feedback from the team.
- Ensure the website is responsive and accessible on various devices.

## Day 5: Testing, Refinement, & Presentation

### All Team Members:

- Conduct thorough testing across different scenarios and devices.
- Debug and refine based on test results.
- Prepare a presentation showcasing the website's features, AI capabilities, and potential impact on the agricultural sector

# Other Problem Statements

## AI/ML

### Talk to Santa Claus

Bring the magic of Christmas to life by developing an AI where children

## Fintech

### Simplifying Small Business Payments

Build an application that enables small

## AI/ML

### Realtime Translation of Voice Calls

Embark on a journey to break language barriers.

can converse with Santa Claus. This enchanting project is about creating joyous and safe interactions and making holiday wishes come true through innovative voice technology.

businesses to manage their payments efficiently. This app should allow business owners to create profiles for each of their clients, track payment transactions, and receive real-time alerts for unpaid invoices.

Create a real-time voice translation app that connects people across the globe, enabling them to converse in their native languages effortlessly and expanding the horizons of communication.

## AI/ML

### Real-Time Air Quality

Design a real-time air quality dashboard that shows the air quality of any region worldwide, empowering users to take action.

## AI/ML

### Precision Farming for Best Product Results with Data

Build a solution that predicts the best time to plant and harvest crops, taking into account local weather conditions and soil quality. This solution will help farmers improve their yields.

## Health

### Medication Adherence Improved with Digital Solutions

Develop a digital solution to improve medication adherence for chronic patients. The solution should empower healthcare professionals and patients to manage medication

regimens  
effectively.

## EdTech

### Intelligent Learning Connections

Build an AI-powered application that uses a collaborative learning matching system designed to enhance collaborative learning experiences by intelligently pairing learners based on their performance metrics.

## AI/ML

### Instant Customer Support for Business Websites

Imagine revolutionizing customer service with an AI-powered chat agent that intuitively understands and responds to various customer needs, 24/7. This is your chance to shape the future of customer interaction, enhancing business efficiency and client satisfaction.

## AI/ML

### Enabling Conversations with a Persona for Illiterates

Dive into the world of AI to create a voice chatbot that bridges the digital divide for illiterates. Your challenge is to craft an intelligent and empathetic digital companion that can converse naturally, offering a seamless and confidential communication experience.

## Fintech

### Effortless Cross-Border Financial Transfers

Build an application that enables users to initiate cross-border money transfers with ease. The app should offer real-time exchange rate information, low transaction fees, and quick delivery of funds.

## AI/ML

### Conversing with an E- commerce Store Database

Transform how businesses interact with data by building a system where non-tech savvy users can query an e-commerce database using simple, everyday language. This challenge is all about bridging the gap between complex data management and intuitive user experience.

## E-

## Commerce

### Advance Marketing growth with Business data insights

Create an application that allows e-commerce sellers to analyze customer behaviour, track sales performance, and tailor their marketing efforts based on real-time insights. This application should provide clear, actionable data for marketing optimization.

## Health

### AI-Powered Symptom and Diagnosis Guidance

Build an application that allows patients to describe their symptoms and receive preliminary medical advice from an AI-powered chatbot. This app should offer quick responses and help users decide if they need to seek in-person medical care.