



< All problem statements

AI/ML

Precision Farming for Best Product Results with Data

Summary

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.

Requirements

1. Farmers should be able to enter their location and crop details.
2. Create a system that uses machine learning to predict the best planting and harvesting times.
3. Make it user-friendly so even non-tech-savvy farmers can use it.
4. Find the Data for building [here](#).

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](#)

Suggested Approach

Day 1 - 2: Conceptualization & Design

Data Science AI/ML:

- Research and select appropriate machine learning models for yield prediction.
- Identify key environmental factors impacting crop yield.

Product Manager & Product Designer:

- Define the user flow for farmers to input location and crop details.
- Design an intuitive and user-friendly interface for non-tech-savvy users.

Day 3 - 4: Development & Testing

Frontend:

- Develop a straightforward interface for farmers to input data easily.
- Ensure the system is accessible to non-tech-savvy users.

Backend:

- Implement the backend system for data storage and retrieval.
- Integrate selected machine learning models for yield prediction.

Day 5 - 6: Refinement, User Feedback Integration, & Presentation

All Team Members:

- Integrate farmer feedback mechanisms for usability improvements.
- Conduct extensive testing for reliability and ease of use.
- Finalize the project, focusing on simplicity, accuracy, and user satisfaction.

Prepare a Presentation:

- Showcase the solution's capabilities, emphasizing its potential impact on improving crop yields for farmers.

Other Problem Statements

AI/ML

Talk to Santa Claus

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

Fintech

Simplifying Small Business Payments

Build an application that enables small 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.

AI/ML

Realtime Translation of Voice Calls

Embark on a journey to break language barriers. 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

Health

Medication Adherence Improved with

EdTech

Intelligent Learning Connections

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

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.

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

AI/ML

Farmer Supporter

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

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

various customer needs, 24/7. This is your chance to shape the future of customer interaction, enhancing business efficiency and client satisfaction.

management, market insights, and real-time problem-solving.

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

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

intuitive user
experience.

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.