

#### < All problem statements

#### AI/ML

### **Real-Time Air Quality**

#### Summary

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

#### Requirements

- 1. Get access to the real-time API data <u>here</u>. Run the 90-day free trial subscription and remember to cancel the sub after the hackathon.
- 2. Implement data visualisations that shed more light on the data points (eg. Line chart, Heat map, Bar chart etc).
- 3. Develop a user-friendly platform that shows the air quality data of any region in the world.

#### **Suggested Approach**

#### Day 1 - 2: Conceptualization & Design

#### **Product Manager & Product Designer:**

- Define user flows for accessing real-time air quality data and implementing data visualizations.
- Design an intuitive and user-friendly platform for users to explore air quality data.

#### Day 3 - 4: Development & Testing

#### Frontend:

- Develop an accessible and user-friendly interface for users to view real-time air quality data.
- Implement data visualizations, including line charts, heat maps, and bar charts.

#### Backend:

• Integrate with the real-time API to fetch and update air quality data.

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

#### All Team Members:

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

#### Prepare a Presentation:

 Showcase the dashboard's capabilities, emphasizing its potential to empower users by providing real-time insights into air quality worldwide and encouraging actionable steps

### **Other Problem Statements**

### Talk to Santa

AI/ML

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

#### 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

alerts for unpaid invoices.

horizons of communication.

#### 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 Alpowered 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 AI/ML AI/ML

# Instant Customer Support for Business Websites

Imagine revolutionizing customer service with an Alpowered 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.

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

#### 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

#### AI/ML

# Conversing with an Ecommerce Store Database

Transform how businesses interact with data

#### E-

#### Commerce

Advance
Marketing
growth with
Business data
insights

initiate crossborder money transfers with ease. The app should offer realtime exchange rate information, low transaction fees, and quick delivery of funds.

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.

Create an application that allows ecommerce 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

## Al-Powered Symptom and Diagnosis Guidance

Build an application that allows patients to describe their symptoms and receive preliminary medical advice from an Alpowered chatbot.

This app should offer quick responses and help users decide if they need to seek in-person medical care.