

< All problem statements

# AI/ML

# **Instant Customer Support for Business Websites**

# **Summary**

Imagine revolutionizing customer service with an Al-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.

# Requirements

- 1. Develop a text chat interface that maintains context over the conversation.
- 2. Focus on three customer scenarios: prospecting, complaint handling, and ongoing support.
- 3. Integrate backend tools for actions like calendar bookings, and ensure data privacy.

4. Implement escalation protocols for human operators for complex issues.

# Access Free OpenAl API Keys!

Limited OpenAl API keys available at no cost for your hackathon project. Reach out <a href="here">here</a> 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:

- OpenAl 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 N 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: Conceptualization & Design

# Product Management & AI/ ML Specialists:

- Define the scope and specific functionalities of the Al chat agent.
- Identify the key customer scenarios: prospecting, complaint handling, and ongoing support.
- Discuss the Al model's requirements for context maintenance and data privacy.

# Frontend Development & Product Design:

- Design a user-friendly text chat interface.
- Ensure the interface is intuitive and aligns with typical customer support scenarios.

# **Backend Development:**

- Begin setting up the server and database structure.
- Start integrating AI models and backend tools for functionalities like calendar bookings.

# Day 3 - 4:: Al Integration & Feature Development

# AI/ ML & Data Science Specialists:

- Integrate NLP models for understanding and maintaining context in conversations.
- Implement logic for handling the different customer scenarios.

# Frontend & Backend Development:

- Develop the chat interface and connect it with the backend Al functionalities.
- Implement features for data privacy and secure information handling.

# **Product Management:**

· Plan and conduct initial testing to check AI responses and interface usability.

# Day 5: Testing, Refinement, & Presentation

# All Team Members:

- Perform comprehensive testing across all customer scenarios.
- Refine the Al's responses and ensure data privacy measures are effective.
- Implement escalation protocols for transferring to human operators.
- Prepare a presentation to showcase the AI chat agent's capabilities, focusing on customer engagement and business utility.

# **Other Problem Statements**

AI/ML	Fintech	AI/ML
Talk to Santa	Simplifying	Realtime
Claus	Small Business	<b>Translation of</b>
Bring the magic of	<b>Payments</b>	Voice Calls
Christmas to life	Build an	Embark on a
by developing an	application that	journey to break
Al where children	enables small	language barriers.
can converse with	businesses to	Create a real-time
Santa Claus. This	manage their	voice translation
enchanting project	payments	app that connects

is about creating joyous and safe interactions and making holiday wishes come true through innovative voice technology.

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.

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

**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

# 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.

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 AI/ML E
Commerce

# 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.

# Conversing with an Ecommerce Store Database

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

# Advance Marketing growth with Business data insights

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.