

< All problem statements

### AI/ML

# **Talk to Santa Claus**

# **Summary**

Bring the magic of Christmas to life by developing an Al 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.

# Requirements

- 1. Ensure child-friendly interactions and content safety.
- 2. Implement voice cloning technology to create a Santalike voice experience.
- 3. Include safeguards against collecting sensitive personal information from children.

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 National 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 & Initial Development

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

- Research and choose voice cloning technologies suitable for creating a Santa like voice.
- Begin developing algorithms for child-friendly interactions and content moderation.

#### **Product Management & Product Design:**

 Define the user experience, focusing on childfriendliness and safety. • Design the interaction flow with Santa, ensuring it's engaging and intuitive for children.

#### **Backend Development:**

 Set up the necessary infrastructure for the Al system, including data handling protocols to prevent the collection of sensitive information.

# Day 3 - 4: Integration and Testing

### Frontend Development:

- Develop a simple and visually appealing user interface suitable for children.
- Implement voice interaction features.

#### AI/ ML & Data Science:

- Integrate the voice cloning technology to simulate Santa's voice.
- Fine-tune the AI for appropriate and safe responses.

#### **Product Design & Management:**

- Conduct user testing with prototypes (ensuring child safety and privacy during tests).
- Gather feedback and iterate on the design and interaction flow.

# Day 5: Final Testing, Refinement, & Presentation

#### All Team Members:

- Finalize the AI interactions, ensuring they are safe and delightful for children.
- Implement robust safeguards against collecting sensitive personal information.
- Conduct comprehensive testing to ensure functionality and safety.
- Prepare a presentation highlighting the project's innovation, safety measures, and the magical experience it offers.

# **Other Problem Statements**

#### **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

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

# 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.

# 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

# 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

# Instant Customer Support for Business Websites

Imagine revolutionizing customer service with an Alpowered chat

### AI/ML

effectively.

# Farmer Supporter

Make a significant impact on the agricultural sector by developing a website that assists farmers in

#### 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

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.

making informed decisions. This project focuses on leveraging AI to provide expert advice on crop management, market insights, and real-time problem-solving.

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

#### 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 realtime insights. This

complex data management and intuitive user experience. 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 inperson medical care.