YourLife

Empathic Assistant for the Homeless of San Fransisco

Problem Statement

People who are at risk for or experiencing homelessness each have a unique journey, and each individual is forced to navigate a complex maze of shelters, services, and programs that vary not only in size, scope, and approach but also in effectiveness. As this article details, homelessness in the Bay Area comprises three distinct problems but is largely perceived and treated as one via a complex and fragmented response ecosystem. A breakthrough may come in part from recognizing the distinct problems faced by those who are unstably housed and by considering bold approaches to reenvision our response ecosystem around people, not siloed individual programs.

The ongoing crisis of homelessness in the Bay Area: What's working, what's not | McKinsey

San Francisco's unsheltered homeless population is unusually high

On the night of February 23, 2022, the city counted 7,800 homeless people in San Francisco. 4,400 of those people were unsheltered, which is about 0.54% of the population.

YourLife – A companion for a Lifetime

Learns who you are, what you need, gets you back on track.

The Value

Hyperpersonal for each individual in need

Will learn who you are – and remembers you on the next visit!

Understands the big picture

Sentiment, Topic Analysis, Opinion Mining in Databricks utilizing LLMS and Azure Cognitive services

Lightning speed ramp-up and ease of use

Can be taken into use by volunteer organizations in their existing events and spaces

All that is needed is a phone

Automated transcriptions and summarizations of discussions. Informal and formal.

Overall scheme for San Fransisco (Sketch without agreements)

- Utilize existing official/volunteer organizations

- Take into use in the events already being held

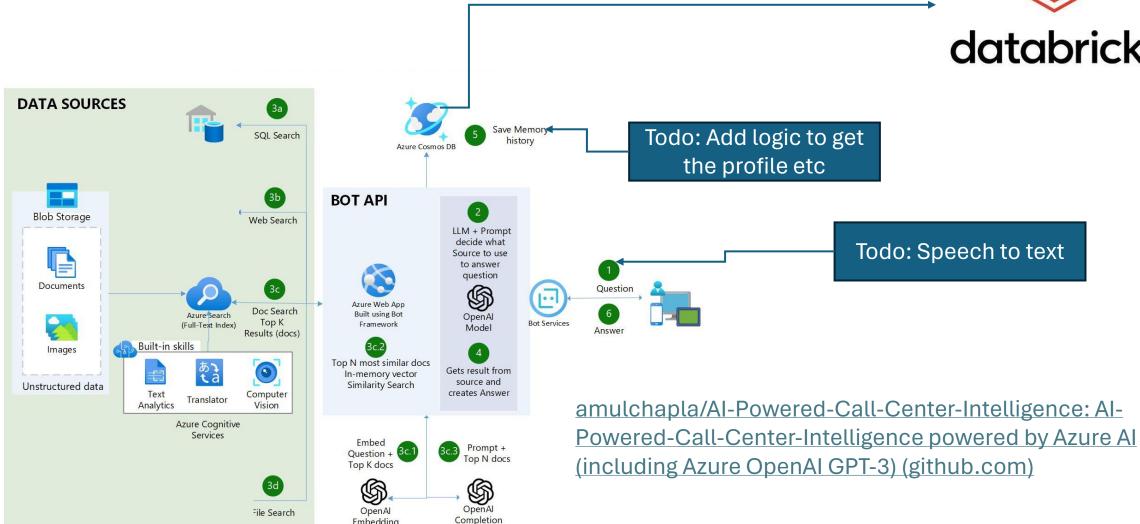- Fully automate in the future into the city infrastructure

How the first version will work

- Discussion starts with the person
    1) **Facilitator starts the session** (take a photo to enable personal service and profile buildup) (Computer Vision)
    2) **Real-time call Intelligence**
        - Transcription, insights and guidance provided live to the Facilitator -
            - Transcription: (Whisper AI , Azure Speech to text, Azure Language)
            - Live insights: Utilize Memory + Smart Search Architecture for Backend
    3) **Post-call Analytics**
        - Discussion Summary
        - Customer Insights (Topic & Trend, Sentiment Analytics ran in Databricks)

Computer Vision

LLM/GPT/DOLLY YourLife Smart Search Architecture

Insights, Analytics in Databricks

databricks

DATA SOURCES

Blob Storage
Documents
Images
Unstructured data

Built-in skills
Text Analytics
Translator
Computer Vision
Azure Cognitive Services

3a — SQL Search
3b — Web Search
3c — Doc Search Top K Results (docs)
3d — File Search

BOT API

Azure Web App Built using Bot Framework

3c.2 Top N most similar docs In-memory vector Similarity Search

2 LLM + Prompt decide what Source to use to answer question
OpenAI Model

4 Gets result from source and creates Answer

3c.1 Embed Question + Top K docs
OpenAI Embedding Model

3c.3 Prompt + Top N docs
OpenAI Completion Model

5 Azure Cosmos DB — Save Memory history

Todo: Add logic to get the profile etc

Bot Services

1 Question
6 Answer

Todo: Speech to text

amulchapla/AI-Powered-Call-Center-Intelligence: AI-Powered-Call-Center-Intelligence powered by Azure AI (including Azure OpenAI GPT-3) (github.com)