Trusst AI Interview Challenge

Introduction

Welcome to Trusst AI. We are a fast-moving team pushing the limits of technology for customer experience. As part of our hiring process, we seek to verify that you have the software development skills that it takes to be able to both ship working features, as well as devise new solutions to tricky problems. We are looking for full-stack developers who are able to take ownership and solve technical problems in limited timeframes.

The Background

At Trusst AI we help customers by categorising their incoming customer service calls, and displaying the breakdown of calls by category in an analytics dashboard. For each call we use a generative model to categorise the intent of the call. For example for a Telco company, if the customer is calling to enquire about their prepaid mobile balance, the model might produce 'prepaid mobile balance enquiry' as the intent.

This is a powerful feature which enables customers to, in real-time, get insights into why their customers are calling. This is without having to come up with the categories beforehand, or train a classification model. If a new problem comes up, it is immediately surfaced in the analytics results.

However, there is a drawback to this method. As it is generative there can be many different ways of saying the same thing. In the above example you may get some calls saying 'prepaid mobile balance', some just 'balance enquiry' some saying 'prepaid enquiries'. This makes for a messy dashboard.

The Task

Your task is to build a webpage which provides an analytical dashboard of the distribution of the caller intents. You will be given a list of intents for the calls in a file as input. It is up to you how you present this data to the user.

It is expected that you will manipulate the data in some way to overcome the drawback mentioned in the background information.

It is a requirement that the webpage has the associated code to deploy it to AWS for hosting. This can be done remaining in the free tier of a new AWS account, but let us know if you need us to provide the account.

Expected Outcomes/Deliverables

- The code/repo access for the website
- A url to your hosted solution

We will arrange a follow-up call after you have submitted your solution for you to walk us through how you approached it.

Data/Inputs

The data provided is a .txt file. It has 1 line per call. Each line has a single string, giving the intent of the call.

Data excerpt (full data set will be shared separately):
Initiate the provisioning of a brand-new phone or web-based connection
Assess your monthly fee
Solicit a temporary service stoppage
Investigate early termination charges
Review your monthly rate
Request a copy of former charges