
Alpha A.I

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Voice based customer grievance redressal system

Idea submission

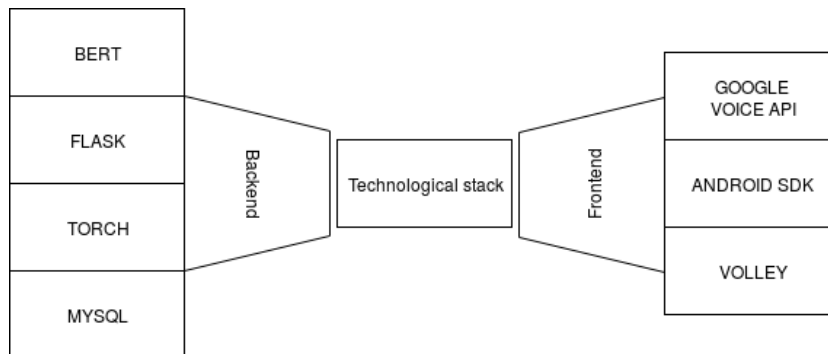
OVERVIEW

In this submission we are proposing a voice based customer grievance redressal system which is able to help with basic requests on its own and able to register and track other requests with and help them reach their respective departments efficiently.

GOALS

1. Able to converse with the customer and extract important information from the voice.(Like account number etc..)
2. Provide basic info like bank balance/transactions and do operations like blocking their account.
3. Register and track the complaints with provision of having centralised monitoring. That is it should be able to route customer queries to the respective departments.

Technology stack



Working method

Speech recognition

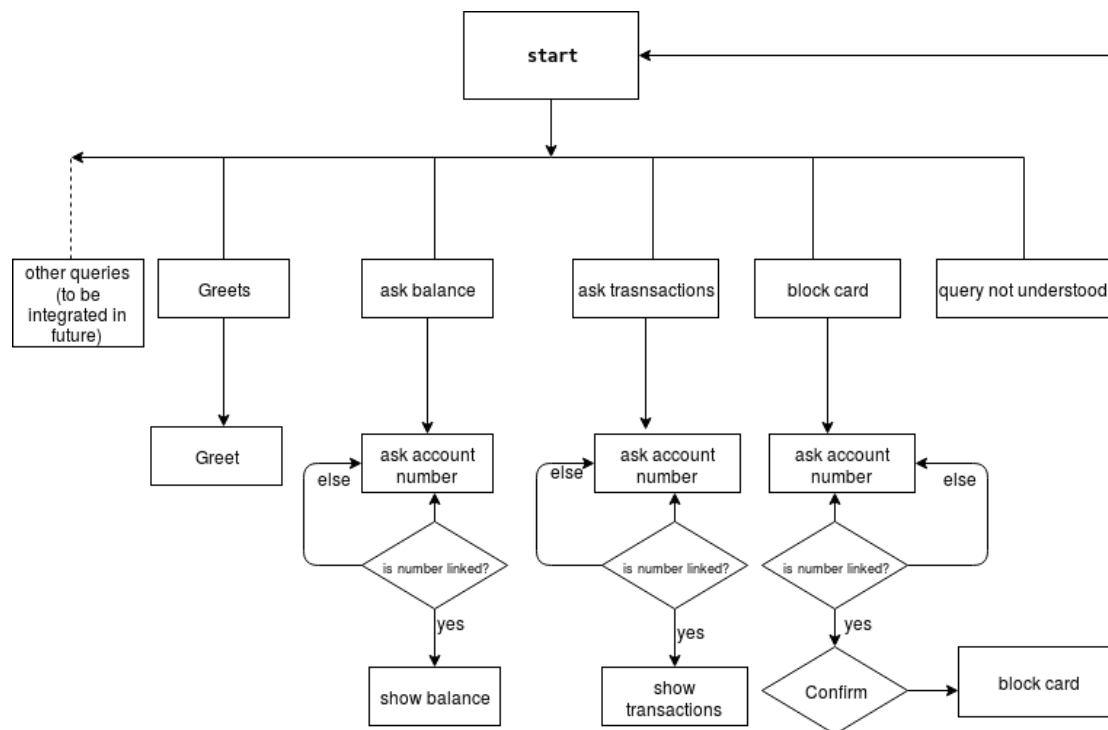
Our first step is to convert voice input given to the system to text. This is done by using Google voice API. Advantages of using Google API is we will be able to scale our model to all major Indian languages.

Intent classification

The next step in our system is to understand the text for its intent (if the text means a bank balance query or some other question). This we are doing it using [BERT](#) (Bidirectional Encoder Representations from Transformers) which is a state of the art general purpose NLP architecture by Google. First we trained our intent classifier using a set of training examples and later used the model to classify the text obtained from Google voice API.

Control flow

This is the flow of our program, we are using states to control how our program responds to the query. We are planning to use MySQL for database management (for details of customers).



Hosting the program

Finally host our programs on server which is created using flask, which is connected to an Android app for the initial phase testing.