# Speech Authentication System

## Project Team Members

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## Project Summary

A Speech authentication system that grants a user access to a system via speech recognition.

## Goals and Objectives

- Using a Google speech API to convert speech-to-text and vice versa.
- Comparing the user input audio with the saved audio file.
- Allowing access to the user after the audio matches up to 90% accuracy.

## GPIO

The GPIO board includes two switches, one to turn on the mic for recording audio and the other to turn off the mic to stop the recording, connected by jumper wires. The board will include a LED bulb that indicates when the mic is on. The USB microphone is connected to the Raspberry Pi.

## GUI

The GUI will include a meter that highlights the intensity of the audio, a save button to save the recorded audio, a textbox that displays the user's speech in text format, a reset button to reset the saved audio and a play button that will play the saved audio back.

## Github Repository

This project's Github repository is located at: https://github.com/Ujjen/Group-3.git

## Gantt Chart