Project Title: Global to Vocal voice-based language translator using AI

TEAM NO.: 235

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Project Details:

Our project aims to create a interface and write a code in such a way that it transcribe the speech in the initial step. Then it translates it into the destination or target language, before generating audio of the translated speech.

Problem Statement:

We have seen in our day-to-day life that people face communication problems when they visit different countries and their respective states. This is due to the lack of understanding the language i.e.. language barrier.

We have proposed a project in such a way that it provides a solution and makes communication easier for people who face problem in understanding the language when they visit different countries and their respective states.

Need of Project:

To develop a interface which uses the translation tool to translate the users voice and read aloud the translated result, allowing us to communicate or travel anywhere which is no longer a language barrier.
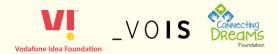
The end users are the people who don't understand the language or those who can't communicate with the language they wish to.

By using the voice-based translator, he or she can communicate with the people around them easily without any assistance by any other person who act as a translator.

Proposed Solution:

In this AI based voice translator system, we have created the voice translator system in which the source language is being translated into the destination language in which the user can translate to the language of his choice.

Our solution is a step towards creating an environment in which the people can communicate with each other easily even if they are not able to understand the language, thus making easier for them to communicate.

Technology Used:

We have used python libraries such as play sound, speech recognition, google trans, gTTs. The google trans will help us to translate the language of our choice and speech recognition library will help us to identify the language in which we are speaking.

Project Outcomes:

To develop a interface which uses the translation tool to translate the users voice and read aloud the translated result, allowing us to communicate or travel anywhere which is no longer a language barrier.

Voice translator is used as a language tool, where voice of the user will be captured and translated.

To create a user-friendly voice-based translator system that requires minimal maintenance for conversion of source language to destination language.

Results:

Future scope for project enhancement:

In future we would like develop a mobile application which will work without internet connection so that one can use this application in any part of the world where there is no proper internet connection as well.