

SPEAKLINGO

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INTRODUCTION

- The “Voice Translate” project is a device-installed application designed to facilitate real-time Voice translation into the Malayalam language. Developed using HTML, CSS, and javascript this innovative solution enables users to input spoken phrases through voice, which are then swiftly translated into written Malayalam text. By utilizing web technologies, the project provides a user-friendly platform for seamless and efficient communication. This application serves as a practical and accessible means of overcoming language barriers, offering instant translation capabilities without the need for complex installations or additional software. The “Voice Translate” project showcases the power of technology in enhancing communication across languages through the simplicity of voice input and localized translation processes. It also helps to download the translated text for future references. By using this project we can input the text file so that it will be easier for user to upload the texts

MODULES

- **Speech Input Module:**

captures the users spoken input using microphone or audio input device

- **Speech Recognition Module:**

It converts the spoken input into text. Popular APIs like Google Speech Recognition or the Web Speech API can be used for this purpose.

- **Translation Engine:**

it responsible for translating the text from one language to another. It can use machine translation models or APIs such as Google Translate, Microsoft Translator, or custom-built translation models.

MODULES

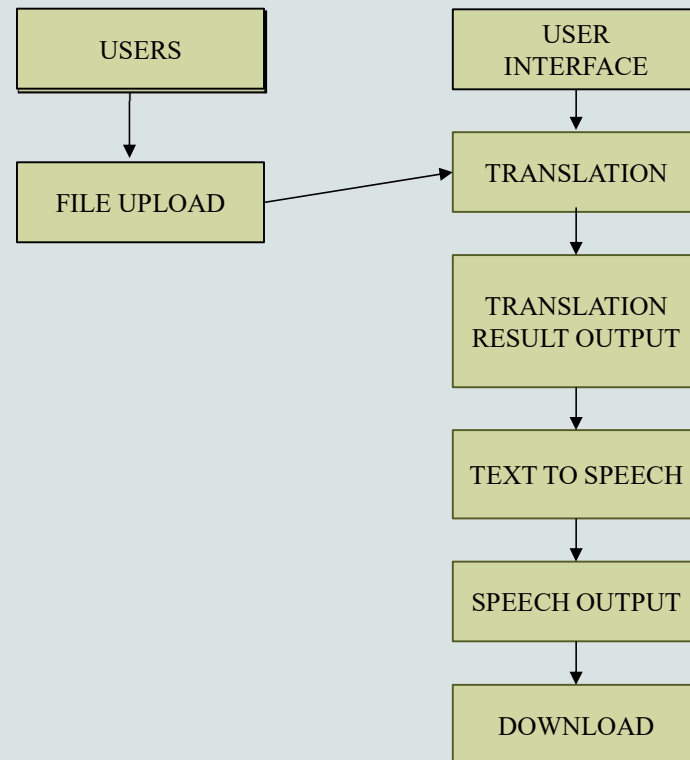
- **Text-to-Speech (TTS) Module:**

After translating the text, this module converts the translated text back into spoken words. TTS engines like Google Text-to-Speech or the Web Speech API can be used here.

Audio Output Module:

This module plays the translated audio for the user to hear.

IMPLEMENTATION



PRODUCT BACKLOG

ID	PRIORITY	SIZE (Hours)	SPRINT	STATUS	NAME
1	Medium	7	1	Planned	Form Design
2	High	24	2	Partially Completed	Coding
3	Medium	6	3	Planned	Testing
4	High	4		Planned	Output Generation

USER STORIES

User story ID	As a <type of user>	I want	so that I can
1	customer	Select the input and output language	Translate it
2	customer	Enter text one language	Automatically translated to another language
3	customer	Option to toggle	Switch between light and dark modes for improved visibility and comfort
4	customer	To hear the translated text	Understand it more
5	customer	Ability to input text by speaking	Convert speech to text for translation
6	customer	Able to download the translated text	Refer when offline
7	customer	To upload text documents(eg :- text files , word documents)	Translate it easily

PROJECT PLAN

ID	TASK NAME	START DATE	END DATE	PROJECT HOURS	STATUS
1	Sprint 1	15/09/2023	12/10/2023	13	Planned
2	Sprint 2	13/10/2023	03/11/2023	14	Partially Completed
3	Sprint 3	08/11/2023	30/11/2023	14	Planned

SPRINT PLAN

SPRINT 1

Backlog Item	Status and Completion date	Original Estimate in hours	Day 1 15/09	Day 2 20/09	Day 3 21/09	Day 4 28/09	Day 5 29/09	Day 6 04/10	Day 7 05/10	Day 8 06/10	Day 9 11/10	Day 10 12/10
Form Design	28/09/2023	4	2	0	1	1	0	0	0	0	0	0
Coding	06/10/2023	7	0	1	0	0	2	1	1	2	0	0
Testing & Validation	12/10/2023	2	0	0	0	0	0	0	0	0	1	1
Total		13	2	1	1	1	2	1	1	2	1	1

SPRINT PLAN

SPRINT 2

Backlog Item	Status and Completion date	Original Estimate in hours	Day 1 13/10	Day 2 18/10	Day 3 19/10	Day 4 20/10	Day 5 25/10	Day 6 26/10	Day 7 27/10	Day 8 01/11	Day 9 02/11	Day 10 03/11
Form Design	01/11/2023	3	0	1	0	0	1	0	0	1	0	0
Coding	27/10/2023	8	2	0	1	2	0	1	2	0	0	0
Testing & Validation	03/11/2023	3	0	0	0	0	0	0	0	0	1	2
Total		14	2	1	1	2	1	1	2	1	1	2

SPRINT PLAN

SPRINT 3

Backlog Item	Status and Completion date	Original Estimate in hours	Day 1 08/11	Day 2 09/11	Day 3 10/11	Day 4 15/11	Day 5 16/11	Day 6 17/11	Day 7 22/11	Day 8 23/11	Day 9 24/11	Day 10 29/11	Day 11 30/11
Coding	22/11/2023	9	1	1	2	1	1	2	1	0	0	0	0
Testing & Validation	30/11/2023	5	0	0	0	0	0	0	0	1	2	1	1
Total		14	1	1	2	1	1	2	1	1	2	1	1

DEVELOPMENT ENVIRONMENT

- SOFTWARE SPECIFICATION:

- Operating system : windows 10
- programming languages: javascript ,html ,css
- Translation APIs : google translate, Microsoft translator
- Development tools : visual studio code
- browser : chrome/firefox
- text to speech : APIs like google text to speech API .

- HARDWARE SPECIFICATION:

- Processor : Intel core i5
- RAM : Minimum 2GB



Thank you