

Internship Report – Task 3 Data Science Nullclass

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IMPLEMENTING ENGLISH AUDIO TO HINDI TEXT TRANSLATION FEATURE

QUESTION:

Create a feature to translate the audio into Hindi . The system will listen the English audio from user and it will convert into Hindi word. If the system does not understand the audio it will ask repeat one more time to make it better.. The audio should be in English word only . This translation feature work on only after 6 PM IST timing and before that it should show message like please try after 6 PM IST as well as it should not translate any English which is start with M and O apart from that it should translate all other words

INTRODUCTION:

Task 3 involved developing a feature to translate English audio into Hindi text using speech recognition and translation APIs. The objective was to create a system that listens to English audio input, translates it into Hindi, and displays the translated text.

BACKGROUND:

Speech recognition and translation technologies have advanced significantly, enabling real-time translation between languages. Implementing an English Audio to Hindi Text translation feature required integrating speech recognition and translation APIs effectively.

LEARNING OBJECTIVES:

Understand speech recognition and translation APIs.

Implement audio input processing in Python.

Develop a user-friendly interface for audio translation.

ACTIVITIES AND TASKS:

Researched speech recognition and translation APIs.

Implemented audio input processing using the SpeechRecognition library.

Integrated translation functionality using the Googletrans library.

Designed a graphical user interface (GUI) for the translation system.

SKILLS AND COMPETENCIES DEVELOPED:

Proficiency in Python programming.

Understanding of speech recognition and translation technologies.

GUI development using Tkinter.

Problem-solving in audio processing and translation.

FEEDBACK AND EVIDENCE:

The implemented English audio to Hindi text translation feature was tested internally and its known for accuracy and ease of use.

CHALLENGES AND SOLUTIONS:

Handling audio input variations: Addressed by fine-tuning speech recognition parameters and error handling.

OUTCOMES AND IMPACT:

The English audio to Hindi text translation feature provides users with a convenient tool for translating spoken English into written Hindi, facilitating communication between speakers of both languages.

CONCLUSION:

Successfully implementing the English Audio to Hindi Text translation feature demonstrates the application of speech recognition and translation technologies in real-world scenarios. The acquired knowledge and skills in audio processing and translation are valuable assets for future projects requiring similar functionalities.

These reports should provide a comprehensive overview of the tasks, activities, challenges, and outcomes of implementing each feature.