

A Grammar Scoring Engine for Voice Samples

Simplified Problem Statement

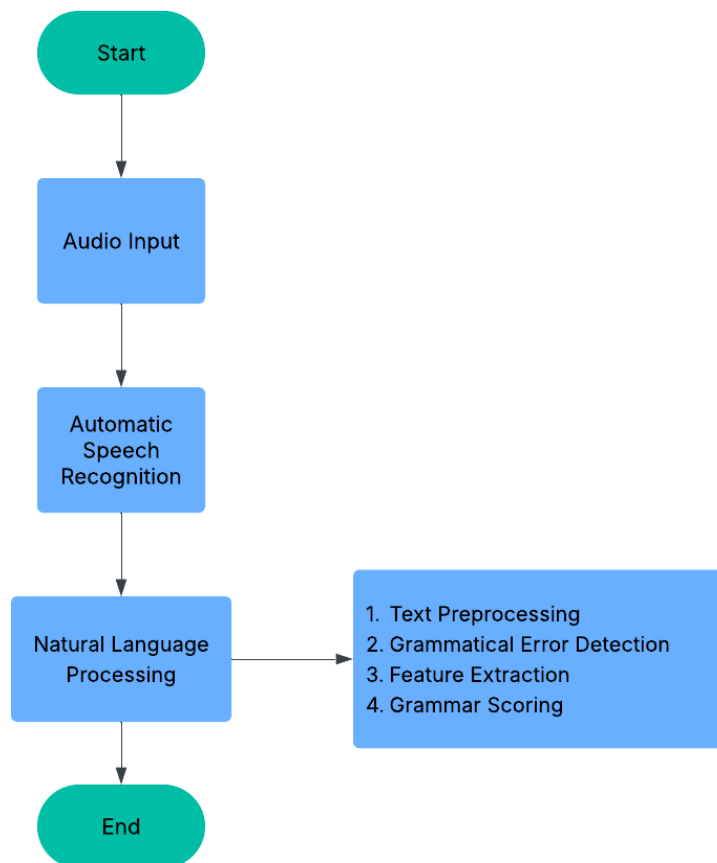
Input: Voice samples (audio files of people speaking English)

Output: A grammar score (e.g., from 1 to 5, or a percentage) representing the **grammatical correctness** of the spoken content

Key Components of the assignment:

1. Speech-to-Text Conversion (ASR)
2. Text Preprocessing
3. Grammar Scoring


Workflow Diagram for the Assignment:



Tools and Libraries Used:

1. **Whisper (openai-whisper)**: For speech-to-text transcription.
2. **Transformers + HuggingFace (RoBERTa-CoLA)**: For grammar scoring.
3. **gTTS (Google Text-to-Speech)**: For optional feedback/response generation.
4. **Pydub, Torchaudio**: For handling audio.
5. **Google Colab**: For running the notebook.

Link to Google Colab File:

 SHLAssignment.ipynb