**“Text To Speech Converter using MATLAB”**

**Project Proposal**



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**CSE301L Signals & Systems Lab**

Submitted to:

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**“Text To Speech Converter”**

* **Introduction/Abstract:** Text-to-speech (TTS) is a type of assistive technology that reads digital text aloud. It's sometimes called “read aloud” technology. With a click of a button or the touch of a finger, TTS can take words on a computer or other digital device and convert them into audio.
* **Methodology:** The main idea of this project is optical Character recognition which is used to convert text character into the audio signal. The text is preprocessed and then used for recognition by segmenting each character. Segmentation is followed by extraction of the letter and resizing of the file containing the text. This Text file is then converted into the audio signal. MATLAB16 will be used for all these processes.
* **Software Used: “**MathWorks’ MATLAB 2015b”.
* **Programming Language Used: “**MATLAB”**.**
* **Libraries Used: NET.addAssembly**
* **Conclusion/Expected Outcome:** After defining a string and the rate/speed of speech, the program should read out the given string aloud.
* **Applications:**

1. People with visual and reading impairments were the early adopters of TTS. The Proposed system is cost-efficient and helps the visually impaired person to hear the text.
2. TTS is very helpful for kids and adults who struggle with reading.
3. TTS eases the internet experience for the 1 out of 5 people who have dyslexia, low literacy readers and others with learning disabilities by removing the stress of reading and presenting information in an optimal format.
4. TTS works with nearly every personal digital device, including computers, smartphones, and tablets. All kinds of text files can be read aloud, including Word and Pages documents.

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