Raspberry Pi based Reader for Blind Person Using Image Processing

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Abstract*: In our India, there are so many peoples who are suffering from blindness. In their life, so many problems faced by them. One of the problems is the related to educational sector. In the educational sector, they have been suffering from many challenges i.e., reading books, newspaper, writing, and so many things are related to this. Without any type of help, they cannot see what they read. Therefore, in motive of supporting them, we have proposed" Raspberry pi reader for blind persons". This project aims to create a raspberry pi reader that utilizes image processing techniques to convert printed text into audible speech. The camera module captures images of printed text which are then processed using optical character recognition (OCR)algorithms extract text from the images which is then converted into speech using text to speech (TTS)synthesis. The Tesseract platform is used to assist the OCR technology. Python programming is used by raspberry pi for conversion of printed text image to text file and then to audio output.*

Keywords: Raspberry pi, OCR, TTS etc

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