Original Research Paper

A Review of Cross-Platform Document File Reader Using Speech Synthesis

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Abstract: Document files are files used to store documents on storage devices primarily for computer use. Software is used to view these files, displaying their text content in a legible way. However, it is essential to have programs for transforming electronic files into versions usable by those who suffer from specific disabilities. This paper reviewed fifteen published articles in the field of document file reading. It was observed from the review that various attempts have been made by different researchers in order to develop a software cable for converting document files that consist of text to an audio format. Text may now be easily translated into natural-sounding voice across many platforms using different software. It was observed from the systematic review that the use of AI such as the GPT-3.5 and GPT-4 Turbo Large Language Model (LLM) technologies has the best performance because it does not end at producing a vocal sound that is similar to human own, but it also translates different languages. In conclusion, cross-platform document file reader (text-to-speech) synthesis has improved user experiences in a variety of applications such as language learning, audiobooks and virtual assistants.

Keywords: Cross-Platform, Document and File, Reader, Speech and Synthesis, Text.