

## **Abstract**

The ability to read and write is one of the main requirement to absorb and develop knowledge that student have received. Literacy is vital in the development of human intelligence. But unfortunately, there are still many children of primary school age are still having difficulty with reading and writing. This is compounded by the lack of interest in primary school age children in learning and prefer to play. Lack of access to quality educators and dedicated in the world of education also contribute to exacerbating illiteracy Indonesia.

Therefore, there needs to be a breakthrough in education, especially in Indonesian education of primary school age. One of them is by building a mobile application that help user to learn to spell words in Indonesian.

This application will be running on android platform. By utilizing OCR technology for image text recognition and text to speech, so that the user can learn how to read the words he encounters by taking a picture and then be processed into pronunciation.

This application will use the Tesseract OCR library and tool Flite. The expected output from this application can help users to spell words in Indonesian.

Results from image to text conversion are heavily influenced by the current state of the image retrieval. The test results get up to 90% accuracy rate. While the results of the synthetic voice is still considered ugly by users because it still uses English lexicon and voice database.

**Keyword: Tesseract, flite, android, OCR, HMM**