

ABSTRACT

A muslim has to be able to read the verses of the holy Quran well based on the instruction of Rasulullah saw. reading the holy Quran based on the tajweed is obligatory for everyone, cannot be represented by another. The application of tajweed is made with the characteristic of mobile, so the user can learn tajweed wherever and whenever. In addition to increase the knowledge of tajweed, the user can read the holy Quran fluently based on the tajweed because this application supports the learning by text and sound. Besides that, the user can examine their ability in tajweed by answering the questions which are available in the application. The application of tajweed learning applied one of the algorithms those are divide and conquer. The algorithm of divide and conquer are implemented of the question answers which are available in the exercise menu. Algorithm of divide and conquer have the procedure to divide the problem into some problems until produce the last solution from the first problem. Algorithm divide and conquer have the fast enough complexity those are 2,86, compared with the algorithm of brute force which has the higher complexity than the algorithm divide and conquer that is 6.

Keyword: The holy Quran, tajweed, mobile, divide and conquer, brute force, complexity

