ABSTRACT

The International English Language Testing System (IELTS) is one of the most widely used English proficiency tests. The IELTS test consists of 4 sessions, Reading, Writing, Listening, and Speaking. One of the most difficult sessions in the IELTS test is the Speaking session. This is due to the preparation process for the Speaking session is quite complicated and takes a long time. To prepare before taking the IELTS test, there are simulations or exercises held by official IELTS test providers. However, the simulation test is relatively expensive and the process of waiting for the results of the assessment is quite long.

To overcome this problem, an IELTS Speaking Simulation Android application has been developed which can be used as a training for the IELTS speaking test which can provide direct assessments. The IELTS Speaking Simulation application can provide a direct IELTS speaking session assessment using Artificial Intelligence technology, so that prospective IELTS test takers can prepare themselves better and more effectively before taking the IELTS test. In providing an IELTS speaking session simulation test assessment, the IELTS Speaking Simulation application uses the IELTS speaking session assessment matrix, Fluency, Lexical, Grammar, and Pronunciation.

The IELTS Speaking Simulation application has been tested on 33 respondents who are prospective users of the application consisting of college students and English language experts. From the test results, it was obtained that the results of alpha testing of Android applications were 100%, alpha testing of API applications were 90%, and the results of beta testing of applications obtained satisfactory results and the questions asked had been tested for the level of reliability using the Cronbach alpha method and the results exceeded the minimum limit of a question considered reliable. And the results of the Machine Learning test obtained an accuracy result in one of the models 99% for the Fluency matrix assessment. With the development of the IELTS Speaking Simulation Android application, it is hoped that it can reduce the problems that have been described and become a solution as a training platform for the IELTS speaking session test.

Keywords: IELTS, Speaking, Android, Artificial Intelligence, Machine Learning