APPLICATION *N-GRAM* METHOD IN ENGLISH LEARNING APPLICATIONS USING SPEECH RECOGNITION BASED ANDROID

Name   : Roza Anugrah Anizar

Nim   : 6304171066

Supervisior I   : Lidya Wati, M.Kom

Supervisior II   : Depandi Enda, M.Kom

ABSTRACT

Pronunciation is a part of learning English that trains you to pronounce properly and correctly. However, it becomes constrained in pronouncing the correct words, many errors in the pronunciation of words, this is due to a lack of speaking in English or never interacting in English. Therefore, there is a need for an English learning application that is focused on pronouncing English properly and correctly by using the built-in Speech Recognition feature from Android Studio and built into the Android platform. In addition, the research method of this application uses yahoo N-grams to compare per character between the words displayed and the voice input that is converted into text and produces the proportion of the voice inputted with the displayed word. As for the application development method using the Prototype method for the approach between the user and the system to be built. There are 5 stages of the Prototype method, namely Communication is used to find needs using interviews, Planning plans in terms of costs, schedules and resources, Modeling makes these requirements into UML form, N gram algorithm and builds a Prototype, Construction implements in the form of coding and Submission of the System as Feedback from users from users about the application. As for Black-Box Testing testing was carried out from android versions 6.0 to 11.0 and System Usability Scale testing got Grade B.

***Keywords*:** *Vocabulary, Speech Recognition,Tense, Speaking, N-gram, User, Pronunciation,Prototype*