ABSTRACT

Introduction of speech is one of many research field that has unique characteristic for each language used, that means, the research that conducted for a particular language may not be used on other languages. This is because the characteristics of a language different from each other. the research of this field was mostly done in various developed and developing countries. In developing countries like Indonesia, this area already noted by several researchers. One of the new alternative being developed is a system of speech recognition (SR) or human recognizing voice.

In this final project as the writer uses voice recognition monophone. The advantage of using phonemes as voice recognition is databases that provided is not bigger than the database if diphone or triphone used. Modeling that used is hidden Markov model (HMM) that worked above the Hidden Markov Toolkit (HTK) platform. Feature extraction that used is Mel Frequency Cepstral Coefficient (MFCC).

Testing is done with 4 different methods. The first one, each in 1 voice sample 8 words said, 1 man as training data with different dictionary's rules(1L8K1m d1), the second, each in 1 voice sample 8 words said, 1 man as training data (1L8K1m d2), a third each in 1 sample voice say 8 words, 2 men and 1 woman as training data (1L8K1w2m d2) and the last 1 sample every sound in the spoken word 8, 2 men and 1 woman as training data with different dictionary's rules(1L8K1w2m d1). The best accuracy for each word and sentence is a method that uses 1L8K1w2md2 are 97, 92% and 83.37%.