ABSTRACT

APPLICATION FOR OPEN PROGRAMS IN COMPUTER USING VOICE WITH MEL FREQUENCY CEPSTRUM COEFICIENTS (MFCC) METHOD

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Software was build for this final project is an application which can open programs in computer using voice (Voice command). Globally, voice will agreeable with data in database. If the value is same, then system will execute programs which choseed before.

For feature extraction, we used Mel frequency Cepstrum Coefficiens (MFCC) Method. In MFCC itself, we have seven stage, first is Pre-emphasis then Frame Blocking, Windowing, Fast Fourier Transform, Mel Frequency Waping, Discrete Cosine Transform and Cepstral Liftering. For reduse time, we used K-Means Clustering for made some data vektor which representation all the data sample. This voice command application was build using Microsoft visual Basic 6.

In testing, we get presentation of accuration for the success up to 70,5% from a thousand data sample . We can get the value from ten people, which trying this application. They are five people girl and five people boy. For the application performance, we need silence room , so that application wil be in good performance.

Key Word **:** *Voice Command, Mel Frequency Cepstrum Coefficients* (MFCC), *, K-Means Clustering*