Title: A Voice Driven Application for First-Aid Treatment Based on Forward Algorithm for Android Platform

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ABSTRACT

Speech recognition has been known for several types of development which includes controlling a certain kind of device, performing operations such as dictation of text, within applications and the operating system itself. Creating the firstaid app with the use of voice command requires deep understanding in speech recognition and enough time to complete the task. In this thesis project, the researchers developed a voice-driven app that converts speech to text using Ionic and compares to the language model created from Laravel, once the converted voice commands and the LM match then output the desired data. The researchers want to prove that using the Forward algorithm based on the concept of Hidden Markov Model, Laravel, and Ionic combination effectively, and accurately works on a firstaid application. To verify the effectiveness and the efficiency of the mobile app regarding recognition of the voice commands it has undergone several software, hardware, and environmental testing techniques.

Keywords: Speech Recognition, Hidden Markov Model (HMM), Laravel, First-aid, Forward Algorithm