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Developing an Animated Evaluation Application

for Learning Lexical Tone using Java

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Abstract

A universally accepted definition of language is the communication between human in order to exchange information. Nowadays, English is widely used by all the people around the world whether there are students, tourists or even a businessman. However, people tend to make mistakes when using the language either in grammar or pronunciations and may lead to wrong perception. The aim for this report is to develop "An Animated Evaluation for Learning Lexical Tone using Java". The objective of this application is to evaluate and learn languages in a more effective way using voice technology to evaluate the stress, rhythm and intonation of the user voice compared with the native speaker. It provides the option for the user to test their pronunciation and gain appropriate feedback to improve their languages in a more effective way. The application also adds in the speech engines in order to provide the functionality of speech recognition. In addition, the speech engine uses the grammatical context system and the recommended speech engine for this system is the Via Voice by IBM. Via Voice afford a multi-modal computer environment, freeing users from dependence on the mouse and keyboard for many applications. The application is design based on the storyboard and implemented according to the human computer interaction (HCI) as a guideline. The application is written in Java programming language and has been thoroughly tested using the black box testing, white box testing and appropriate test plan. In order to ensure the user requirements are met the evaluation is being done as well. The .NET technology is recommended for future enhancement in this application along with a Microsoft Agent that will explains to the user how to use the system.