

# **A STUDY AND IMPLEMENTATION OF A VOICE-ENABLED LIBRARY SYSTEM WITH LUCENE SEARCH ENGINE**

Prepared by: Guo Yuan Quan

## **ABSTRACT**

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This project studies and evaluates the existing INTI Library System so as to identify the limitations of current system. The project further develops new library system with enhanced features which are the new searching subsystem by using Apache Lucene. Apache Lucene is a high-performance, full-featured text search engine library written entirely in Java. So it is introduced to improve the searching function of current system. Another key feature of proposed system is to control the system based on the voice. Sphinx-4 is a state-of-art speech recognition system which is capable of recognizing discrete and continuous speech. Based on the Sphinx-4, voice control subsystem can be developed. It can be very useful for disabled people. In addition, this project will also focus on system design which is based on three tier architecture and multi-threading programming and new technologies such as Hibernate in order to improve system performance and flexibility.