

## **Abstract**

Nowadays, most music query is based on its title or singer. Content based music query such as melody based query is quite unpopular. However, the problem is how to match two music files with different sequence of notes, so they can be concluded as having the same melody.

In the final project, a software can be used to do music query based on either partial or complete melody by Approximate string matching method, using Levenshtein Distance algorithm is developed. Approximate string matching is a string matching algorithm which allows an error. Each music is represented in digital form as MIDI files.

To perform the music query, three steps are required. These steps are melody extraction, melody standardization, and melody matching. As user input the query, system will read MIDI files convert the information they contain into text. Afterwards these three steps mentioned above are executed sequentially.

This software is able to do music query that generate a list of music file which contain inputed query. Compared to Exact matching, this method is more appropriate to do music query. In this method, query length is equivalent to the time required for query execution.

**Keywords:** music query, music content, approximate string matching, levenshtein distance, MIDI