TJHSST Senior Research Project
Music Editing/Compsition Software
2006-2007

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1 Purpose

To make a usable music editing and composing software that has a functional GUI so that the music can be edited directly from the GUI. When completed, I want to be able to incorporate any musical symbol into my music and have it appear in a visual sensible fashion. I also want to have compositional aids such as a harmony writer that can help a person flesh out a melody. This project will expand both my knowledge of computer software and compositional techniques.

2 Previous Work

2.1 Background

Many free programs exist to edit or compose software, but they are often confusing or have poorly designed GUIs that have irregular spacing that make the scores look clumsy or ugly.

2.2   Research

3   Procedure

3.1   Language

I plan on using Java because it can create usable GUIs fairly easily. The fact that it is an object oriented language doesnt really do much for me, but I am more familiar with the language than C++.

3.2   Testing

I will test my program by having other people play with my code and GUI to see if any problems exist and to make the interface as intuitive as possible.

3.3   Units

I will be able to segment my code once I get a basic shell going. Adding more interface options such as transposition, harmony, and multiple melodies can be added separately once the basic interface is completed.

4   Testing

4.1   Interface usability

I will get other people to use my interface to make sure that it is intuitive at each step of the process

4.2   Complicated inputs

I will try a large variety of complicated music types in order to make sure that there are no bugs in my program. I don't anticipate this being very much of a problem.

5   Expected Result

I expect to have a usable GUI that allows people to create and edit music easily without having to purchace an expensive piece of software that is far to complicated for the average user. I will present my program using a poster displaying pieces of code and screenshots of the GUI in use.