CS380 Design Document

Feature requests:

1) Play button – this will start the program using whatever constraints that have been set by the user.

2) Stop button – the program will stop playing music

3) Pause button – the program will pause playing music and resume when the pause button is pressed again

4) Reset to Defaults button – all slider values will reset to starting default values.

5) Constraints – The program will need setters and getters for those values to be used internally.

a) Soft --|-- Loud (slider from 0 to 1. Default will be 0.5)

b) Major |– Minor (consider this is a bool toggle with no in between values. Default will be Major.)

c) Staccato --|-- Legato (slider from 0 to 1. Default will be 0.5)

d) Phrase Length (either a slider or an input box - values should range from 4 to 16. Default will be 12.)

e) Voice Melody (selection between None, Bass, Tenor, Alto and Soprano – one of these voices must be selected. Default would be None.)

f) Time Signature (selection between 3/4, 4/4, and 6/8 – one of these must be selected. Default will be 4/4)

g) BPM ----- (slider with values from 40 to 208, alternatively we could also have text input that could work with the slider in case the value range of the slider is too difficult to control. Default will be 80.)

6) Emotion selection - these sliders will auto-adjust the Constraint values based upon the user selection

a) Happy --|-- Sad (slider from 0 to 1, default at 0.5)

b) Peaceful --|-- Angry (slider from 0 to 1, default at 0.5)

c) Light-hearted --|-- Heavy (slider from 0 to 1, default at 0.5)

d) Relaxed --|-- Frantic (slider from 0 to 1, default at 0.5)