Defining the problem:

Client ***** loves music. They are a high school student and are a part of a number of music-related organizations, including a high level regional orchestra. After taking a musical theory class they became interested in musical composition. After using a traditional music composition software, i.e Musescore and Finale, they found them unsatisfactory, citing the dull MIDI (Musical Instrument Digital Interface) instrumentation displeasing to the ears. They wanted to utilize their own skill as a musician to help with the music composition process.

I believe that this is a good situation for my IA. I have known the client for an extended period of time, meaning that it is very easy for me to receive feedback and wanted criteria for the program. I am also a musician, meaning that I already have some experience in this field, such as tempo, key signature, structure, etc.

Rationale for Proposed Solution:

As the client talked about their problem during the interview process, it became clear that they wanted something along the lines of a DAW, or a Digital Audio Workstation. In that system, they would be able to input audio samples they recorded themselves. However, they stated that they had tried popular DAWs, like FL Studios and Audacity, and found that the layout was much too confusing to a newcomer like themselves. There were a number of extraneous functions that the client believed were not necessary for what they wanted.

Although other DAWs already exist, given the aforementioned examples, the selling point of this product will be the simple design and ease of use. The user will be able to directly record samples from their microphone for use, and manipulate the sample in a variety of ways.

The program will be written in Java because:

- It is what I am currently learning in school
- Huge library for helpful tools
- Ease of access

Stating Success Criteria

- 1. Program allows user to upload audio from computer file system
- 2. Program allows user to upload audio from microphone
- 3. Program allows user to upload/record and manipulate multiple audio files
- 4. Program allows user to manipulate the pitch of the audio file
- 5. Program allows user to manipulate the tempo of the audio file
- 6. Program allows user to equalize the audio file
- 7. Program allows user to adjust the volume of the audio file
- 8. Program allows user to listen to edited audio
- 9. Program interface is easy to use and user friendly
- 10. Program allows user to download the edited audio files