Jason Jiang and Kenneth Park

Project: CS35

Proposal:

The goal for this project is to build program that puts together the “perfect” song. We will be doing this by utilizing the NeuroSky Mindwave, an EEG device that records electrical activity in the brain. Our plan is to have someone wear the device, and then play some of their favorite music. After having them listen to multiple songs, the computer will have collected data on the electrical activity in their brain. Using this data, which will be collected in the form of waves, the program will take snippets from the music and put it together, to create the ideal song. There are a couple of reasons why we want to create a program that does this. Kenny plays/played many instruments growing up and is very involved with music. Jason played the piano when he was young and enjoys music in his spare time.

Library:

Pyo- Pyo is a library for audio signal processing. We believe that this library may come in handy for the mixing of the songs and we would like to investigate this further.

Resources:

On the website for Pyo, there are guides and documentation for us to use. They offer an overview of the library and also a tutorial on how to use it. It also includes examples on the basics of Pyo, such as playing sound files, generating melodies etc., but we will have to figure out how to best utilize this library to build our program. We will also need to learn a bit on how to write programs for the Mindwave device, so that we can have the program take in the data as the user is listening to the music.

Timeline:

Week 1: Investigate, gather info on how to build our program.

Presentation: Have the program at least 75% done, try to have it done to use as a demo in class.

End: Our goal is to have made the perfect song/ songs from the data that we collect using the Mindwave device.