Eric Terui

Eterui

15-112 Term Project Proposal

My name is Eric Terui, and for my 15-112 term project, I propose an audio-recognition based game. I plan on using this pitch recognition to detect different notes that the user plays on an instrument (oboe in my case). The game would be a sidescroller with “lanes” or rows which the character can occupy. Each note would correspond to one of the eight lanes, with each lane being designated to a note in the C major scale. The player would use their instrument as a controller to dodge certain “bad” objects and hit other “good” objects by switching lanes. I will have different types of obstacle courses that would each make you play a different series of notes.

Additionally, I have done some research on different music based python libraries. Many of them have a dependency on NumPy arrays, so I will be incorporating that package. Additionally, I plan on using either the pyAudio or the Aubio module for pitch recognition.