CSCI - 4738-908

Khalid H. Adkins

Marco Rojas

Nicholas Stanford

Zaid AL Yasiri

12/05/2019

Data collecting prograss

Senior Design I – Semester Progress

1. Introduction

In this paper we will go over the data that we collected and the progress that we have made so far. We will be listing some of the findings and the achievements that we have done toward the final project that we will be submitting next semester (Senior Design II).

2. Problem Statement:

The goal of this project as assigned by Dr. Gethner; is to work on both music and visualization, the work we want to accomplish must be mostly focusing on the scientific aspect. And to do so we had start researching to better understanding the concept, the scientific vocabularies and also the techniques that we will be using to achieve what we are looking to do.

3. Research phase:

We started the research phase the second week of this semester with a good start as Dr. Gethner gave as the freedom to take the path that we want to accomplish this project, Khalid has worked on Unity and he knows how the graphics works, and Marco has a good background on music. We started looking into the concept of music theory and the connection between all the music parts, such as the tempo, the music rhythm, etc.

The next step was to determine how the music and visualization interact with each other. Also, we had to understand all how to put all the pieces in a way that the user will be able to use them easily and scientifically so the can

4. Results out of researches:

The results we got out of the researches that we have done is we can use different techniques to build the two pieces of the project (Music – visual) and make them work with each other. We have found so valuable sources that can explain each part of the project to make it clear how we can employ it to the benefit of the project. We ended mostly using Chuck and Unity to put the pieces together, this will get the music production and the graphic representation taken care of. It will also will make the two part be able to talk to each other and giving the user the friendly interface that can handle what they are seeking easily.

5. Conclusion:

After agreeing about most of the parts that we will use to build this project, we started working on the outcome of it, and we got some progress on both parts. We also were able to make both parts interact with each other (we still working on improvements as it is still the beta version). We agreed that we will have a timeline for the second part of the project, this timeline will set when will we give the finale results, also it will set the dates for the testing, tweaking and submitting the final project which will be set for the final presentation based on the approval's of Dr. Gethner.