To: Mrs. Alexandra Bello

From: Joshuan Jimenez

Date: June 30, 2019

Subject: Proposal for Project on Enhanced Audio Recognition

Hello Mrs. Alexandra Bello,

I am looking into starting a project to enhance audio recognition to create an application that allows people to find songs that they like without having to play the actual song. This is a common issue that affects people when they listen to a song on the radio, yet do not know who is singing it or what is the name of the song.

**Needs**

For this project to be undertaken, we would need to address what to focus on:

* Allows users to hum a melody
* Allow users to be asked questions about song and artist
* Allow users to hear clips of sounds and compare to desired song
* Tell user information about song that is being looked for

**Outline**

Based on these needs, I have devised an outline of what we would need to be able to meet them:

* Create or use an existing database full of songs
* Create an application with an interface that allows users to hum a melody
* Take user input if provided to then link to similar sound files in database
* Create a list of questions to narrow down search result
* Provide audio clips when necessary to user to narrow down possible choices
* Play audio clip after asking enough questions to see if the song is the right one
* Allow user to say if the result is the right song

**Proposed Plan**

This project will be undertaken by me and Randy Rivas, who is knowledgeable when it comes to music technology. We will meet over the next two weeks to plan and design the structure of the application. Then, we will begin working on the project for three months after planning to develop and test the program. After this time, we will have made a breakthrough in audio recognition.

**Limitations**

Due to the project having to rely on audio files and user input, it will take some time to adjust how to take the user input to match the audio files to the database. As a result, the project can potentially be longer because of this becoming a potential issue.

If you have any comments or questions concerning this project, please let me know.

Sincerely,

Joshuan Jimenez