

**FACULTY OF ENGINEERING AND APPLIED SCIENCE**

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| **SOFE 3490U - Software Project Management**  **Lab 2 Report**  **Music Hub**  **Thursday, February 7, 2019** |

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**MUSIC HUB**

INTRODUCTION:

We chose Music Hub as our topic because of our interest in music and how it can benefit the music industry. Music Hub would be very beneficial to artists and clients alike. For artists, it makes it very easy to publish your own work and not fall into a bad contract with labels/recording companies. You will also be able to manage your own music and the amount of money you make entirely depends on the amount of listens your music gets, so no one controls your income other than you. As for clients, it is beneficial because all the music you would want to listen to is in one application and it is extremely easy to find new music as well as listen to the music you have. Also, rather than buying albums or songs for each artist, you pay a monthly price and have access to as many albums and songs as you’d like. The main issue that Music Hub would have to tackle is to figure out how to prevent piracy as this would lead to artists not getting the money they deserve for the work they do. Another issue to tackle would be to have every single artist and song on the platform so that the clients would have access to every possible song they would want to listen to. Our goal for this project is to make music easily accessible to the public while also ensuring that the artist get their fair share for the work they do.

OBJECTIVES:

Our main objective would be to ensure that our users like the interface with respect to its ease of use and also the services that it provides. This is obviously an objective that will require multiple steps to complete. Therefore, we must set up many supplementary objectives to fulfill our main objective. One of the mini objectives, is to make the music hub user interface user friendly and easy to use. After creating a user friendly user interface, we can work on the communication the user wants to have with the services we provide. We want as much communication with the users as we can. Our platform will allow artists to have direct control of the music they want to release. One of the main objectives is to have several genres in our system. We will of course get approval from the artists that we plan on partnering up with. The artists will be paid in royalties. Another objective is to allow clients to listen to music with no advertisement. To acquire that feature we will ask clients to pay and obtain a premium account. We also want to have an explore page, which will feature music that is related to the music the client listens to. For example, if the client listens to hip hop artists, then the explore page will recommend other hip hop artists he may like. The explore page will also feature songs that are popular at the moment.

MEASURES OF SUCCESS:

We will give the users of the music hub the freedom to customize the interface to their liking. We will show related artists below the song that they are listening to and give them the option to follow their favorite artists so they can be notified when they release new albums. The system will have a database that will keep track of all these records that the artists we partner up with will achieve. We will also have a database that keeps track of the customer information. Information retrieved from the customer would be their name, membership, banking information, songs downloaded,etc. In order to achieve sustainable success, we have to make sure that the customers are satisfied first. Thus, we will allow the customer to give us feedback to make our product better. We will provide the user with a free membership. This will help us attract more customers to first try out our product. We will implement a monthly premium membership that will have give more perks to the user if they choose to apply. This could include ad-free service and listening to any downloaded songs offline. Lastly, we will make sure the costs for making this product does not exceed the money given to the artists.

INFRASTRUCTURE:

* Cloud server to store all artist information, such as;
  + All albums and songs by artist
  + All songs that the artist is involved in
    - Features, production team, etc
  + Short biography about artist background and musical history
  + News about artist
    - This will be taken from their social media updates
  + Upcoming tour dates and location for artist
  + Earnings
* Cloud server to store customer information, such as;
  + Personal information (name, etc)
  + Membership type (premium, or free)
  + Banking information (for monthly fee)
  + Songs and albums downloaded
  + Playlists created
  + Artists followed (to get updates about specific artists)
* Cloud server to store information about genres of music
  + All genres
  + Which songs and albums belong to each genre
* Cloud server to store album/song information, such as;
  + Times a song is listened to
  + Name of album or song
  + If it is a song, which album does it belong to
  + Which artist each song and album belong to
  + Which genre each song/album belongs to
* Some sort of encryption to ensure that piracy is prevented
  + Basically the encryption will not allow users to download the music to an outside source outside of the Music Hub application
* An AI to learn and understand what kind of music each specific user likes based on what they listen to most often. Then using this AI to suggest new songs to user