Software Project Management

Lab2

GitHub assignment

Music Hub

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**1. Why did we choose this topic?**

The topic we have chosen for our project is a Music Hub. Our platform will host artist’s music and allow them to generate revenue by hosting them on our platform. They will be able to make money from ads that will be hosted on the platform. There will also be a subscription option that allows listeners to avoid ads for a monthly subscription fee. Artists will also share in the subscription revenue based on the amount of attention they are able to draw.

We have chosen this topic because it solves the following problems to users and artists:

The problems that our platform is solving for our artists is that piracy and unfair contracts rob artists of a large chunk of revenue that they deserve. Music labels take a large cut of the revenue that is generated by the music that artists produce. This was a fair deal to artists in the past because record labels were able to reach audiences that artists could not on their own. They also did all of the distribution of the music such as the physical record sales. Now that we are in the digital age, artists are able to reach large audiences they could not in the past with minimal effort so they no longer have to depend on record labels and can become more independent.

Peer to peer file sharing such as torrents allow users to distribute and download copies of music records with each other. This robs artists of the revenue they deserve for their creation. With this platform, artists will be paid directly through ad revenue.

The problem that our platform solves for users is that they don't currently have ways of directly supporting the artists that they love. Our platform allows artists to get paid directly for their music, without a record label taking a cut of the revenue. Another problem is that users don't have a convenient way of discovering new music similar, similar to how they would when browsing records at a record store. Our platform allows users to browse artists by genre and even recommends artists based on what they have been listening to.

The benefits to artists using this platform is that they can gain revenue for their music that is not mostly taken by the record label. It allows artists to be more independent and have control of their music. This platform also allows artists with a smaller following to make revenue and a living by producing music.

The benefits to users is the convenience and availability of music. Also users will be able to browse music and discover new artists and genres, similar to the experience of going to a record store.

Our competitors:

Pirated music: (torrents, p2p)

The appeal of pirating music is that it is free and easily accessible. Users can search for and download albums from any artist they want. However this option does not offer the greatest availability. Users may not always be able to find a torrent for the album they are looking for, or they might not find one with enough peers connected to be able to download it immediately. Our competitive edge over the appeal of torrenting music is that users will be able to support the artists they love. Piracy robs artists of revenue and our platform allows artists to generate money through streams. Users will also have instant access to the music they desire, as it is streamed directly from our platform.

Physical Copies:

Purchasing physical media is how fans and supporters have been supporting artists for a long time which is a big appeal of this medium. However they are inconvenient as you have to go to a physical location to purchase them. Another appeal of this medium is the lossless quality that CDs can offer. With a subscription to our service, users will also be able to stream music files of lossless quality.

Digital downloads (iTunes):

Digital downloads allow fans to support artists by actually purchasing the music. However this option is often just as expensive as purchasing physical copies. Also a large chunk of the revenue still goes to the record label that the artist is signed to. Our platform allows artists to get paid directly for their listens. It also allows artists to go independent which will allow for artists that are not as popular to still be able to make a living producing art.

Digital subscription services

There are various digital music streaming services such as spotify, apple music, google play music that offer similar services. The services have contracts with major artists and record labels. We could compete with them by providing a cheaper subscription model and through attracting lesser known artists.

**2. Objectives**

A. Provide a well-operate music website.The priority is to design a music system for individuals so that searching, collecting, and sharing songs can benefit the users.

B. Website is totally free to upload or download the favorite songs, and is capable of relatively lots of users during operation.

C. Users could easily modify their personal information and save it into database securely.

D. Website is coded by HTML, JavaScript, MySQL and CSS, the document that illustrate how many objects and classes in PHP, which is traceable and easy to maintenance.

E. Users could upload the songs from local laptop or computer or from other users within same website.

F. The web platform would allow users to create their personal playlists and add music to their “favorite” list in their personal account, in order to review their collections easily.

**3.** **Measure of success**

A. Enable to use JavaScript and MySQL to build a music player, which makes the system flexible to run.

B. Use database to save personal information that submit to the website.

C. Be able to use CSS to style the entire system.

D. Use button (JavaScript function) to validate the information collected from user, and start playing, pausing and skip.

E. Provide real time menu from playlist (process bar) in the database (web server).

F. The maintenance team will check the system bi-weekly to eliminate the bugs and ensure that server can hold most users without crashing.

G. Setting contracts with various artists based on demand (measured through views).

**4. Infrastructure required**

* Cloud server to store the artists’ database
* Cloud server to store the users’ information
* Database to store user music collections and preferences
* Song sharing API
* Music playback API
* Music upload/download functionality
* Android/Windows/IOS compatibility