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**Software Engineering (CS301)**

Musistic

A social media platform for music lovers to connect and interact!

# Introduction:

The proposed social platform is aimed at music lovers, providing a platform for them to connect and interact with each other, play sound tracks in real-time, and access a wide range of features.

The platform will be connected to Spotify, allowing users to play music in real-time, and retrieve user profile details and sync it with the same.

The stakeholders of this project include the end-users of the application software, which are music lovers, and the business profile of the platform, which will generate revenue through advertisements, sponsored content, and premium subscriptions.

The existing music-based social platforms have limited features for user interactions and less personalized user experience.

**Project Scope:**

The proposed social platform is implemented keeping in mind the lack of opportunities for the music-loving community to exchange their views and ideas over a platform specially dedicated to the music community.

The proposed web-based social platform will be heavily dependent on the data provided by Spotify, including user profile information and music streaming capabilities with AI based features like recommendation systems, etc. to improve the user experience.

The primary target audience for this project is the young adults across the country who are a greater part of users on the music streaming platform, Spotify. The platform will be designed & developed by keeping them in mind.

**Methodology and tools used for feasibility study:**

The feasibility study was conducted using a combination of Brainstorming and Surveys.

* In the Brainstorming sessions, the team discussed the idea and potential features of the platform. Various suggestions were provided which improved the decision making process. As a result of this range of ideas, evaluation of options and better comparison was feasible .
* Surveys were conducted to understand needs of music lovers and their expectations from a music-based social platform. It helped the team to gain an insight about what possible aspects might be added and which aspects can be deemed redundant.

**Technical Feasibility Report:**

* The proposed social media platform will be developed as a user-friendly website that can handle a large number of concurrent users.
* The platform will be heavily dependent on the data provided by Spotify, including real-time music streaming capabilities and user profile details which will be retrieved by integrating the platform with Spotify’s API.
* Features like AI-powered recommendation system, voice bot, and playlist generator will be implemented to enhance user experience.
* After reviewing the various technologies, the plan is to use the MERN stack with NextJS as the React framework to build the social platform.

**Economic Feasibility Report:**

* The estimated cost of development for the platform is X dollars.
* The platform will generate revenue through advertisements, sponsored content, and premium subscriptions.
* The potential market size for music-based social platforms is large, with a potential for significant returns on investment.

**Operational Feasibility Report:**

* Users will find the platform to be seamless to use and navigate owing to its intuitive UI.
* The platform will include a dedicated customer service team to address consumer questions and problems.
* To ensure the platform runs well, upgrades and maintenance will be performed on a regular basis.

**Legal Feasibility Report:**

* The platform will be compliant with all relevant laws and regulations, including copyright laws and data protection laws.
* The platform's policies and terms of service will be clearly outlined and easily accessible to users.
* The platform will comply with Spotify's terms of service and developer agreement while using their API and data.

**Observations from the feasibility study:**

The proposed platform has a huge potential market size, as music lovers are always looking for better ways to connect and interact with each other.

The integration with Spotify's API and its features will provide a huge advantage to the platform.

There is a high demand for personalized features, such as AI-powered recommendation systems, voice bots, and playlist generators.

Thus, if successfully implemented, the user interface and ease of use would be key factors contributing to the success of the platform.

**Challenges and Assumptions considered for the project study:**

* High dependency on the Spotify API is a limiting factor for the success of the platform as the API will provide limited scalability, availability and security.
* Intense competition from already existing music-based social platforms might affect the platform’s success.
* The platform will be required to comply with Spotify's terms of service and developer agreement while using their API and data.

**Recommendation and Conclusion:**

After taking into account the major variables in the study that was conducted, such as financial, technical, marketing, etc. it is concluded that Musictic is a feasible and viable platform in the market today.

Therefore, it is recommended that the proposed music-based social media platform be pursued.

**Team Name:** "Musistic"

**Student names and roll numbers:**

Patankar Chinmayee Nilesh - 21BCS079

Patil Smruti Milind - 21BCS082

Pratik Prakash Pakhale - 21BCS085

Shewale Chinmay Vijay - 21BCS109

**Glossary/References:**

Spotify - A music streaming service

MERN - A stack for building web applications using MongoDB, ExpressJS, ReactJS, and NodeJS

NextJS - A framework for building server-rendered React applications.

AI - Artificial Intelligence

API - Application Programming Interface

UI - User Interface

UX - User Experience