**SYNOPSIS**

**Report on**

**Music Player App**

**by**

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**ABSTRACT**

This project endeavors to create a dynamic music streaming application focused on providing users with an immersive and personalized music listening experience. The application will offer features for music discovery, streaming, and playlist management. Integration with external data sources will enrich the content available to users. Through a seamless and intuitive interface, the project aims to enhance user engagement and satisfaction within the digital music landscape.

In this project, we embark on the creation of an innovative music streaming application geared towards delivering an enriched and personalized musical journey for users. Through an exploration of diverse musical genres and artists, users will immerse themselves in a seamless experience of discovery, streaming, and playlist curation. Leveraging external data sources, our application aims to broaden the horizons of musical exploration, offering a comprehensive library of tracks and albums. By prioritizing intuitive design and fluid functionality, we aspire to foster deep user engagement and satisfaction within the ever-evolving realm of digital music consumption.

**TABLE OF CONTENTS**

Page Number

1. Introduction --
2. Literature Review --
3. Project / Research Objective --
4. Project Flow/ Research Methodology --
5. Project / Research Outcome --
6. Proposed Time Duration --

References/ Bibliography --

**Introduction**

Today, everyone listens to music on their mobile devices; be it on the bus, while commuting to work, or while working out. However, the way people access their favourite songs has completely changed over the past few years. Thanks to streaming services such as Spotify, Pandora, Apple Music and others, listening to music is no longer about owning your favourite tracks on CD or buying them from an online store. Today you can stream virtually any song at any time just by signing up for one of these apps and connecting your social media accounts with them. If you’re a heavy music listener who likes to listen to different songs every day or someone who uses music as a way of relaxing after a long day at work, having a music player app can make your life much easier.

**Software Requirement**

* **Frontend Framework**: React.js

Employing React.js for building dynamic user interfaces and ensuring efficient rendering of components for an interactive user experience.

* **State Management**: Redux

Implementing Redux to centrally manage application state, facilitating predictable state updates and enabling seamless communication between React components.

* **CSS Framework**: Tailwind CSS

Utilizing Tailwind CSS for rapid UI development by applying pre-defined utility classes, allowing for quick prototyping and flexible styling options.

* **API Integration**: Rapid API

Integrating Rapid API to seamlessly access external data sources and services, enabling functionalities such as music metadata retrieval and content enrichment.

* **Development Tools**: Visual Studio Code

Leveraging Visual Studio Code as the primary development environment, providing features for code editing, debugging, and version control integration, enhancing developer productivity and collaboration.

**Hardware Requirement**

* **Computer**: A standard laptop or desktop computer with at least:

Processor: Dual-core processor or higher.

RAM: 4GB of RAM or more for smooth development experience.

* **Operating System**:

Compatible with Windows, macOS, or Linux.

* **Storage**:

Adequate storage space for storing project files and dependencies. A minimum of 50GB of free disk space is recommended.

* **Internet Connectivity**:

Stable internet connection for accessing online resources, documentation, and API services during development.

**Objective**

The objective of this music app project is to develop a versatil application that serves as a comprehensive platform for music enthusiasts. The app aims to offer seamless access to a vast library of songs, albums, and playlists, allowing users to discover, stream, and organize their favorite music effortlessly. Key objectives include implementing advanced recommendation algorithms to personalize music recommendations, creating an intuitive user interface for easy navigation and interaction, and integrating social features to foster community engagement and sharing among users. Furthermore, the project seeks to enhance user satisfaction by incorporating offline listening capabilities, ensuring uninterrupted access to music even without an internet connection. Overall, the goal is to deliver a compelling and user-centric music streaming experience that meets the diverse preferences and expectations of the target audience.

**Literature Review**

[1] The paper by Matthew E.P.Davies focuses only on the AutoMashUpper, which is used for multi-song mashups. He performed

mashups based on the measure the user can define their own values to the tempo as well as they can also add or remove songs

from the mash-ups.

[2] Facial expression is the most effective way of expressing emotion in humans.The paper by Sushmita G.Kamble uses PCA

algorithm and Euclidean distance classifier to segregate expressions and the music will be played based on the expression

captured by the inbuilt camera.Also the use of the camera reduces the designing cost of the system.

[3] This paper is used to implement a karaoke machine which removes the voice of the artist who sang the song.It uses “Out of

phase” stereo method for removing the original voice.If the user wants to sing a song along with the music,he can use

karaoke.Also the user can record the song that he sings. Nirmal R Bhalani uses MATLAB software to implement the above

model

[4] Music is a form of entertainment that everyone loves to hear. But categorizing music is a difficult task that everyone faces.

Some of the methods use speech signal to classify songs which causes high computation time and cost. The paper by Karthik

replaces speech signal with human emotions with minimal time computation. The authors used Audio Information

Recognition(AIR) and Music Information Retrieval(MIR)to implement the above model.

**REFERENCES/ Bibliography**

1. Seonggeun Ryu, Kyung-Joon Park, and Ji-Woong Choi, “Enhanced fast handover for network mobility in intelligent transportation systems”, IEEE Transactions on Vehicular Technology, Vol. 63, No. 1, pp. 357-371, January 2014, DoI: 10.1109/TVT.2013.2272059.
2. S.Kong, W. Lee, Y. H. Han, M. K. Shin, H. You, “Mobility management for all-IP mobile networks: Mobile IPv6 vs. Proxy Mobile IPv6, IEEE Wireless Communications Vol. 15, Issue 2, pp. 36–45, April 2008, DoI: 10.1109/MWC.2008.4492976