Music Streamer

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Abstract

Streaming of on-demand music has increased remarkably, driving digital growth to compensate for the decrease in downloads. In addition, the Internet architecture and implementations of audio streaming services have generated tremendous donations from technology and innovation. More recently, there has been an increase in paid music streaming services like Apple Music, MelOn, YouTube Music, Spotify, and SoundCloud. The rapid birth of these new audio streaming services was focused not only on smartphone or web devices, but also on the market penetration strategy of companies inspired to invest in the music industry from different sectors. This comparative study of major music streaming services shows that on-demand music streaming services have a substantial effect on the record's global growth. Furthermore, the report highlights the evolution of Internet technology, wireless access, and competitive and diverse markets as the driving factors behind the rapid growth of on-demand music streaming services. This research report offers insights into the current state of the music industry and its future direction from a realistic point of view that can be useful for potential entrants, current entrants.

Keywords— Global Music Industry, On-Demand Music Streaming Services, Internet Architecture, Online Applications

Introduction

The music industry has been striving historically, particularly since the 1990s, towards an ordinary business structure that provided a variety of services under one roof. Information technology was, and has continued to play, an important part in the development of the service offerings of the music industry. This industry is not alien to the integration of modern Internet architecture and a new internet architecture from development to delivery. .

Technologies excel by creativity in which technologists bring a step closer every day to the full potential of quantum computing. Scientific research teams around the world aim to discover and grow the next big thing. If it's a new smartphone or a new supercomputer, the power of the Internet and its influence on the world economy in general and on—may not be overlooked..

Wireless networking, fuelled by 5G deployments, is an important growth facilitator that leaves the music industry at yet another crucial moment. For example, in South Korea, where Internet speed is the fastest in the world through its 5G networks, Korean netizens are

To spend four hours and forty-seven minutes online every day [1]. Without a question, the future lies in wireless networking and the implementation of innovations such as 5G technology that make it possible to communicate and link seamlessly with billions of devices of almost any kind. Every part of our everyday life, including how we consume music, has been influenced by this implementation.

On the other hand, the music industry, along with the rapid growth of Internet architecture and applications, has seen steady change and development. In addition to innovation and

music collaborations, the development of the music industry has also been responsible for partnerships between musicians and record labels around the world. More recently, these alliances have taken various forms, such as Moreover, the rise of new markets in recent years has changed the model of economic development in the recorded music industry. More recently, the area of Asia has been a significant contributor to the development of the global music industry, with new emerging markets such as South Korea and China. In particular, the South Korean music industry is evidence of a worldwide outreach and impact.

Literature Survey :

Paper 1 : **Interactive Music Visualization for Music Player using Processing**
Author : Yunli Lee, Revina Nur Fathia
Description: Hearing and vision are closely tied in human sensitivity where visual representations and interaction techniques are widely used to design and develop various type of visualization including music visualization. Visual presentations of music such as traditional music notation, graphical scores or musical inspired artwork have offered this temporary medium a more lasting from a through which to study, preserve and recreate it. Today, many popular media players support music visualization such as Windows Media Player and Apple iTunes. Most of the visualizations are colours, shapes, and patterns animated imagery that form a generative and/or abstract based representation [1-2] that move to the rhythm of a song which helps to reinforce in human cognition.

Paper 2 : Music Matters: An empirical study on the effects of adaptive music on experienced and perceived player affect
Author : Cale Plut School of Interactive Arts and Technology Simon Fraser University Surrey, British Columbia cplut@sfu.ca

Description: Music is an integral part of video games, and almost every video game has music [1]. Most music for games is linear, and is not affected by the actions of the game [2]. Adaptive music is music that changes based on the state of the game, and has many theoretical benefits [3]. In film, music that more closely aligns with the actions of a movie significantly increase the viewer's emotional

response and enjoyment of the media [4]. This phenomenon is previously assumed to exist for video game music as well [3].

Paper 3 : An Intelligent Music Player based on Emotion Recognition
Author : Ramya Ramanathan∗, Radha Kumaran†, Ram Rohan R‡, Rajat Gupta§ and Vishalakshi Prabhu
Description : Emotion recognition is an aspect of artificial intelligence that is becoming increasingly relevant, for the purpose of automating various processes that are relatively more tedious to perform manually. Identifying a person's state of mind based on emotions they display is an important part of making efficient automated decisions best suited to the person in
question, for a variety of applications. One important aspect of this would be in the entertainment field, for the purpose of providing recommendations to a person based on their current mood. We study this from the perspective of providing a person with customised music recommendations based on their state of mind, as detected from their facial expressions.

Paper 4 : Hand Gesture Based Music Player Control in Vehicle
Author : Omkar Vaidya *Dept. of E&TC Engineering Sandip Institute of Technology & Research Centre (Savitribai Phule Pune University)* Nashik, India omcar.vaidya@gmail.com

Description : According to World Health Organization (WHO), road accident is one of the major cause of mortality rate in India and The Ministry of Road Transport and Highways, Government of India has given the same confirmation. There are many factors to distract drivers while driving a vehicle such as handling mobile phones, fast driving, and abrupt braking and distract attention while handling dashboard music player system. Nowadays modern automobile has provision of all dashboard functionality on drivers steering. But such vehicles are very expensive and still have no gauntness that accident will not happen. The reason is many such controls are not easy to operate for drivers continuously looking at the road while driving.

Paper 5 : Influencing the Behavioral Responses of Players in an Interactive Narrative Game through Music and Arousal Congruency

Author : Logan Parmeter Department of Computer Science Baylor University Waco, Texas Logan Parmeter@baylor.edu

Description : With the growing popularity of video games in today's media, researchers continue to find new avenues of exploration into players' thought processes during gameplay. Understanding why players make the choices that they do in video game can not only increase a potential game's success on the competitive video game market, but can also aid game developers in creating games that increase player agency. Murray defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices" [1] . While agency is used to describe the sensation individuals feel while performing actions and interacting with their environment, this definition of agency has been applied by many researchers when studying player choice in video games. Murray's definition of agency is also adopted in this study in the interest of motivating a high sense of player agency while also influencing the choices that players make.

Proposed System
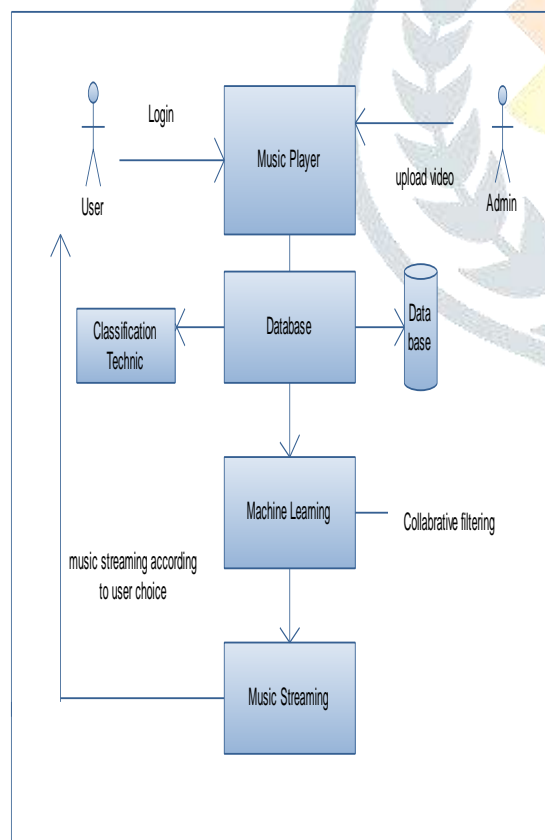
The online digital media player is implemented in the suggested framework.

Playing online music based on your choice of

And a favourite singer of yours. This media player does not need all of the music in the device to be processed. We just have to open up,

Depending on your choice, device and play music .

The proposed framework uses the machine learning algorithm for the music recommendation system and the classification technique. for music recommendation for user.

Advantages of Proposed System

1. Save memory of user
2. Reduce storage cost of user
3. Free of cost music player application

Disadvantages of Proposed System

1. System will slow due increase load on server some time.
2. It require good internet speed.

METHODOLOGY:

A. Extraction of audio

Features and plotting on graphOne of the components of the framework that has been introduced is one that retrieves music from a system's local storage and processes it using various Python packages for Music Information Retrieval The process of classifying music starts with downloading all of the music files that are locally accessible on the device through the music database.

B. Music Grouping

All of the songs in the collection's valence and arousal values (on a scale of 0 to 1) can then be plotted on Thayers' arousal-valence graph. This graph, along with all of the data points on it, is subjected to k-means clustering in order to produce music clusters based on emotion. Each song in the collection can be categorised using emotion

descriptors. Based on the user's current mood, these descriptors are used to pick music from the set to be played.

Conclusion

The increase of pay streaming services firms, such as Apple Music in 2018, MelOn in 2019, and YouTube Music in 2018, has been responsible for rising revenue from on-demand music streaming services in the last four years.

Based on our study, we found that on-demand streaming services have a major effect on the growth of the global recorded music industry and on the growth of the global music industry.

The research underlines the driving factors behind the exponential growth of streaming platforms for on-demand music. The development of the Audio Streaming Realm is strongly driven by the progress of Internet architecture and application technologies.

Moreover, with wireless networking and the advent of technologies such as 5G technology, billions of devices can now be reached.

Unlike Spotify, which was created by a music streaming company, the rapid birth of new music streaming services was a market expansion strategy for businesses from diverse sectors that were inspired to invest in the $20 billion music industry. With the participation of new global technology moguls, such as Facebook, we expect a rise in the number of music streaming services.

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