

Music Streaming Mobile Application based-on Cloud

Introduction

Remember those times when the only source of music was CD collections, and if you wanted to listen to something new, you needed to buy a new CD or exchange it with your classmates? But times had changed. The emergence of smartphones and the ensuing digitalization had greatly affected the music industry. Now, you could listen to his favourite tracks on his phone at any time and in any place without having to buy CDs.

But you are frustrated with phone was unable to store a huge music collection. This is the right choice for that. This application is all about streaming music of different type, language, albums, artists, genres. Also application provides different advance features like you can download songs for playing offline, search songs/track/album/artist and genres that u want, different bitrates (96kbps, 160kbps, 320kbps) and the main feature was **Recommendations**.

This Application uses **Cloud technology** for Data storing and **MongoDB** as database management tool.

Objective

The main objective of the Project on Music streaming application is to play music seamlessly and get all type of music well categories. In this application music are well categories in Language, Album, Artists, Genres, and Track. Also this application provides features like user can download songs, create your own playlist and like your songs. In this application user can search songs not only search the songs also search playlist, artists and albums for better reach.

Also the main objective of this application was better reach to people. User with all type of internet connection can play the songs with smoothly for that purpose we provide songs of different bits rates with that user can play songs with poor internet connection.

Methodology

Agile:

Totally depends on an agile methodology which is iterative, an incremental method of managing the design and build activities that aim to provide new product or service development in a highly flexible and interactive manner.

What is Agile Methodology?

AGILE methodology is a practice that promotes continuous iteration of development and testing throughout the software development life cycle of the project.

Both development and testing activities are concurrent unlike the Waterfall model

The general principles of the Agile Method

- Satisfy the client and continually develop software.
- Changing requirements are embraced for the client's competitive advantage.
- Concentrate on delivering working software frequently. Delivery preference will be placed on the shortest possible time span.
- Developers and business people must work together throughout the entire project.
- Projects must be based on people who are motivated. Give them the proper environment and the support that they need. They should be trusted to get their jobs done.
- Face-to-face communication is the best way to transfer information to and from a team.
- Working software is the primary measure of progress.
- Agile processes will promote development that is sustainable. Sponsors, developers, and users should be able to maintain an indefinite, constant pace.
- Constant attention to technical excellence and good design will enhance agility.
- Simplicity is considered to be the art of maximizing the work that is not done, and it is essential.
- Self-organized teams usually create the best designs.
- At regular intervals, the team will reflect on how to become more effective, and they will tune and adjust their behaviour accordingly.

Agile software development emphasizes on four core values.

1. Individual and team interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

Requirement Specification

Minimum Hardware Requirement:

- **RAM: 4 GB or Higher**
- **Storage (HDD): 500 GB or Higher**
- **Processor: Intel i3 6th Gen or Later**

Minimum Software Requirement:

- **Operating System: Windows 10 or any**
- **DATABASE: MongoDB**
- **SOFTWARES:**
 - **ANDROID STUDIO: VERSION 4.1.0.0**
 - **VISUAL STUDIO CODE EDITOR**
 - **LANGUAGE: React-Native, Node.js**

Reference

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- <https://theappsolutions.com/blog/development/music-app-development/>
- <https://yalantis.com/blog/music-apps-market-experience-music-apps-development/>