Rhythmic Tunes: Your Melodic Companion

Project Title: Rhythmic Tunes: Your Melodic Companion

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Rhythmic Tunes: Your Melodic Companion

Category: Frontend development with DBA by MongoDB

Skills Required:

ReactJS

Project Description:

Welcome to the future of musical indulgence – an unparalleled audio experience awaits you with our cutting-edge Music Streaming Application, meticulously crafted using the power of React.js. Seamlessly blending innovation with user-centric design, our application is set to redefine how you interact with and immerse yourself in the world of music.

Designed for the modern music enthusiast, our React-based Music Streaming Application offers a harmonious fusion of robust functionality and an intuitive user interface. From discovering the latest chart-toppers to rediscovering timeless classics, our platform ensures an all-encompassing musical journey tailored to your unique taste.

The heart of our Music Streaming Application lies in React, a dynamic and featurerich JavaScript library. Immerse yourself in a visually stunning and interactive interface, where every click, scroll, and playlist creation feels like a musical revelation. Whether you're on a desktop, tablet, or smartphone, our responsive design ensures a consistent and enjoyable experience across all devices.

Say goodbye to the limitations of traditional music listening and welcome a world of possibilities with our React-based Music Streaming Application. Join us on this journey as we transform the way you connect with and savor the universal language of music. Get ready to elevate your auditory experience – it's time to press play on a new era of music streaming.

Scenario-Based Intro:-

Imagine stepping onto a bustling city street, the sounds of cars honking, people chatting, and street performers playing in the background. You're on your way to work, and you need a little something to elevate your mood. You pull out your phone and open your favorite music streaming app, "RythimicTunes."

With just a few taps, you're transported to a world of music tailored to your tastes. As you walk, the app's smart playlist kicks in, starting with an upbeat pop song that

gets your feet tapping. As you board the train, the music shifts to a relaxing indie track, perfectly matching your need to unwind during the commute.

Target Audience:-

Music Streaming is designed for a diverse audience, including:

Music Enthusiasts: People passionate about enjoying and listening Music Through out there free time to relax themselves.

Project Objective

The primary goal of Music Streaming is to provide a seamless platform for music enthusiasts, enjoying, and sharing diverse musical experiences. Our objectives include:

User-Friendly Interface: Develop an intuitive interface that allows users to effortlessly explore, save, and share their favorite music tracks and playlists.

Comprehensive Music Streaming: Provide robust features for organizing and managing music content, including advanced search options for easy discovery.

Modern Tech Stack: Harness cutting-edge web development technologies, such as React.js, to ensure an efficient and enjoyable user experience while navigating and interacting with the music streaming application.

PRE-REQUISITES

Here are the key prerequisites for developing a frontend application using React.js:

- Node.js and npm: Node.js is a powerful JavaScript runtime environment that allows you
 to run JavaScript code on the local environment. It provides a scalable and efficient
 platform for building network applications.
 - Install Node.js and npm on your development machine, as they are required to run JavaScript on the server-side.
 - Download: https://nodejs.org/en/download/
 - o Installation instructions: https://nodejs.org/en/download/package-manager/
- React.js: React.js is a popular JavaScript library for building user interfaces. It enables
 developers to create interactive and reusable UI components, making it easier to build
 dynamic and responsive web applications.

Install React.js, a JavaScript library for building user interfaces.

Create a new React app:

npx create-react-app my-react-app

Replace my-react-app with your preferred project name.

· Navigate to the project directory:

cd my-react-app

· Running the React App:

With the React app created, you can now start the development server and see your React application in action.

Start the development server:

npm start

This command launches the development server, and you can access your React app at http://localhost:3000 in your web browser.

 HTML, CSS, and JavaScript: Basic knowledge of HTML for creating the structure of your app, CSS for styling, and JavaScript for client-side interactivity is essential.

- Version Control: Use Git for version control, enabling collaboration and tracking changes throughout the development process. Platforms like GitHub or Bitbucket can host your repository.
 - Git: Download and installation instructions can be found at: https://git-scm.com/downloads
- Development Environment: Choose a code editor or Integrated Development Environment (IDE) that suits your preferences, such as Visual Studio Code, Sublime Text, or WebStorm.
 - Visual Studio Code: Download from https://code.visualstudio.com/download
 - Sublime Text: Download from https://www.sublimetext.com/download
 - o WebStorm: Download from https://www.jetbrains.com/webstorm/download

Follow below steps:

- Install Dependencies:
 - Navigate into the cloned repository directory and install libraries:

cd tunes

npm install

- Start the Development Server:
 - o To start the development server, execute the following command:

npm start

- Access the App: Open your web browser and navigate to http://localhost:3000.
- You should see the rythamic tunes app's homepage, indicating that the installation and setup were successful.

You have successfully installed and set up the application on your local machine. You can now proceed with further customization, development, and testing as needed.

Project structure

The project structure may vary depending on the specific library, framework, programming language, or development approach used. It's essential to organize the files and directories in a logical and consistent manner to improve code maintainability and collaboration among developers.

app/app.component.css, src/app/app.component: These files are part of the main AppComponent, which serves as the root component for the React app. The component handles the overall layout and includes the router outlet for loading different components based on the current route.

MUSIC-PLAYER(FRONTEND) > db > node_modules > public ∨ src > assets > Components # App.css App.jsx # index.css 🗱 main.jsx eslintrc.cjs .gitignore index.html {} package-lock.json {} package.json README.md JS vite.config.js

Project Flow

Demo Video

: https://drive.google.com/file/d/1zZuq62lyYNV k5uu0SFjoWa35UgQ4LA9/view?usp=drive link

Project Reference

: https://drive.google.com/drive/folders/1fSBjgZ_ICEDXYrKug1GuNYLAO1FAOLzX?usp=sharing

Project setup and configuration

Duration: 2 Hrs

Skill Tags:

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- · 1. Install required tools and software:
 - Installation of required tools:
 - 2. Open the project folder to install necessary tools In this project, we use:
 - React Js
 - React Router Dom
 - React Icons
 - Bootstrap/tailwind css
 - Axios
 - · For further reference, use the following resources
 - https://react.dev/learn/installation
 - https://react-bootstrap-v4.netlify.app/gettingstarted/introduction/
 - https://axios-http.com/docs/intro
 - https://reactrouter.com/en/main/start/tutorial

Project Development

Duration: 8 Hrs

Skill Tags:

- 1. Setup React Application:
- Create React application.
- · Configure Routing.
- Install required libraries. Setting Up Routes:-

Project Implementation & Execution

Duration: 1 Hrs

Skill Tags:

After completing the code, run the react application by using the command "npm start" or "npm run dev" if you are using vite.js

And the Open new Terminal type this command "json-server --watch ./db/db.json" to start the json server too.

After that launch the Rythimic Tunes.

Here are some of the screenshots of the application.

Hero components







