Project Documentation

Rhythmic Tunes: Your melodic companion

1. Introduction

- ➢ **Project Title:** Rhythmic Tunes: Your melodic companion
- ➢ **Team ID:** NM2025TMID31671
- ➢ **Team Leader:**
  Name: P.Abina
  Mail id: abiruthra555@gmail.com
- ➢ **Team Members:**
  - **Name:** S.Arivumathi
    Mail id: arivumathi160507@gmail.com
  - **Name:** K.Ragavi
    Mail id: ragavikannaiah26@gmail.com
  - **Name:** S.Kanisha
    Mail id: skanisha162@gmail.com

2. Project Overview

- **Purpose:** 'Rhythmic Tunes' is a music-based web application. The purpose is to provide users with an easy platform to listen ,learn ,and enjoy music. It helps to work together in real-world applications.

- **Features:**
  - ✓ Easy-to-use Interface
  - ✓ User-friendly Interface
  - ✓ Responsive Design
  - ✓ Database Support

3. Architecture

- **Frontend:** React.js with Bootstrap and Material UI

4. Setup Instructions
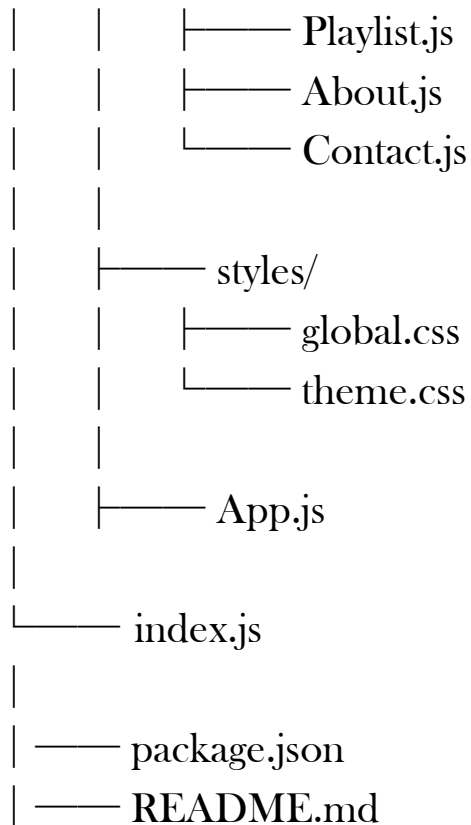
Prerequisites:
- ✓ Node.js
- ✓ MongoDB
- ✓ Git
- ✓ React.js
- ✓ Express.js-Mongoose-Visual Studio Code

- **Installation Steps:**

  - ✓ **Install software:** Node.js ,Python/java ,MySQL/MongoDb.
  - ✓ **Download project:** Clone from GitHub or extract ZIP.
  - ✓ **Frontend setup:** Open folder → run npm install → npm start.
  - ✓ **Backend setup:** Open backend folder → install requirements → run server
  - ✓ **Database setup:** Create database → import file → update config.
  - ✓ **Run project:** Start backend ,then frontend → open in browser http://localhost:3000.

5. Folder Structure:

```
rhythmic-tunes/
 | —— public/
 |      ├—— index.html
 |      ├—— favicon.ico
 |      └—— assets/
 |           ├—— images/
 |           └—— music/
 |
 | —— src/
 |      ├—— components/
 |      |      ├—— Navbar.js
 |      |      ├—— Footer.js
 |      |      ├—— SongCard.js
 |      |      └—— MusicPlayer.js
 |      |
 |      ├—— pages/
 |      |      ├—— Home.js
```

```
|       |       ├────── Playlist.js
|       |       ├────── About.js
|       |       └────── Contact.js
|       |
|       ├────── styles/
|       |       ├────── global.css
|       |       └────── theme.css
|       |
|       ├────── App.js
|
└────── index.js
|
| ── package.json
| ── README.md
```

6. Running the Application

- ➢ **Start the Database**
  - Open MYSQL/MongoDB and make sure the database is running.
- ➢ **Run the Backend**
  - Go to the backend folder.
  - Run the server (example: python manage.py runserver or npm start.)
- ➢ **Run the frontend**
  - Go to the frontend folder.
  - Run:
    npm start
- ➢ **Open the Application**
  - Open your browser and go to:
    http://localhost:3000

7. API Documentation

User
  - ✓ /api/user/register

✓ /api/user/login

Projects

✓ /api/projects/create
✓ /api/projects/:id
✓ Applications: /api/apply

Chats

✓ /api/chat/send
✓ /api/chat/:userId

8. Authentication
✓ JWT-based authentification for secure login
✓ Middleware protects private routes

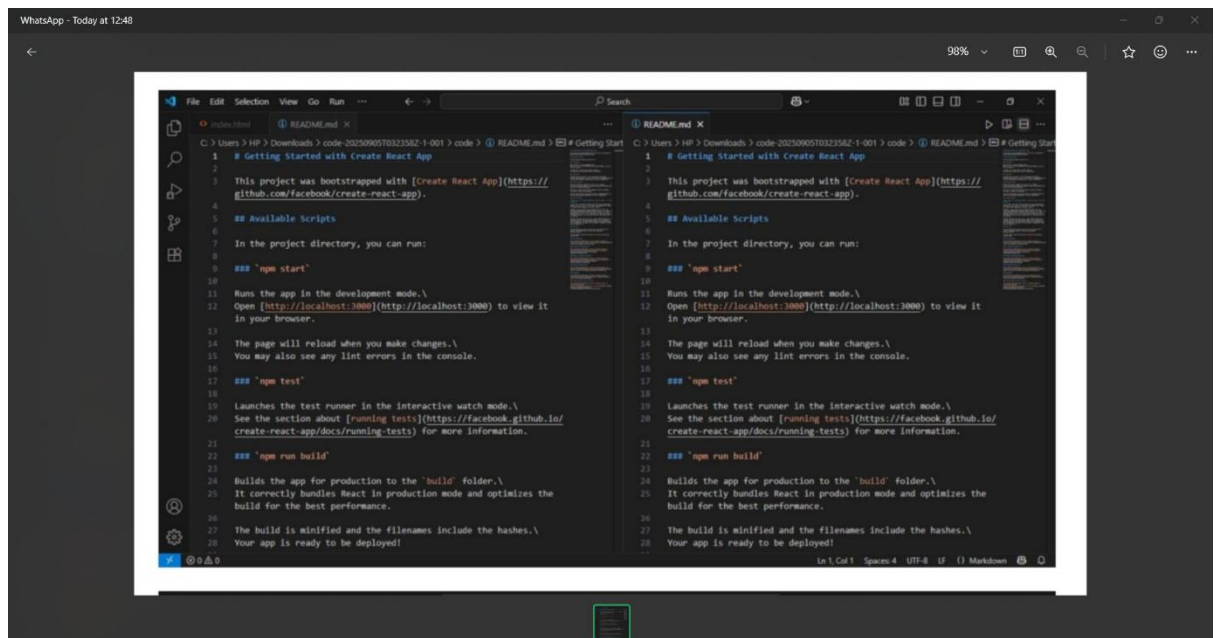## 9. User Interface
✓ Landing Page
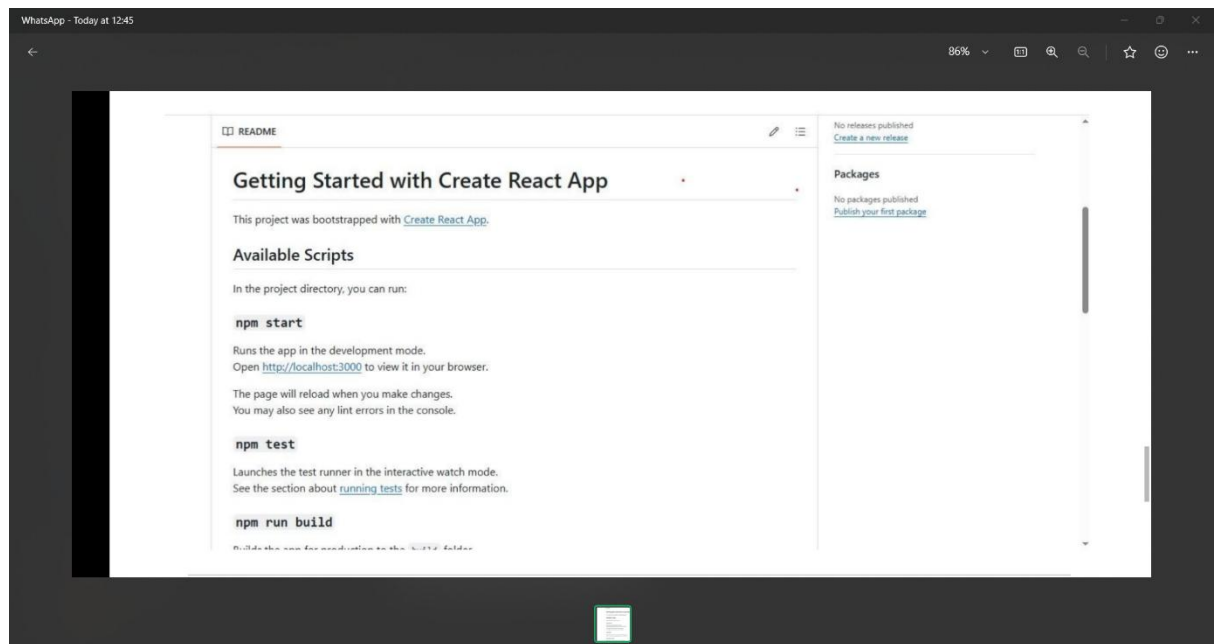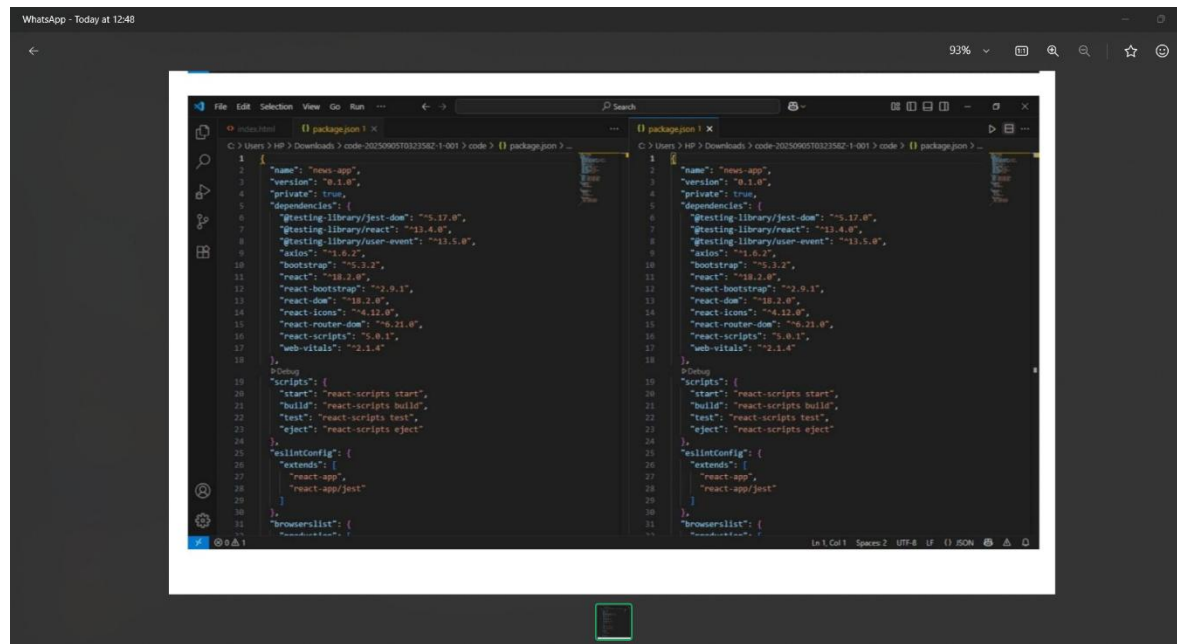✓ Freelancer Dashboard
✓ Admin Panel
✓ Project Details Page

10. Testing
✓ Manual testing during milestones
✓ Tools: Postman ,Chrome Dev Tools

11. Screenshots

12. Known issues

- ✓ API Rate Limit
- ✓ Server Problem
- ✓ Navigation Glitches

13. Future Enhancements

- ✓ Analytics Dashboard
- ✓ Search functionality
- ✓ User Authentication