

Project Documentation

Project Title: Rhythmic Tunes Melodic Companion

1. Introduction

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Team ID: NM2025TMID34852

Team Size: 4

Team Leader: SHAWN SHIRPHY P (24ucs556@avasctnj.edu.in)

Team Member: SAMUVEL B (24ucs551@avasctnj.edu.in)

Team Member: SABARISHWARAN S (24ucs548@avasctnj.edu.in)

Team Member: PRAVEEN KUMAR V (24ucs539@avasctnj.edu.in)

2. Project Overview

Purpose:

This project connects clients and freelancers through project postings, bidding, and real-time communication.

Features:

Project posting and bidding

Secure chat system

Feedback and review system

Admin control panel

3. Architecture

Frontend: ReactJS with Bootstrap and Material UI

Backend: Node.js & Express.js managing server logic and API endpoints

Database: MongoDB for user data, project information, applications, and chat messages

4. Setup Instructions

Prerequisites:

Node.js

MongoDB

Git

React.js

Express.js

Mongoos

Visual Studio Code

Installation Steps:

Clone the repository

```
git clone <repository-url>
```

Install client dependencies

```
cd client
```

```
npm install
```

Install server dependencies

```
cd server
```

```
npm install
```

5. Folder Structure

SB-Works/

```
|
|
| └─ client/      # React frontend
|   |
|   | └─ components/
|   | └─ pages/
|   |
|   | └─ server/   # Node.js backend
|   |   |
|   |   | └─ routes/
|   |   | └─ models/
|   |   | └─ controllers/
```

6. *Running the Application*

Frontend:

```
cd client
npm start
```

Backend:

```
cd server
npm start
```

Access: Visit <http://localhost:3000>

7. *API Documentation*

User:

/api/user/register

/api/user/login

Projects:

/api/projects/create

/api/projects/:id

Chats:

/api/chat/send

/api/chat/:userId

8. Authentication

JWT-based authentication 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 or Demo

12. Known Issues

13. Future Enhancements