

Project Documentation

1. Introduction

Project Title: Fitflex

Team ID

Team Leader: M.Deepak

bcacdeepak@gmail.com

Team Members:

S. Chandru

bcachandru@gmail.com

N. Akhil Varnan

bcacakhilvarnan@gmail.com

Jaya Krishnan

bcacjayakrishnan@gmail.com

2. Project Overview

Purpose:  FitFlex

1. Introduction

FitFlex is a modern fitness and wellness platform designed to help users track workouts, log nutrition, and monitor their progress toward health goals. Whether you are a beginner or a professional athlete, FitFlex adapts to your needs with personalized plans and insights.

Target Audience: Fitness enthusiasts, trainers, and anyone looking to improve health.

Admin control panel

3.Architecture

Frontend: React.js with Bootstrap and Material UI

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

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

4.Setup Instructions

Prerequisites:

Node.js

MongoDB

Git

React.js

Express.js - Mongoose- Visual Studio Code

Installation Steps:

Clone the repository git clone

Install client dependencies cd

client npm install

Install server dependencies cd

../server npm install

5.

Folder Structure

SB-Works/

|-- client/

React frontend

|__ components/

L__ pages/

Node.js backend

server/

```
|__routes/  
  |__models/  
    |__controllers/
```

6. Running the Application

Frontend:

```
cd.\code\
```

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 • Applications: /api/apply
```

Chats:

```
/api/chat/send
```

```
/api/chat/:userId
```

8. Authentication

JWT-based authentication for secure login

Middleware protects private routes

9. User Interface

Homepage

Fitflex details page

Searching Space

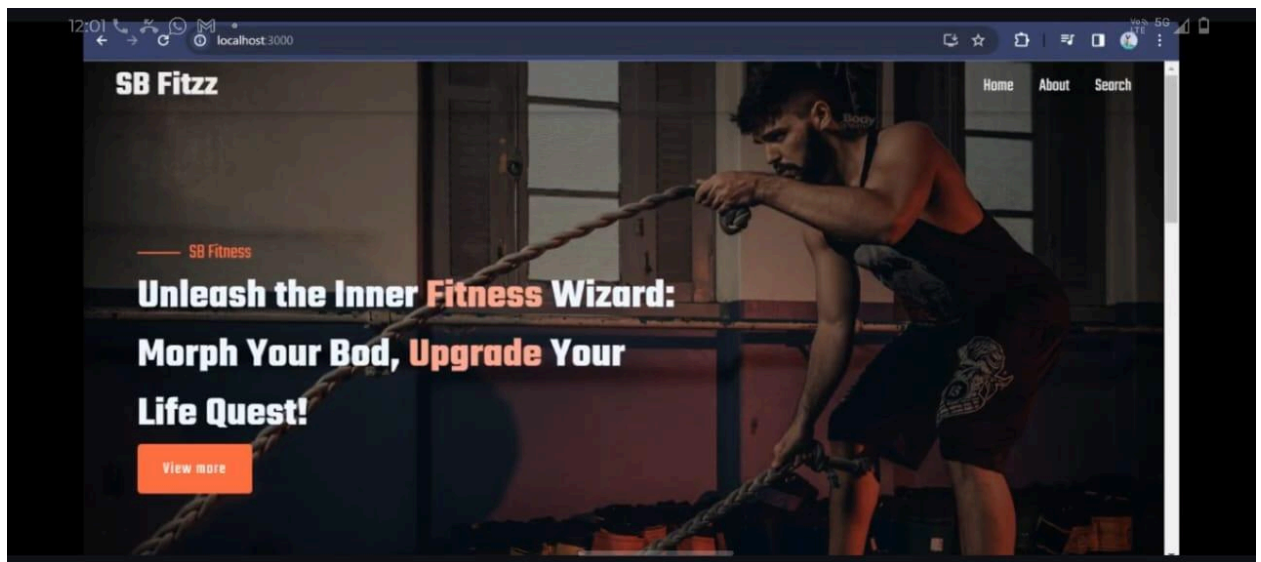
Fitness details

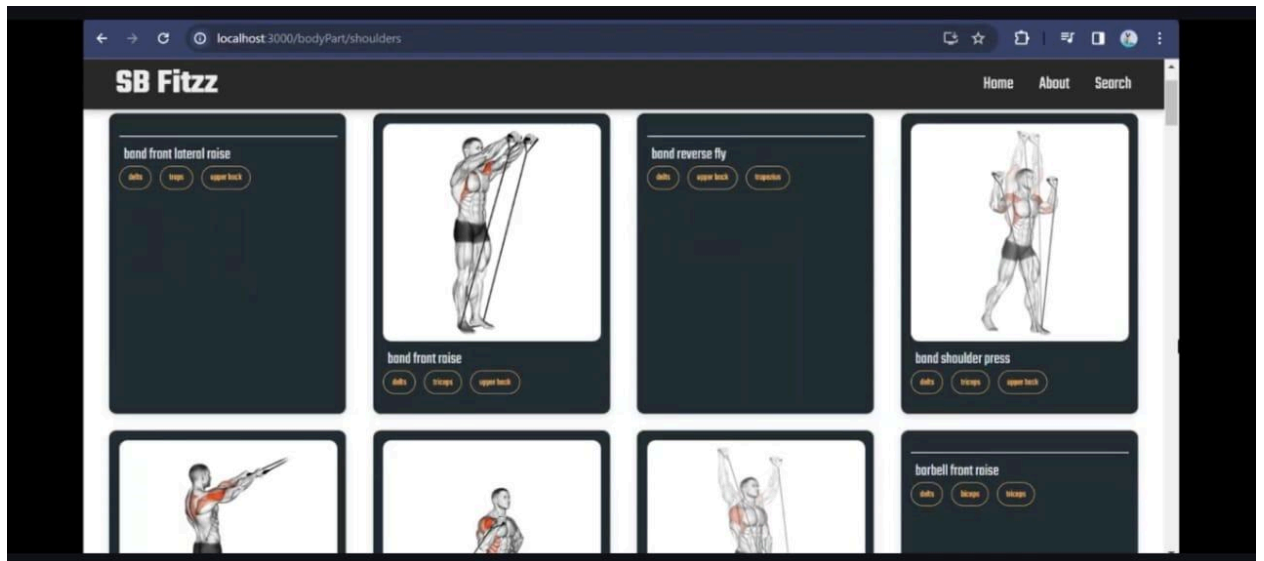
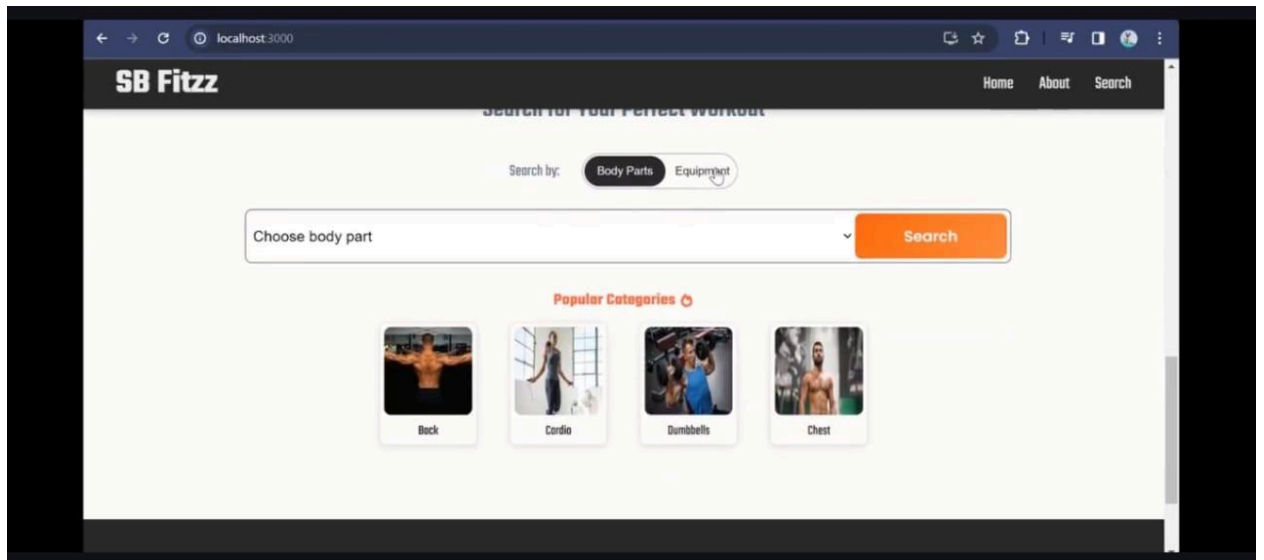
10. Testing

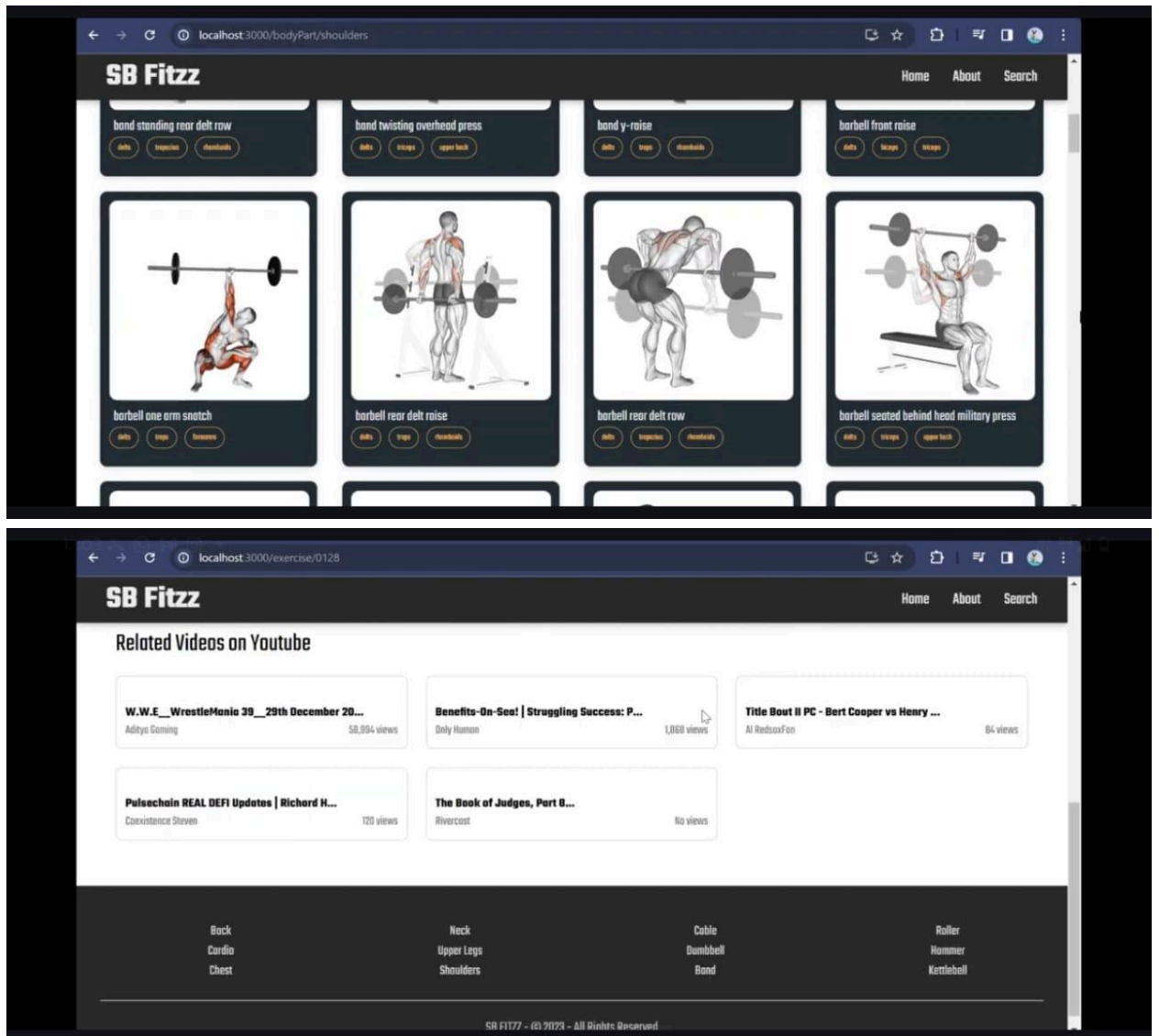
Manual testing during milestones

Tools: react.js, visualcode studio.

11. Screenshots or Demo







12. future Enhancements

We Should Add more Fitness Exercises in our App