

# PROJECT DOCUMENTATION

## FITFLEX

### 1. INTRODUCTION

- **Project Title:** Fitflex
- **Team ID:** NM2025TMID37028
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### 2. PROJECT OVERVIEW

- **Purpose:**

Fitflex is a fitness and wellness platform that helps users track workouts, manage diet plans, and connect with trainers through a seamless and interactive interface.

- **Features:**
- Workouts tracking and progress monitoring.
- Personalized diet recommendations.
- Trainer-client chat system.
- Goal setting and achievement tracker.
- Admin control panel.

### 3.ARCHITECTURE

- **Frontend:** React.js with Bootstrap and Material UI
- **Backend:** Node and Express for server logic and API endpoints
- **Database:** MongoDB to store user profiles, workout data, diet plans, and chat history

### 4.SETUP INSTRUCTIONS

- **Prerequisites:**

- Node.js
- MongoDB
- **Tools:**
- Git
- React.js
- Express.js
- Mongoose
- Visual Studio Code
- **Installation Steps:**

# clone the repository

git clone <repo-link>

# Install client dependencies

cd client

npm install

```
# Install server dependencies
```

```
cd ../server
```

```
npm install
```

## **5.FOLDER STRUCTURE**

Fitflex

```
|--client/      #React frontend
```

```
| |-- components/
```

```
|
```

```
|--server/     #Node.js backend
```

```
  |--routes/
```

```
  |--models/
```

```
  |--controllers/
```

## **6.Running the Application**

- Frontend:

Bash

```
cd client
```

npm start

- Backend:

Bash

cd server

npm start

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

## 7.API Documentation

User:

- POST/api/user/register-Register a new user
- POST/api/user/login-User login

Workouts:

- POST/api/workouts/create-add workout
- GET/api/workouts/:id-Get workout details

Diet Plans:

- POST/api/diet/create-Create diet plan
- GET/api/diet/:userId-Get diet plan by user

Chats:

- POST/api/chat/send-Send message
- GET/api/chat/:userId-Get chat history

## 8.Authentication

- JWT-based authentication for secure login
- Middleware to protect private routes

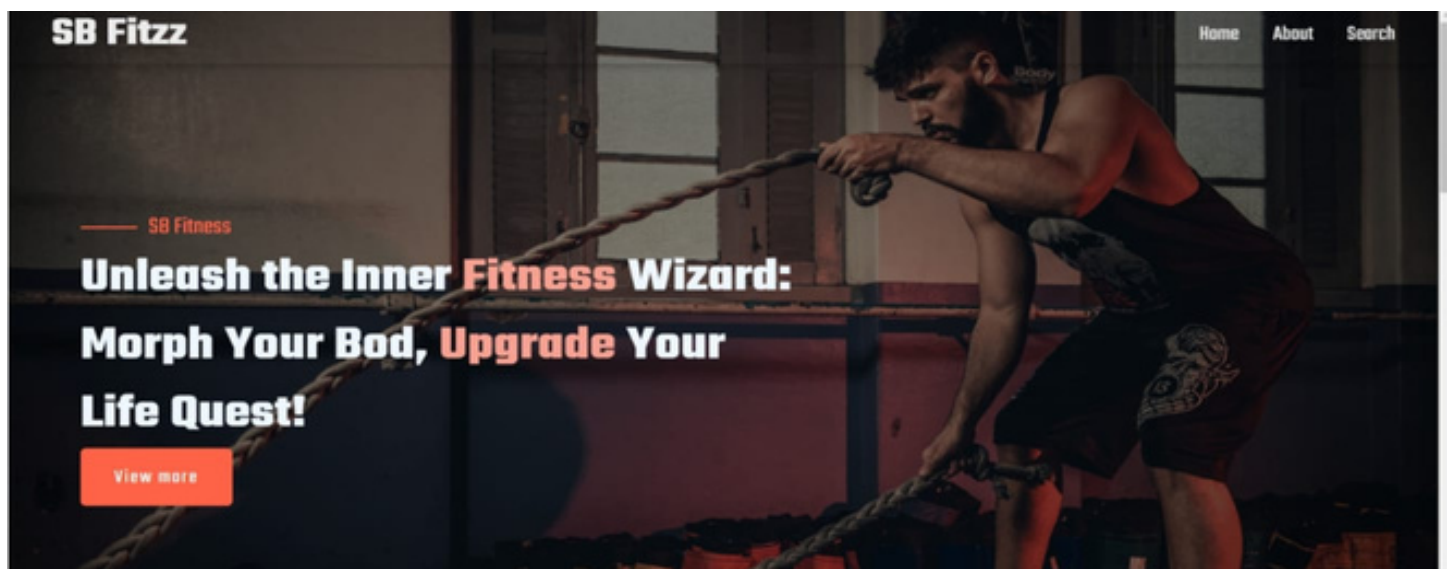
## 9.User interface

- Landing page
- User dashboard(workouts and diet)
- Trainer dashboard
- Admin panel
- Progress tracker page

## 10.Testing

- Manual testing during milestone
- Tools: postman, chrome dev tools

## 11. Screenshot or demo



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## Embark on a Fitness Odyssey with SB Fitzz..

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#### Popular Categories



Back



Cardio



Dumbbells



Chest

## category: chest



archer push up

pectorals

triceps

shoulders



assisted chest dip (kneeling)

pectorals

triceps

shoulders

assisted seated pectoralis major stretch  
with stability ball

pectorals

shoulders

triceps



assisted wide-grip chest dip (kneeling)

pectorals

triceps

shoulders



## band bench press

Target: **pectorals**Equipment: **band**Secondary Muscles: **triceps** **shoulders**

## Instructions

- Lie flat on a bench with your feet flat on the ground and your back pressed against the bench.
- Grasp the band handles with an overhand grip, slightly wider than shoulder-width apart.
- Extend your arms fully, pushing the bands away from your chest.
- Slowly lower the bands back down to your chest, keeping your elbows at a 90-degree angle.
- Repeat for the desired number of repetitions.

## **12.Known issue**

- To be updated during testing phase

## **13.Future enhancements**

- Mobile app integration
- AI-based workouts suggestions
- Social fitness community features