**Project Documentation**

**FitFlex : Your Personal Fitness Companion**

**1. Introduction**

**• Project Title:** FitFlex : Your Personal Fitness Companion

**• Team ID :** NM2025TMID36612

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**2. Project Overview**

**• Purpose:** FitFlex is designed to help users monitor their fitness levels and engage in fitness-related activities. The application provides an interactive platform where users can track their fitness, view workout-related data, and manage their health goals.

**• Features:**

* User-friendly interface to navigate fitness options.
* Workout activity pages for different fitness tasks.
* Options to check personal fitness records and performance.
* Interactive modules for fitness exercises.
* Buttons to submit, update, or reset fitness-related data.
* Organized navigation between Home, Fitness Tracker, and other related sections.

**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/

|\_\_ 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

**• 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**

* Landing Page
* Freelancer Dashboard
* Admin Panel
* Project Details Page

**10. Testing**

* Manual testing during milestones
* Tools: Postman, Chrome Dev Tools

**11. Screenshots or Demo**

Video Link - https://drive.google.com/file/d/1tk-8i\_Grd6meE8hjTQV2J7dT9by2fEAs/view?usp=drive\_link

**12. Known Issues**

* Graphs or fitness metrics not auto-updating

**13. Future Enhancements**

* Add AI-based personalized fitness suggestions.
* Integration with wearable fitness devices.
* Diet and nutrition tracking modules.
* Enhanced analytics and progress visualization.
* Cloud deployment for global access.