Project Documentation

1. Introduction :-
• Project Title: FitFlex : Your Personal Fitness Companion.
• Team ID: NM2025TMID40847
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• Team Members:
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2. Project Overview :-
• Purpose: SB Works 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: 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 <repo-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

• 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. Demo Video Link :-

https://drive.google.com/file/d/1y7WG0PAEacrf3xDs3_zYUIdHcz5hq1GV/view?usp=drive sdk

12. Known Issues :-

- Limited error handling in frontend forms
- Chat system lacks file sharing support
- No email verification during user registration
- Admin panel features are minimal
- Mobile responsiveness needs improvement

13. Future Enhancements :-

- File Sharing in Chat: Allow users to share documents, images, and code files within the chat system.
- Mobile Application: Develop Android and iOS apps for freelancers and clients.
- AI-based Matching: Use machine learning to recommend freelancers for projects based on skills and past performance.
- Payment Gateway Integration: Add secure payment handling directly within the platform.
- Advanced Admin Panel: Include detailed analytics, fraud detection, and user activity monitoring.
- Notification System: Real-time email and push notifications for project updates and messages.
- Improved Security: Add two-factor authentication and stronger password policies.