Project Documentation

FitFlex: Your Personal Fitness Companion

1. Introduction

• Project Title: FitFlex: Your Personal Fitness Companion

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2. Project Overview

• **Purpose:** SB Fitzzz is designed to revolutionize the way users engage with exercise routines. It provides an intuitive platform for discovering, organizing, and managing workouts while fostering a community around fitness and wellness.

• Features:

- Exercises from Fitness API
- Visual Exercise Exploration
- Intuitive and User-Friendly Design
- Advanced Search Feature

3. Architecture

- Frontend: React.js with Bootstrap/ Tailwind CSS, React Router, React Icons.
- **Backend:** Node.js and Express.js managing server logic and API endpoints. Fitness APIs and YouTube APIs for videos.
- **Database:** Not included (Future scope can integrate MongoDB for user management, saved workouts and more).

4. Setup Instructions

• Prerequisites:

- Node.js and npm
- React.js
- Git and GitHub
- Visual Studio Code

• Installation Steps:

```
# Clone project from Google Drive
git clone <a href="https://drive.google.com/drive/folders/14f9eBQ5W7VrLdPhP2W6PzOU_HCy8UMex">https://drive.google.com/drive/folders/14f9eBQ5W7VrLdPhP2W6PzOU_HCy8UMex</a>
# Install dependencies
cd fitness-app-react npm install
# Run development server
npm start
```

5. Folder Structure

6. Running the Application

• Frontend:

cd fitness-app-react npm start

• Access: Visit http://localhost:3000

7. API Documentation

• Exercises:

- Fetch body parts and equipments list.
- Fetch exercises under a specific category.
- Fetch exercise details.

• Videos:

- Fetch related YouTube videos for each exercise.

8. Authentication

• Currently not implemented. (Future enhancement – add JWT-based authentication for saving personal workouts, tracking progress and user login).

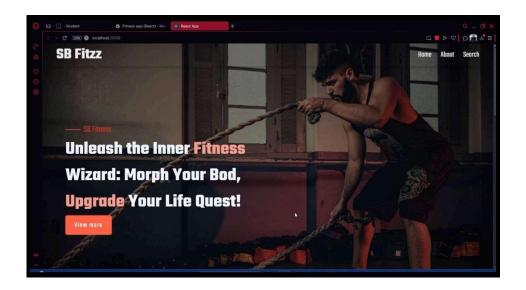
9. User Interface

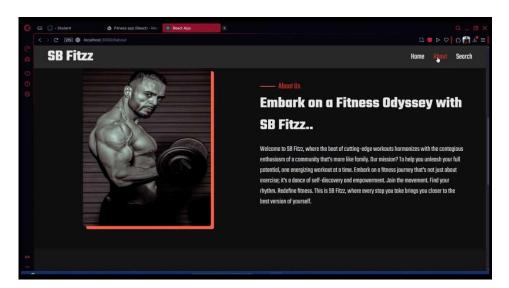
- Landing Page Hero Component
- About Section
- Drop down list for exercises and equipments
- Exercise details page (instructions and related YouTube videos)

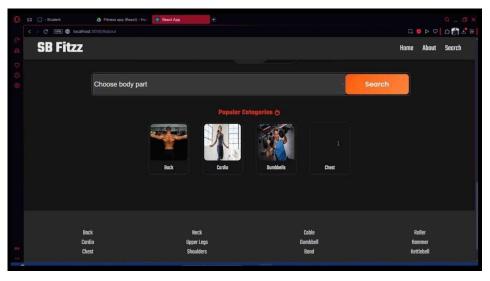
10. Testing

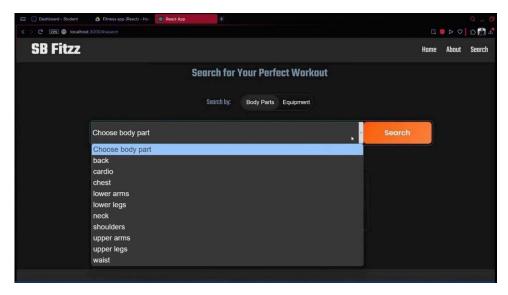
- Manual testing during milestones
- Tools: Postman, Chrome Dev Tools, React Developer Tools

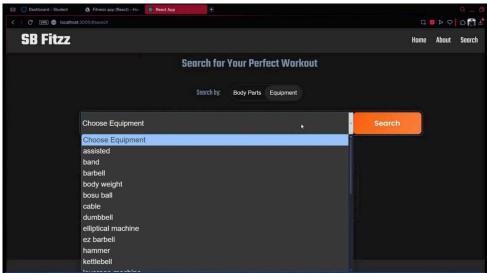
11. Screenshots or Demo

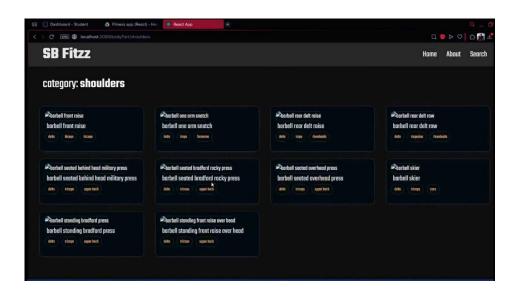


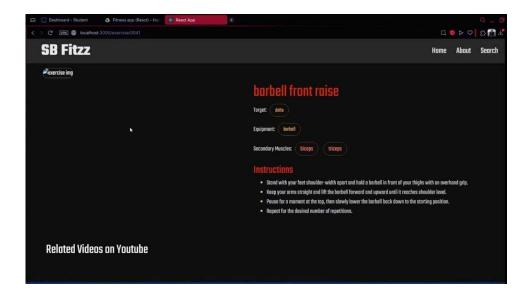


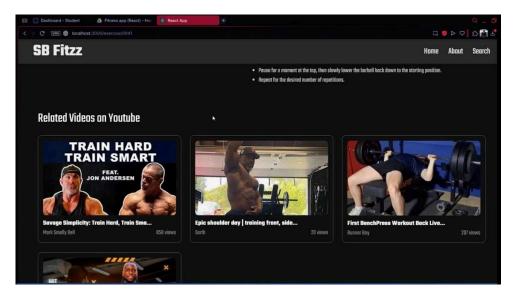












Demo link:

https://drive.google.com/file/d/1McMLUMbHXyYOhKDeN8W7rpJ3FmnVDe8D/view?usp=drivesdk

12. Known Issues

- API issue (Exercise images are not loading)
- No backend database integration (currently read-only from APIs)

13. Future Enhancements

- Add user authentication and profile management
- Integrate database for storing user data and routines
- Add workout tracking and diet planning features
- Gamification (badges, challenges, leaderboards)
- AI powered personalized workout recommendations