Project Documentary - FitFlex

1. Introduction

Our project is titled FitFlex. It is a fitness-based web application created using React and Node.js in VS Code.

Team Members & Roles:

- TEAM LEADER

 JANANI PRIYA: Developed the code in VS code and built the application
- NISHA & MADHUMITHA: Prepared the Documentation for the project
- PAVITHRA & PRINCY: Created the demo video for the project

The aim of FitFlex is to provide users with a personal fitness assistant that helps them stay healthy, access workouts anytime, and track their fitness journey in a friendly and simple way.

2. Project Overview

Purpose:

FitFlex acts as a personal fitness companion that enables users to explore and track workouts anytime, anywhere. The main goal is to encourage people to stay healthy, achieve their fitness goals, and have a smooth experience.

Key Features:

- Workout search based on body parts (e.g., back, chest, legs).
- Workout search based on equipment (e.g., dumbbells, resistance bands).
- Easy-to-use interface with workout categories and images.
- User-friendly design, accessible on any device.
- Helps maintain consistency in fitness routines.

3. Architecture

FitFlex follows a simple React architecture with reusable components and pages.

- Navbar → Navigation links (Home, About, Search).
- Search Component → Lets users search workouts by body part or equipment.
- Workout Cards → Displays exercises with images and categories.
- Footer → Basic footer with text/links.
- Home Page → Shows intro and categories.
- About Page → Provides information about the app

Routing:

Implemented using React Router for page navigation.

5. Setup Instructions

Prerequisites

- Install Node.js (v14 or higher).
- Install npm (comes with Node.js).
- Install a code editor like VS Code.

Steps

1. Clone the repository:

git clone <onedrive\desktop\FitFlex> cd code (FitFlex)

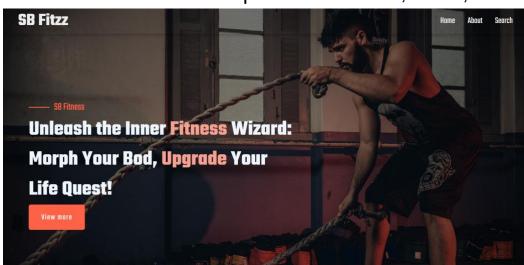
- 2. Install dependencies: npm install
- 3. Start the development server: npm start
- 4. Open the application in browser

6. User Interface

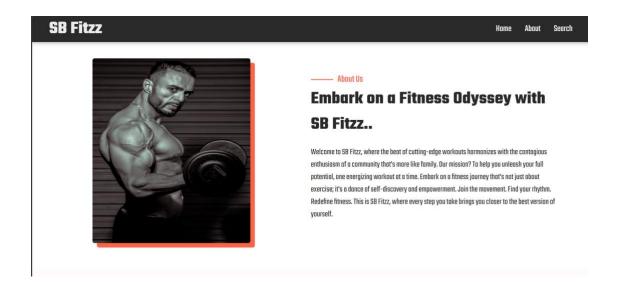
FitFlex provides a clean and simple UI.

- Search Page:
- Search bar for workouts.
- Categories with images (Back, Dumbbells, Chest, etc.).
- Navigation bar for Home, About, and Search.

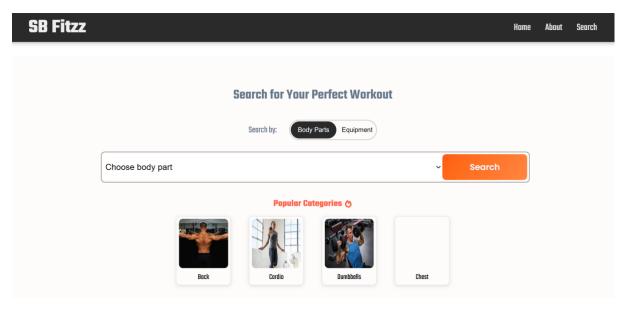
HOME PAGE: shows options like Home, About, Search



ABOUT PAGE : Gives information about the application.



SEARCH: Provides various features like search bar for different types of workout ,bodyparts ,equipments with personalized workout



7. Styling

Custom CSS files are used for styling (App.css, index.css, and files in styles/).

Theme:

- Clean white/orange gradient background.
- Responsive workout category cards.
- Simple, minimalistic design for easy navigation.

```
> styles

# App.css

JS App.js

JS App.test.js

# index.css

JS index.js

logo.svg

JS reportWebVitals.js

JS setupTests.js

• .gitignore

{} package-lock.json
```

8. Implementation – Testing

The application was coded in VS Code using React.

The output was tested manually by running npm start and opening in the browser.

Functionality (search, navigation, workout categories) worked successfully.

9. Results

FitFlex successfully combines fitness and flexibility into one platform.

Developed a fully functional fitness web application.

Provides search-based workouts with categories and equipment options.

Demonstrates teamwork in coding, documentation, and presentation.

10. Conclusion

This project gave us hands-on experience in building a web application and working as a team.

Learned coding with React and managing a project in VS Code.

Improved skills in documentation, design, and teamwork.

Delivered a functional, user-friendly fitness app.

• FitFlex is proof that with teamwork and consistency, a simple idea can be turned into a working product.

11. Future Enhancements

To make FitFlex more powerful and useful, the following features can be added:

- Login/Signup system for personalized profiles.
- Progress tracker for recording workout history.
- Diet and nutrition planner.
- Dark mode for better user experience.
- Integration with APIs for real-time fitness tips.