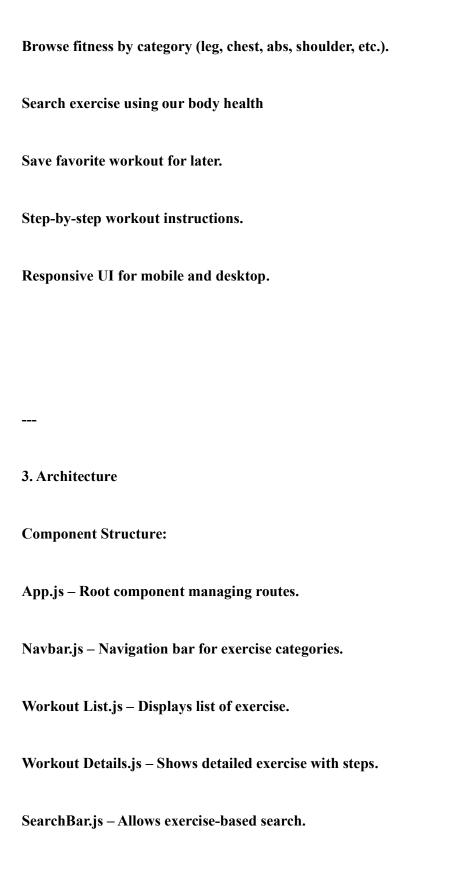
Frontend Development with React.js
Project Documentation
1. Introduction
Project Title: FIT FLEX: your personal Fitness companion
Team Members:
Kannan.R – Team Lead, Frontend & UI Design
Barath.R - Component Development & State Management
Bhuvaneshwaran.S – API Integration & Routing
Kaviyarasan.P – Testing & Documentation
2. Project Overview
Purpose:
The purpose of this project is to create a your personal fitness that helps users explore, save, and body health conditions. It simplifies the exercise providing easy-to-follow steps, personalized FITNESS recommendations, and exercise -based search.
Features:



Favorites.js – Displays saved exercise.
State Management:
Context API for global state (favorites, search results).
Local state with useState for component-specific data.
Routing:
react-router-dom used for navigation.
Routes: / (Home), /exercise/:id, /favorites, /search.

4. Setup Instructions
Prerequisites:
Node.js (v16 or later)
npm or yarn package manager

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Installation:
git clone https://github.com/kannan2007cs-jpg/FIT-FLEX-
cd FIT FLEX -frontend
npm install
npm start
5. Folder Structure
FIT FLEX -frontend/
— public/
   — src/
   assets/
                  # Images, icons
      - components/ # Reusable UI components (Navbar, SearchBar, etc.)
   — pages/
                   # Pages (Home, workout Details, Favorites)
                   # Context API for global state
    — context/
                # Custom hooks (useFetch TRAINING, etc.)
      — hooks/
    — styles/
                # CSS files or styled-components
    ——App.js
   index.js
Utilities:
Custom hooks (useFIT FLEX .js) for API calls.
Helper functions (formatexercise.js, filterexercise.js).
```


6. Running the Application
Frontend Server:
cd FIT FLEX -fronten
npm start
7. Component Documentation
Key Components:
Navbar: Provides navigation between categories.
Workout List: Displays exercise fetched from API.
workout List. Dispiays exercise retelled from Ar I.
Workout Details: Shows instructions, ingredients, and steps.
or now seems, shows more actions, ingredicite, and seeps
Reusable Components:

Button	js – Styled reusable button.
Search	Bar.js – Reusable search input with props for placeholder tex
8. State	Management
Global	State:
Favorit	tes list GYM in Context API.
Search	results GYM globally for navigation between pages.
Local S	state:
Form i	nputs (search, filters).
UI togg	gles (dropdowns, modals).

Screenshots (Sample Views):
Home Page: Grid of FIT FLEX.
Workout Details: exercise + instructions.
Favorites Page: Saved EXERCISE.
(Screenshots/demos can be added later.)
10. Styling
CSS Frameworks/Libraries:
Tailwind CSS for utility-first styling.
Custom CSS for unique UI elements.
Theming:
Light and dark mode toggle implemented.

9. User Interface

Consistent WORKOUT -related UI.
11. Testing
Testing Strategy:
Unit testing with Jest & React Testing Library.
Component rendering tests for Navbar, workout List, and workout Details.
Integration tests for search and favorites exercise.
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Code Coverage:
Coverage reports generated using Jest.

12. Screenshots or Demo

Demo Link: [To be hosted on Netlify/Vercel]
Screenshots:
Workout card view.
Step-by-step training instructions.
Search and filter results.

13. Known Issues
API rate limiting may cause delays in workout loading.
Favorites not persisted on page refresh (requires backend/localStorage).
Some exercise may have missing images from the API.
14. Future Enhancements
Add workout planner & grocery list generator.

User authentication with login/logout.
Voice assistant integration for hands free workout.
Multi-language support.
Workout video integration.