

# Frontend Development with react.js

## Project Documentation Format

### 1.Introduction:

- Project Title: Fittflex
- Team Members:
  - Alfiza.A - Coding.
  - Jeevitha.D - Document Creation.
  - Lakshmi Gayathri.S - Github Creation.
  - Ghoshini Christiya.B - Voice Note and Screen recording.

### 2. Project Overview:

- Purpose: FitFlex is designed to help users achieve their fitness goals by providing personalized workout plans, exercise tracking, and progress monitoring. The platform offers intuitive navigation, motivating features, and insightful analytics to enhance the user's fitness journey.
- Features: Personalized Workout Plans  
Exercise Category Filter (e.g., Strength,

Cardio, Yoga, etc.) Progress Tracking and Goal Setting Daily Workout Reminders Interactive Workout Demonstration Bookmark Feature for Favorite Exercises Light/Dark Mode for Improved User Experience Responsive Design for Mobile and Desktop profile.

### 3. Architecture:

- **Component Structure:** `App.js` Root component that manages layout and routing  
`Header.js` Navigation bar with search functionality  
`WorkoutList.js` Displays categorized workout plans  
`WorkoutCard.js` – Individual workout details with instructions  
`WorkoutDetails.js` Displays step-by-step workout guidance  
`Footer.js` Provides useful fitness tips and motivational quotes
- **State Management:** Context API Manages global states like theme preferences, saved workouts, and Progress tracking.
- **Routing:** React Router -Used for seamless navigation across categories, workout details, and user Profile.

## 4. Setup Instructions

- Prerequisites: Node.js (v18 or higher) `npm` or `yarn`
- Installation: Clone the Repository: `Git clone https://github.com/darunraj0071/fitflex-app.git` `Cd fitflex-app` Install Dependencies: `Npm install` Create 'env' file:  
`REACT_APP_FITNESS_API_KEY=your_api_key_here` Run the Application: `Npm start`.

## 5. Folder Structure:

- `/src`
- `/components` `Header.js` `WorkoutList.js` `WorkoutCard.js` `WorkoutDetails.js` `Footer.js`
- `/pages` `Home.js` `Categories.js` `Progress Tracker.js` `Profile.js`
- `/assets` `Images` `Icons` `Styles`
- `/utils` `Api.js` `helpers.js` `Constants.js` `App.js` `Index.js`.

## 6. Running the Application:

- Frontend Server Command: `Bash Npm start`.

## 7.Component Documentation:

- Key Components: Header: Provides navigation and search functionality  
WorkoutList: Displays workout plans categorized by type WorkoutCard: Shows workout details such as steps, duration, and tips WorkoutDetails: Provides detailed instructions, video demos, and progress tracking
- Reusable Components: Button Component: Used for 'Start Workout,' 'Save Plan,' or "Track Progress' actions Modal Component: Displays workout instructions in a popup.

## 8.State Management:

- Global State: Managed using Context API for workout tracking, theme settings, and reminders
- Local State: Managed via React's 'useState()' for dynamic UI elements like forms and pagination.



## 9. User Interface:

- Clean, modern interface designed for fitness enthusiasts
- Motivational quotes and tips integrated throughout the platform
- Dynamic progress bars and goal trackers for better visualization.
- <https://drive.google.com/file/d/1ov-fjfMgyxheRLDkhAxWWsh9ZXTmmp5u/view?usp=drivesdk>

## 10. Styling:

- CSS Frameworks/Libraries: \*\*Tailwind CSS\*\* Used for fast, scalable, and responsive design.
- Theming: Integrated Light/Dark Mode for improved user comfort.

## 11. Testing:

- Testing Strategy: Jest For unit testing of components React Testing Library For integration and user interaction testing.

- Code Coverage: Ensured high test coverage with Jest reports.

## 12. Screenshots or Demo:

- Demo video:  
<https://drive.google.com/file/d/1ov-fjfMgyxheRLDkhAxWWsh9ZXTmmp5u/view?usp=drivesdk>