

Frontend Development with React.js

1. Introduction

Project Title :FITFLEX: YOUR PERSONAL FITNESS COMPANION

Team Members :

B.Dharshini (HEAD)-ROLE-(Project Coding and Demo Video)

M.Abinaya-ROLE-(Project Coding)

S.Abinaya-ROLE-(Project Documentation)

P.Asvitha-ROLE-(Demo Video)

2. Project Overview

🌟 📸 Welcome to the forefront of fitness exploration with SB Fitzz! Our innovative fitness app is meticulously designed to revolutionize the way you engage with exercise routines, catering to the diverse interests of both fitness enthusiasts and seasoned workout professionals. With a focus on an intuitive user interface and a comprehensive feature set, SB Fitzz is set to redefine the entire fitness discovery and exercise experience.

🏃 Crafted with a commitment to user-friendly aesthetics, SB Fitzz immerses users in an unparalleled fitness journey. Effortlessly navigate through a wide array of exercise categories with features like dynamic search, bringing you the latest and most effective workouts from the fitness world.

🌐 From those embarking on their fitness journey to seasoned workout aficionados, SB Fitzz embraces a diverse audience, fostering a dynamic community united by a shared passion for a healthy lifestyle. Our vision is to reshape how users interact with fitness, presenting a platform that not only provides effective exercise routines but also encourages collaboration and sharing within the vibrant fitness community.

💧 Embark on this fitness adventure with us, where innovation seamlessly intertwines with established exercise principles. Every tap within SB Fitzz propels you closer to a realm of diverse workouts and wellness perspectives. Join us and experience the evolution of fitness engagement, where each feature is meticulously crafted to offer a glimpse into the future of a healthier you.

🌟 💁 Elevate your fitness exploration with SB Fitzz, where every exercise becomes a gateway to a world of wellness waiting to be discovered and embraced. Trust SB Fitzz to be your reliable companion on the journey to staying connected with a fit and active lifestyle.



Project Goals and Objectives:

The overarching aim of SB Fitzz is to offer an accessible platform tailored for individuals passionate about fitness, exercise, and holistic well-being.

Our key objectives are as follows:

- **User-Friendly Experience:** Develop an intuitive interface that facilitates easy navigation, enabling users to effortlessly discover, save, and share their preferred workout routines.
- **Comprehensive Exercise Management:** Provide robust features for organizing and managing exercise routines, incorporating advanced search options for a personalized fitness experience.
- **Technology Stack:** Harness contemporary web development technologies, with a focus on React.js, to ensure an efficient and enjoyable user experience.

Features of SB Recipess:

- **Exercises from Fitness API:** Access a diverse array of exercises from reputable fitness APIs, covering a broad spectrum of workout categories and catering to various fitness goals.
- **Visual Exercise Exploration:** Engage with workout routines through curated image galleries, allowing users to explore different exercise categories and discover new fitness challenges visually.
- **Intuitive and User-Friendly Design:** Navigate the app seamlessly with a clean, modern interface designed for optimal user experience and clear exercise selection.
- **Advanced Search Feature:** Easily find specific exercises or workout plans through a powerful search feature, enhancing the app's usability for users with varied fitness preferences.

3. Setup Instructions

Pre-Requisites:

Here are the key prerequisites for developing a frontend application using React.js:

- **Node.js and npm:**
 - Node.js is a powerful JavaScript runtime environment that allows you to run JavaScript code on the local environment. It provides a scalable and efficient platform for building network applications.
 - Install Node.js and npm on your development machine, as they are required to run JavaScript on the server-side.
 - Download: <https://nodejs.org/en/download/>
 - Installation instructions: <https://nodejs.org/en/download/package-manager/>
-
- **React.js:**

- React.js is a popular JavaScript library for building user interfaces. It enables developers to create interactive and reusable UI components, making it easier to build dynamic and responsive web applications.
- Install React.js, a JavaScript library for building user interfaces.

- Create a new React app:

```
npx create-react-app my-react-app
```

Replace my-react-app with your preferred project name.

- Navigate to the project directory:

```
cd my-react-app
```

- Running the React App:

With the React app created, you can now start the development server and see your React application in action.

- Start the development server:

```
npm start
```

This command launches the development server, and you can access your React app at <http://localhost:3000> in your web browser.

- **HTML, CSS, and JavaScript:** Basic knowledge of HTML for creating the structure of your app, CSS for styling, and JavaScript for client-side interactivity is essential.
- **Version Control:** Use Git for version control, enabling collaboration and tracking changes throughout the development process. Platforms like GitHub or Bitbucket can host your repository.
- **Git:** Download and installation instructions can be found at: <https://git-scm.com/downloads>
- **Development Environment:** Choose a code editor or Integrated Development Environment (IDE) that suits your preferences, such as Visual Studio Code, Sublime Text, or WebStorm.
 - Visual Studio Code: Download from <https://code.visualstudio.com/download>
 - Sublime Text: Download from <https://www.sublimetext.com/download>
 - WebStorm: Download from <https://www.jetbrains.com/webstorm/download>

To get the Application project from drive:

Follow below steps:

- **Get the code:**
 - Download the code from the drive link given below:
https://drive.google.com/drive/folders/14f9eBQ5W7VrLdPhP2W6PzOU_HCy8UMex?usp=sharing

Install Dependencies:

- Navigate into the cloned repository directory and install libraries:

```
cd fitness-app-react  
npm install
```

- **Start the Development Server:**

- To start the development server, execute the following command:

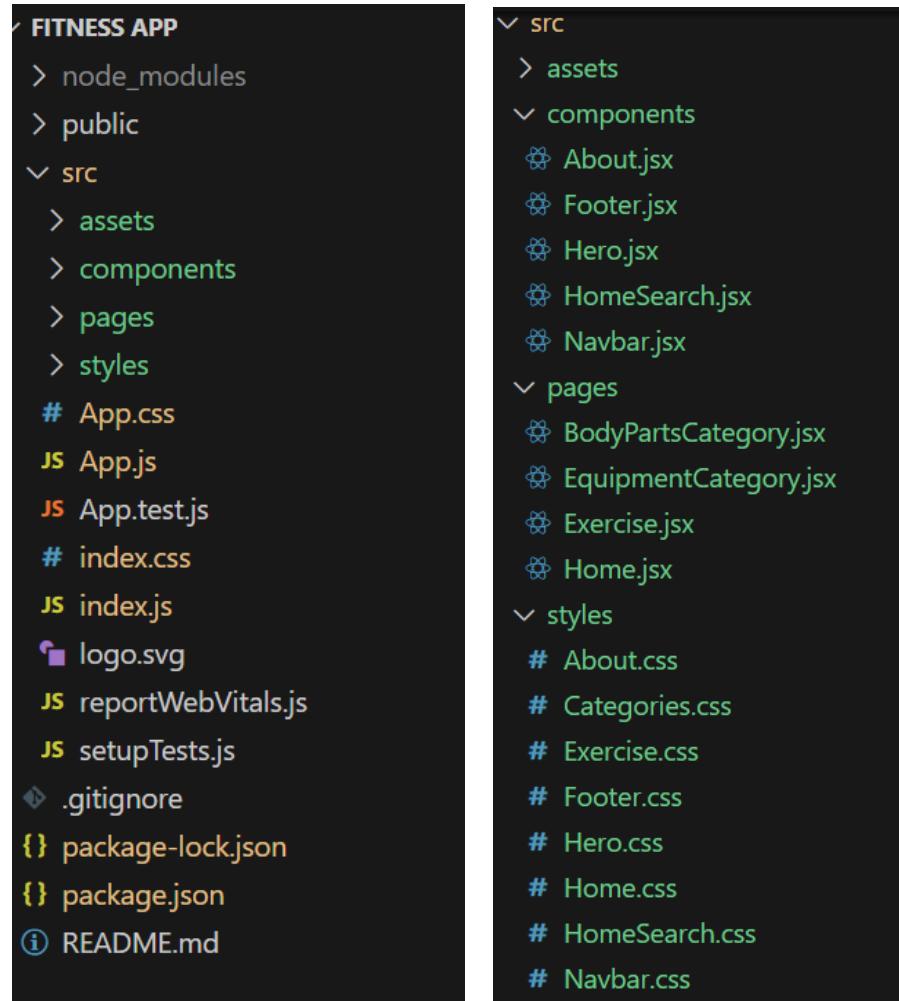
```
npm start
```

Access the App:

- Open your web browser and navigate to <http://localhost:3000>.
 - You should see the application's homepage, indicating that the installation and setup were successful.

You have successfully installed and set up the application on your local machine. You can now proceed with further customization, development, and testing as needed.

4.Folder structure :



```

FITNESS APP
> node_modules
> public
src
> assets
> components
> pages
> 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
{} package.json
ⓘ README.md

src
> assets
components
About.jsx
Footer.jsx
Hero.jsx
HomeSearch.jsx
Navbar.jsx
pages
BodyPartsCategory.jsx
EquipmentCategory.jsx
Exercise.jsx
Home.jsx
styles
About.css
Categories.css
Exercise.css
Footer.css
Hero.css
Home.css
HomeSearch.css
Navbar.css

```

In this project, we've split the files into 3 major folders, *Components*, *Pages* and *Styles*. In the pages folder, we store the files that acts as pages at different URLs in the application. The components folder stores all the files, that returns the small components in the application. All the styling css files will be stored in the styles folder.

5. Project Development

- ❖ Setup the Routing paths

Setup the clear routing paths to access various files in the application.

Ex:

```

<div className="App">
  <Navbar />
  <Routes>
    <Route path="/" element={<Home />} />
    <Route path="/bodyPart/:id" element={<BodyPartsCategory />} />
    <Route path="/equipment/:id" element={<EquipmentCategory />} />
    <Route path="/exercise/:id" element={<Exercise />} />
  </Routes>
  <Footer />
</div>

```

- ❖ Develop the Navbar and Hero components

- ❖ Code the popular search/categories components and fetch the categories from **rapid Api**.
- ❖ Additionally, we can add the component to subscribe for the newsletter and the footer.
- ❖ Now, develop the category page to display various exercises under the category.
- ❖ Finally, code the exercise page, where the instructions, other details along with related videos from the YouTube will be displayed.

Important Code snips:

➤ Fetching available Equipment list & Body parts list

Fetching exercises under particular category

```
const fetchData = async (id) => {
  const options = {
    method: 'GET',
    url: `https://exercisedb.p.rapidapi.com/exercises/equipment/${id}`,
    params: {limit: '50'},
    headers: {
      'X-RapidAPI-Key': 'your api key',
      'X-RapidAPI-Host': 'exercisedb.p.rapidapi.com'
    }
  };

  try {
    const response = await axios.request(options);
    console.log(response.data);
    setExercises(response.data);
  } catch (error) {
    console.error(error);
  }
}
```

➤ Fetching Exercise details

➤ Fetching related videos from YouTube

```
useEffect(()=>{
  if (id){
    fetchData(id)
  }
},[id])

const fetchData = async (id) => {
  const options = {
    method: 'GET',
    url: `https://exercisedb.p.rapidapi.com/exercises/exercise/${id}`,
    headers: {
      'X-RapidAPI-Key': 'ae40549393msh0c35372c617b281p103ddcjsn0f4a9ee43ff0',
      'X-RapidAPI-Host': 'exercisedb.p.rapidapi.com'
    }
  };

  try {
    const response = await axios.request(options);
    console.log(response.data);
    setExercise(response.data);

    fetchRelatedVideos(response.data.name)
  } catch (error) {
    console.error(error);
  }
}
```

```

const fetchRelatedVideos = async (name)=>{
  console.log(name)
  const options = {
    method: 'GET',
    url: 'https://youtube-search-and-download.p.rapidapi.com/search',
    params: {
      query: `${name}`,
      hl: 'en',
      upload_date: 't',
      duration: 'l',
      type: 'v',
      sort: 'r'
    },
    headers: {
      'x-RapidAPI-Key': 'ae40549393msh0c35372c617b281p103ddcjsn0f4a9ee43ff0',
      'x-RapidAPI-Host': 'youtube-search-and-download.p.rapidapi.com'
    }
  };

  try {
    const response = await axios.request(options);
    console.log(response.data.contents);
    setRelatedVideos(response.data.contents);
  } catch (error) {
    console.error(error);
  }
}

```

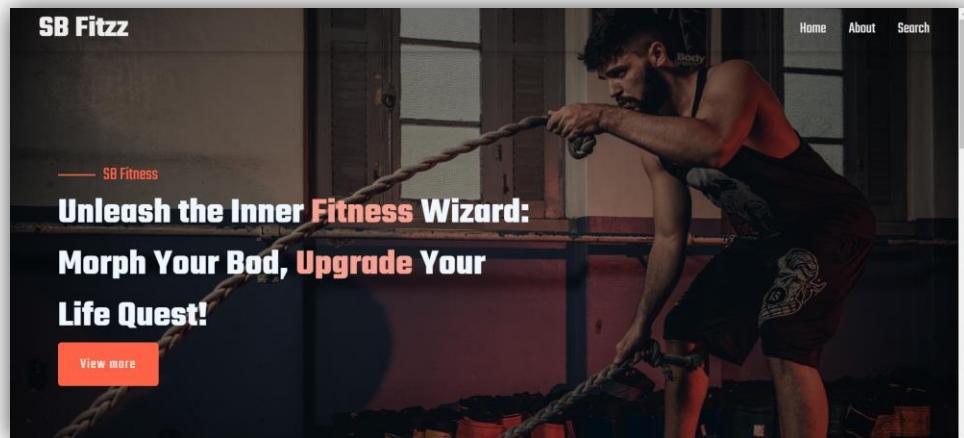
6. Running the Application

- To start the development server, execute the following command:

npm start

7. Screenshots or Demo

- Hero component



[About Us](#)

Embark on a Fitness Odyssey with SB Fitzz..

Welcome to SB Fitzz, where the beat of cutting-edge workouts harmonizes with the contagious enthusiasm of a community that's more like family. Our mission? To help you unleash your full potential, one energizing workout at a time. Embark on a fitness journey that's not just about exercise; it's a dance of self-discovery and empowerment. Join the movement. Find your rhythm. Redefine fitness. This is SB Fitzz, where every step you take brings you closer to the best version of yourself.

➤ Search

Search for Your Perfect Workout

Search by: [Body Parts](#) [Equipment](#)

Choose body part

[Search](#)

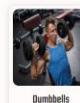
Popular Categories



Back



Cardio



Dumbbells

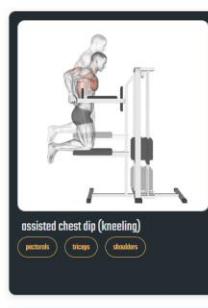


Chest

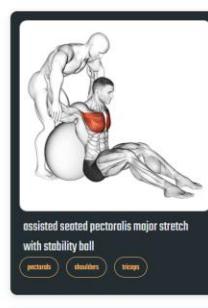
➤ Category page

category: **chest**

archer push up

[pectenoids](#) [triceps](#) [shoulders](#)

assisted chest dip (kneeling)

[pectenoids](#) [triceps](#) [shoulders](#)assisted seated pectoralis major stretch
with stability ball[pectenoids](#) [shoulders](#) [triceps](#)

assisted wide-grip chest dip (kneeling)

[pectenoids](#) [triceps](#) [shoulders](#)

➤ Exercise page

SB Fitzz

Home About Search



band bench press

Target: pectorals

Equipment: band

Secondary Muscles: triceps shoulders

Instructions

- Lie flat on a bench with your feet flat on the ground and your back pressed against the bench.
- Grasp the band handles with an overhand grip, slightly wider than shoulder-width apart.
- Extend your arms fully, pushing the bands away from your chest.
- Slowly lower the bands back down to your chest, keeping your elbows at a 90-degree angle.
- Repeat for the desired number of repetitions.