Full Stack Development with MERN

Frontend Development Report

Date	
Team ID	
Project Name	FitFlex :Your Personal Fitness Companion
Maximum Marks	

Project Title: SB Fitzzz..

Date: [Date of Report]

Prepared by: Aarti Mallayya Swami

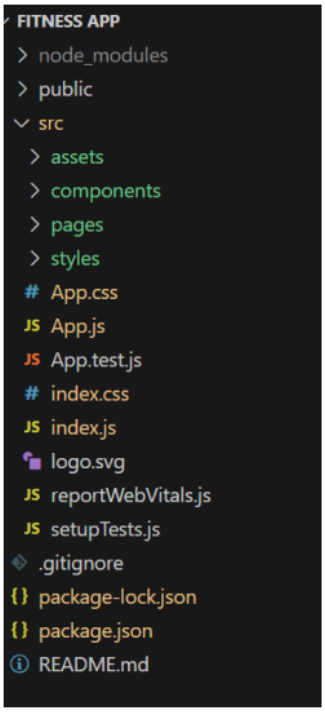
Objective

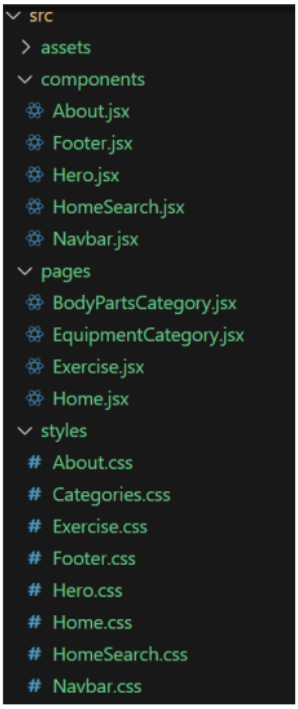
The objective of this report is to document the frontend development progress and key aspects of the user interface (UI) implementation for the **SB Fitzz** project. This project is focused on providing a dynamic and engaging fitness platform with various exercise categories, workout routines, and features to help users maintain a healthy lifestyle.

Technologies Used

- **Frontend Framework:** React.js
- **State Management:** [Redux/Context API, if applicable]
- **UI Framework/Libraries: Material-UI**, **Bootstrap**, or **Tailwind CSS** (for responsive design and UI components)
- **API Libraries:** Axios (for fetching exercise data, videos, etc.)

Project Structure





Routing

- **/home:** Landing page showcasing the app's features, introduction to fitness, and popular exercises.
- **/category/:id:** A category page displaying exercises under different fitness categories (e.g., Strength Training, Yoga, Cardio).
- **/exercise/:id**: Detailed exercise page with instructions, images, and related videos.
- **/profile:** User profile management page, where users can save their favorite exercises, track their progress, etc.**State Management (If Applicable)**

State management is achieved using [Redux/Context API].

- **Fetching available Equipment list & Body parts list**

```
const bodyPartsOptions = {
  method: 'GET',
  url: 'https://exercisedb.p.rapidapi.com/exercises/bodyPartList',
  headers: {
    'X-RapidAPI-Key': 'place your api key',
    'X-RapidAPI-Host': 'exercisedb.p.rapidapi.com'
  }
};

const equipmentOptions = {
  method: 'GET',
  url: 'https://exercisedb.p.rapidapi.com/exercises/equipmentList',
  headers: {
    'X-RapidAPI-Key': 'place your api key',
    'X-RapidAPI-Host': 'exercisedb.p.rapidapi.com'
  }
};

useEffect(() => {
  fetchData();
}, [])

const fetchData = async () =>{
  try {
    const bodyPartsData = await axios.request(bodyPartsOptions);
    setBodyParts(bodyPartsData.data);

    const equipmentData = await axios.request(equipmentOptions);
    setEquipment(equipmentData.data);
  } catch (error) {
    console.error(error);
  }
}
```

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**

```
useEffect(()=>{
    if (id){
        fetchData(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);
    }

}
```

Fetching related videos from YouTube

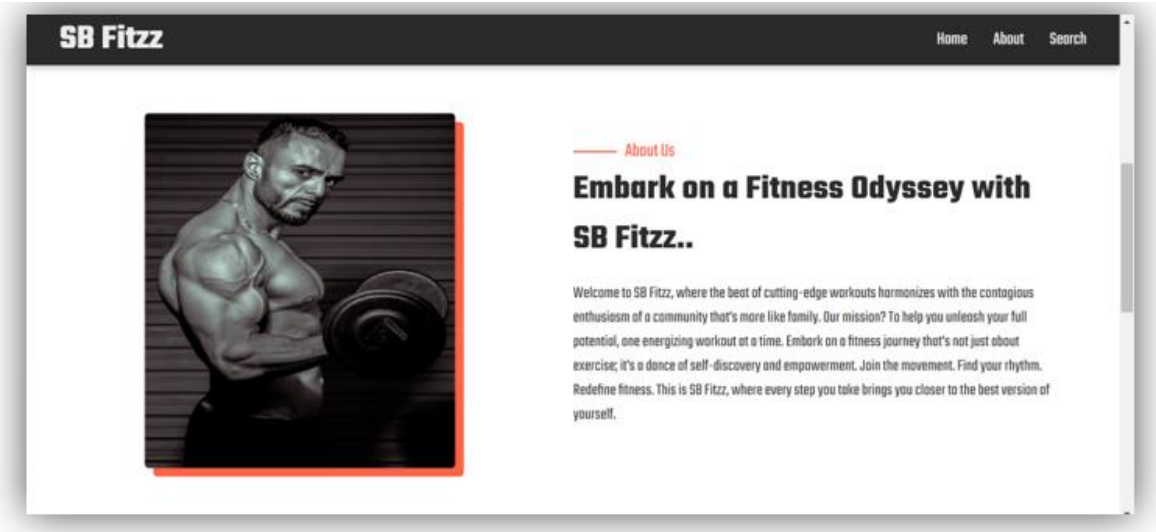
```
const fetchRelatedVideos = async (name)=>{
  console.log(name)
  const options = {
    method: 'GET',
    url: 'https://youtube-search-and-download.p.rapidapi.com/search',
    params: {
      query: `${name}`,
      hl: 'en',
      upload_date: 't',
      duration: 'l',
      type: 'v',
      sort: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

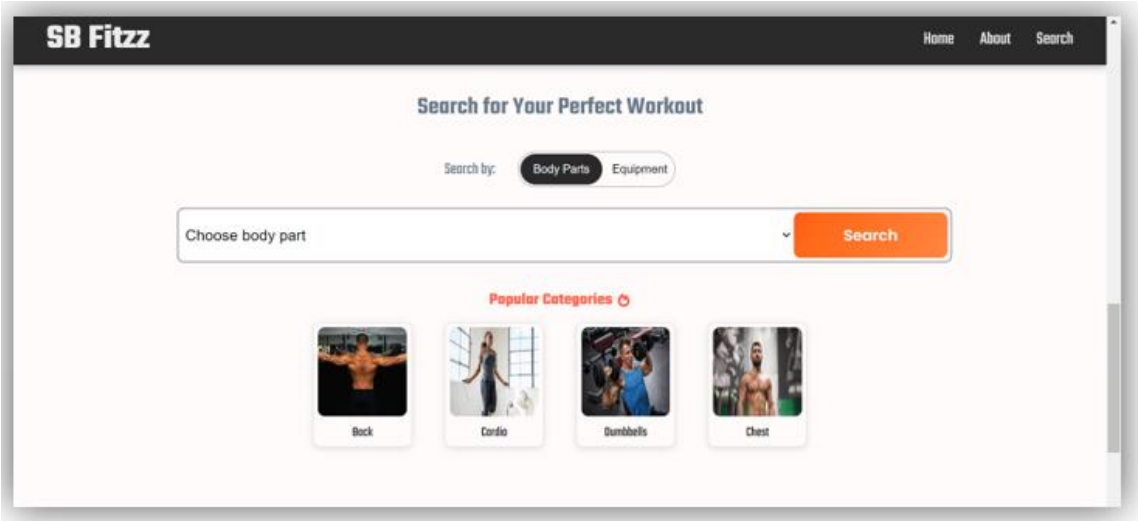
User Interface (UI) Design

- **Hero component**

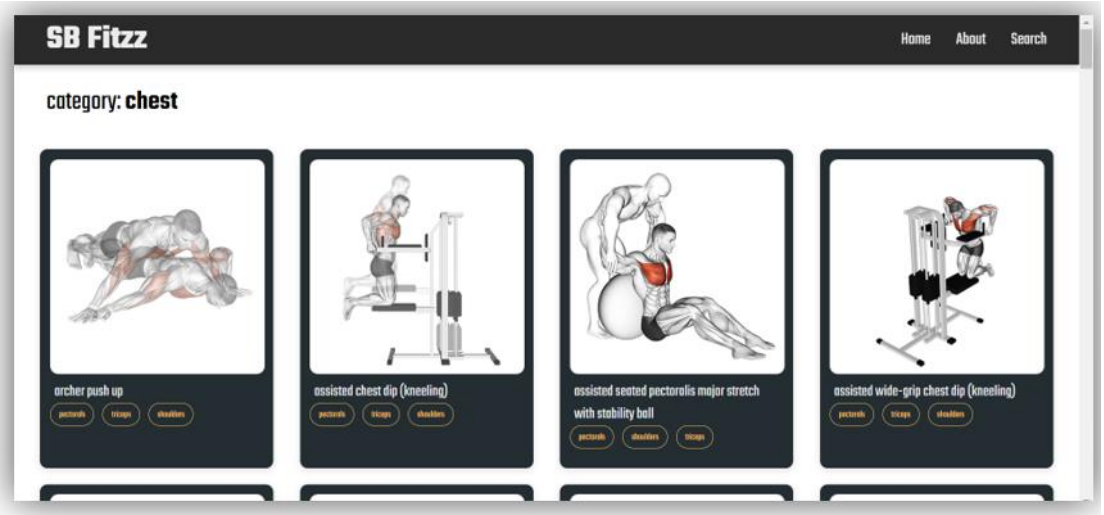
- **About**



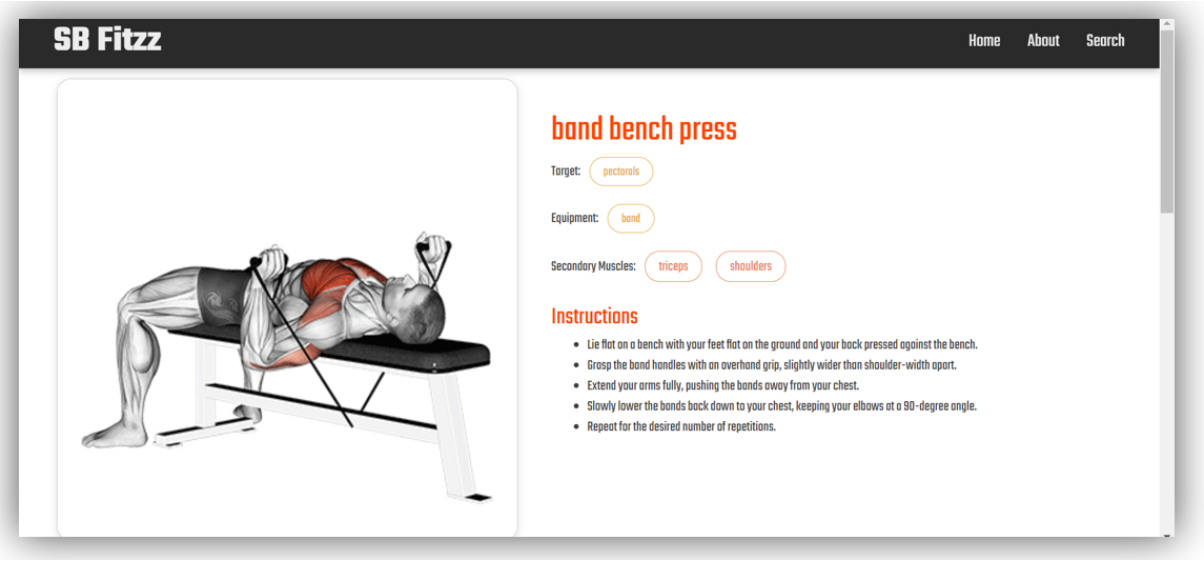
- **Search**



- **Category page**



- **Exercise page**



Third-Party Integrations (If any)

- **Axios**: Used for making HTTP requests to external fitness APIs to fetch exercise data, video tutorials, and other relevant information.
- **YouTube API**: Integrated to fetch related exercise videos to enhance the user experience with video instructions.
- **React Router**: Used for routing between different pages of the application.
- **Material-UI/Bootstrap/Tailwind CSS**: Used for creating a responsive and aesthetically pleasing UI.