□ import necessary library or self code

□ create state

□ useEffect function

□ api calling function

□ component code

□ for css : website:codepen

□ for toast :npm install react-hot-toast

□ for loading :loading io

□

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full code

1. first execute: `useEffect()` and then data will be saved in `ProductList` then show this data in table.
2. there are a REFRESH button.when this is clicked the `useEffect()` will be called again and fetch.
3. In table there are delete option where user can delete this item.when this button is clicked this call a delete-api and then refresh varible will be increased and again useEffect() will be called.

```
import React, { useEffect,useState } from 'react';
import axios from 'axios';
import toast, { Toaster } from 'react-hot-toast';
import Loading from '../loader/Loading'
const readPage = () => {
    const [ProductList,SetProductList] = useState([])

    const [Refresh,SetRefresh] = useState(0);

    const [Load,SetLoad] = useState(true);
    useEffect(()=>{

        GetAPI();

    },[Refresh]);
    const GetAPI = async ()=>{
        let res = await axios.
get("https://crud.teamrabbil.com/api/v1/ReadProduct");
        // console.log(res);
        let product = res.data['data'];
        SetProductList(product);
        SetLoad(false);
        // console.log(product);
    }
    const DeleteAPI = async(id)=>{
        SetLoad(true);
        let res = await axios.
        get(`https://crud.teamrabbil.com/api/v1/DeleteProduct/${id}`);
        let deleteItem = res.data['status'];
        if(deleteItem==='success'){
            toast.success("delete successfully");
            SetRefresh(Refresh+1);
        }
        else{
            toast.error("delete failed");
            SetLoad(false);
        }
    }

  return (
    <>
    {Load && <Loading/>}
    <div className='container'>
        <div className='row'>
            <div className="col-12">
                <h1>Product List</h1>
                <hr />
                <button className='btn btn-outline-dark'
                 onClick={()=>SetRefresh(Refresh+1)}>REFRESH</button>
                <br />
                <div className='table-responsive'>
                <table className="table table-striped">
                    <tbody>
                    {
                        ProductList.length>0 &&
                        ProductList.map((item,i)=>{
                            return(
                                <tr>
                                    <td>{item['_id']}</td>
                                    <td>{item['ProductName']}</td>
                                    <td><img src={item['Img']} alt="..."
                                    style={{width:"60px",margin:"auto"}} />
</td>

                                    <td>{item['UnitPrice']}</td>
                                    <td>{item['Qty']}</td>
                                    <td>{item['TotalPrice']}</td>
                                    <td>
                                    <button onClick={()=>
{DeleteAPI(item['_id'])}}

                                    className='btn btn-
danger'>Delete</button></td>
```

```
                                </tr>
                            )
                        })
                    }
                    </tbody>
                </table>
                <Toaster/>
                </div>
            </div>

        </div>

    </div>
    </>
  )
}
export default readPage;
```

Import

```
import React, { useEffect,useState } from 'react';
import axios from 'axios';
import toast, { Toaster } from 'react-hot-toast';
import Loading from '../loader/Loading'
```

State

- this is state declaration
    - ProductList is initially empty string
    - Refresh is initially 0 and used for refresh the component
    - Load is initially true and used for loading.
        - this is used in time of calling api.
        - sometimes it takes time to fetch data from database,in this case user see loading animation.

```
    const [ProductList,SetProductList] = useState([])
    const [Refresh,SetRefresh] = useState(0);
    const [Load,SetLoad] = useState(true);
```

useEffect

- □ useEffect : in this section (all function) will be executed after the page load means this section will execute first.

```
    useEffect(()=>{
        API();
    },[Refresh]);
```

API calling

- □ this is API calling function . here used async await method.
- □ this API calling is through axios

```
    const API = async ()=>{
        let res = await
axios.get("https://crud.teamrabbil.com/api/v1/ReadProduct");
        // console.log(res);
        let product = res.data['data'];
        SetProductList(product);
        // console.log(product);
    }
```

- this is deletion of item
  - take product id as parameter and delete data using axios [https://crud.teamrabbil.com/api/v1/DeleteProduct/${id}`](https://crud.teamrabbil.com/api/v1/DeleteProduct/${id}`)
  - as api is called so there may take time so for loading animation we call a function `SetLoad(true);` means loading enable
  - then it check its status
    - it is 'success' then show a success toast msg `toast.success("delete successfully");`
      - call `SetRefresh(Refresh+1);` because data has chaanged and there need a `GetAPI();` calling.that's why we call useEffect() function.
    - it is fail then also show a error toast msg `toast.error("delete failed");`
      - when it shows error then call: `SetLoad(false);` because there is no change in data. So no need for waiting.

```
    const DeleteAPI = async(id)=>{
        SetLoad(true);
        let res = await
axios.get(`https://crud.teamrabbil.com/api/v1/DeleteProduct/${id}`);
        let deleteItem = res.data['status'];
        if(deleteItem==='success'){
            toast.success("delete successfully");
            SetRefresh(Refresh+1);
        }
        else{
            toast.error("delete failed");
            SetLoad(false);
        }
    }
```

---

main Component

when the Load = true then this will be active:

```
{Load && <Loading/>}
```

- when the refresh button is clicked then the refresh value or state will be changed.
- this change effect the useEffect function. because of setting this variable in useEffect such as, `useEffect(()=>{API();},[Refresh]);`

```
<button className='btn btn-outline-dark'   onClick=
{()=>SetRefresh(Refresh+1)}>REFRESH</button>
```

- we take delete btn for delete this item from the list.
  - `onClick={()=>{DeleteAPI(item['_id'])}}`
    - when this btn will be clicked this `DeleteAPI(item['_id'])` this will be called and send item['_id'] as parameter

```
<td><button onClick={()=>{DeleteAPI(item['_id'])}} className='btn btn-
danger'>Delete</button></td>
```

- we have many data in ProductList. we show this data using loop.
- that's why we use `ProductList.map((item,i)=>{ return (.....)})`
- `ProductList.length>0 && ProductList.map((item,i)=>{ return (.....)})` we use this for checking if there are any data or not. if there is no data we don't run loop.
- `<td>{item['_id']}</td>` in this case, we use data from external source.so we take this data by using `{....}` . In Item list we have many keys .that's why we use `item['_id']`
- when Load is true then the Loading component will be shown.
-

```
  return (
    <>
    {Load && <Loading/>}
    <div className='container'>
        <div className='row'>
            <div className="col-12">
                <h1>Product List</h1>
                <hr />
                <button className='btn btn-outline-dark'
                onClick={()=>SetRefresh(Refresh+1)}>REFRESH</button>
                <br />
                <div className='table-responsive'>
                <table className="table table-striped">
                    <tbody>
                    {
                        ProductList.length>0 &&
                        ProductList.map((item,i)=>{
                            return(
                                <tr>
                                    <td>{item['_id']}</td>
                                    <td>{item['ProductName']}</td>
                                    <td><img src={item['Img']} alt=" ... "
                                    style={{width:"60px",margin:"auto"}} />
</td>

                                    <td>{item['UnitPrice']}</td>
                                    <td>{item['Qty']}</td>
                                    <td>{item['TotalPrice']}</td>
                                    <td><button
                                    onClick={()=>{DeleteAPI(item['_id'])}}
                                    className='btn btn-
danger'>Delete</button></td>
                                </tr>
                            )
                        })
                    }
                    </tbody>
                </table>
                <Toaster/>
                </div>
            </div>
        </div>
    </div>
    </>
  )
```

Loading

```
import React from 'react'
import spinner from '../assets/img/spinner.svg'
const Loading = () => {
  return (
    <div className="container"
    style={{zIndex:100,position:"fixed",marginTop:"100px"}}>
        <div className="row d-flex justify-content-center">
            <div className='col-md-3'>
                <img src={spinner} alt="" />
            </div>
        </div>
    </div>
  )
}
export default Loading;
```