**Day 6 React JS 22 Dec. 24**

useReducer(): useReducer is a type of hook provided by react js which help to manage state of component when we are doing more complex login on state variable.

useState() : it is use to do simple as well as very less work on state variable.

useReducer() : it is use to do complex as well as more operation on state variable then we need to use useReducer hook.

Syntax

let [variableName,setFunction]=useState(defaultValue);

let [stateVariableRef,dispatchFunction]=useReducer(reducerFunction,initialState)

reducer : reducer is a normal JavaScript function which takes two parameter

1. 1st parameter state
2. 2nd action

Base upon the action it will do the change on state variable.

initialState : it hold initial state variable of any types.

Dispatch : dispatch is a function which help to dispatch the action to reducer which also help to pass the payload ie data to reducer function(dynamic values if you need).

stateVaraibleRef : which help access state variable part of initialState

open the command prompt

npx create-react-app react-use-reducer-app

cd react-use-reducer-app

open this project in VS code

npm start

Calling End point or Rest API in React JS

Web Service : Giving the Service for web application when both the web application running using different technologies.

Amazon : React JS

Payment --🡪 Gpay React JS

Phone Pay Java

Paytm Python

Paypal php

Credit / Debit card Node JS

Bridge

Web Service

XML / JSON

SOAP Base Web Service : Simple Object Access Protocol.

In SOAP web service we can consume as well as produce data only in xml format.

Rest Full Web Service

In Rest full web service we can consume and produce data in any format like xml, json, plain text, html or any media type etc.

If we are planning access end point develop using any language in react

We can take the help of axios third party library

Which provide get, post, put and delete methods.

Using get method we can consume rest api develop using any language.

Synchronous and promise

npx create-react-app react-rest-api

cd react-rest-api

npm install axios

then we need open this project in VS code

using npm start run the project.

We can create end point using backend technologies like

Java, python, node js or .net

Few end point for get the data like product, customer, order etc

axios.get(“URL”)

few end point for create the resource like signup, store product info, place the order

axios.post(“URL”,data);

few end point for update the data like change password, update employee salary

axios.put(“URL”,data)

few end point for delete the data like delete login details, remove employee details, remove product info

axios.delete(“URL”,idtoDelete)

axios.get(URL)

get method return type is promise. If promise resolved it call then() function. If promise rejected then it will call catch() function

axios.get(URL).then(result=>console.log(result)).catch(error=>console.log(error))

useEffect()

useEffect() : is a another look which help to do some background task. This function get called automatically initially whenever component get loaded as well as it call again whenever any dependencies change.

syntax

useEffect(callback,[dependencies]);