Day 6 : 23 June 2024

React routing :

SPA : Single page application

Routing help us to move from one component jsx to another component jsx baes upon path provided

If we want to use routing features in react js we need install third party module ie

react-router-dom

<http://localhost:3000/>

<http://localhost:3000/aboutus>

<http://localhost:3000/contactus>

<http://localhost:3000/feedback>

**create-react-app react-routing-app**

cd **react-routing-app**

**npm install react-router-dom**

**sub routing**

Testing

Testing is use to find the defect or error or bugs in the application.

Unit testing : unit testing is a type of testing which help to test the smallest code ie function or method. This testing is use to test function functionality working or not.

Junit or TestNG

Nunit

Jasmine , mocha or JEST etc.

Jasmine is an open source testing framework which help to test plain javascript as well as node js.

Mocha with chia : is smallest testing framework base upon the jasmine which help to do the testing for Node Js.

JEST is one of the testing framework provided by Facebook.

Angular by default provide jasmine with karma to do the testing.

React JS by default provide JEST for testing the application.

Test suite and test case, assert library

Test suite : JavaScript provided pre defined function ie describe which consider as test suite. Test suite contains more than one test case as well as another test suite.

describe(“Message”,callback)

describe(“Message”,()=> {

})

Test case : it is a type of function which help to do the testing for particular functionality of JavaScript or components.

it(“Message”,callback)

describe(“Message”,()=> {

it(“First Test”,()=> {

})

it(“Second Test”,()=> {

})

})

Inside each test case we can use more than one assertXXX function or library which help to test. Ie actual and expected output.

Simple testing for JavaScript program

First create the folder and then create package.json file using

npm init -y this command is use to create pckage.json file

npm install jest -D

test testing tool by default all testing file in \_\_test\_\_ folder.

Reat testing using JEST testing framework

create-react-app react-testing-app

ES5 style

fetch(“url”).then(res=>res.json()).then(res=>console.log(res)).catch(error=>console.log(error));

ES6 style

Async Function check(){

try{

let response =await fetch(url); await keyword replace then

let result = await response.json();

console.log(result);

}catch(exp){

}

}

Next.JS Framework

React JS Vs Next.JS

React JS is component base library which help to create client side rendering application.

Next.js is an open source web framework base upon the react which help to do server side rendering. Using Next.JS we can achieve SEO (Search Engine Optimization). Routing, Data fetching, static files loading , images loading etc.

Next.JS each component we can invoke as router path.

In Next JS each component consider as page which return some data to as response.

npm intall -g create-next-app

create-next-app

or

npx create-next-app