Day 2

Node JS provided tool kit

As

npm (node package manager)

npx (node package extension)

node --version

npm --version

npx --version

creating react js project using npx command

npx create-react-app welcome-app

welcome-app is project name you can write anything depending upon your requirements.

It create the project. After downloaded all file and folder you need to move inside a project directly using the command as

cd welcome-app

npm start this command is use to run the project

In JS Normal function return variable name of any type.

But in React JS function return JSX (JavaScript and XML or JavaScript and Extension). It means it can return dynamic html code. Generally if we wan to write any html code inside a normal JS file we need write in document.write(“<h1>Welcome</h1>”). But in React JS we can return html code that html can be static dynamic using JSX concept.

In Simple Every function which generally known as component which return DOM or html code using JSX concept.

In React, we can create the component using function. Every component return DOM(JSX). Using Component we create user defined tag and those tag return DOM or JSX code.

In JSX if we want to access any variable value we need to use inside {}.

Syntax

{variableName}

In React We can create component using

1. Function style
2. Arrow style
3. Class style

npx create-react-app react-component-style

here react-component-style is project name

cd react-component-style

open the project in VS Code

npm start to run the project

React component contains two types of variables.

1. state : state variable is use to describe the behaviour of react component. state variable also known as mutable variable means we can change the value of state variable. State variable is local to that component where it declared.
2. props : props variable are known as immutable variables means we can’t change value. Using props we can pass the value from one component to another component depending upon component relationship.

Types of components

In React component mainly divided into 2 types.

1. State less components : Old version in react using function style component generally known as state less component because Function style component didn’t support state variable.
2. State full components. Class style component generally known as state full components.

React hooks . New version react provided lot of hook. Using some hook function we can create state variable in function style component also.

Without react hook function style component is known as state less component with react hook function style component is known as state full components.

Arrow style component state less component. Arrow style component taken props as parameter and return JSX.

React state variable : state variable is use to describe the component behaviour. In React function style we can declare state variable using react hook.

useState() useState is a type of hook function which help to create state variable in function component. while using useState() hook we need to import this hook from react module.(module is a collection of function, classes, variable etc).

state variable can be

primitive type : string, number, Boolean (which can hold only one value)

array type : more than one value

object type : of customer, employee, order, product

array object type : array of customer, array employee etc.

npx create-react-app react-state-variable

cd react-state-variable

open this project in VS Code

npm start

syntax to declare state variable

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

let [id,setId]=useState(100); // state variable

let srno =100; // local variable

here id is variable and setId is a function which help to change the value. We can change the value base upon some events.

If variable is Boolean value we need to use ternary operator

condition?trueBlock:falseBlock