**MODULE-3 REACT JS**

**Q-1 What is React Js?**

**Ans. :** React is a JavaScript library developed by Facebook which, among other things, was used to build Instagram.com. It aims to allow developers to create fast user interfaces for websites and applications alike easily.

**Q-2 What is NPM in React Js?**

**Ans.:** NPM is short for node package manager, an online directory that contains the various already registered open-source packages.

**Q-3 What is Role of Node Js in react Js?**

**Ans.:** React nodes are basically equivalent to DOM nodes. To simplify, we can just talk about them as generic 'nodes. ' A node is the basic building block of a web page. All HTML elements ( div , a , p ) are nodes, as well as document , text, attributes...

**Q-4 What is CLI command In React Js?**

**Ans.:** CLI is stands forcommand-line interface. However, these CLI commands are currently only used to create a passable version of a react application using the command line.

**Q-5 What is Components in React Js?**

**Ans.:** Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML. Components come in two types, Class components and Function components.

1.Functional components:

// Functional Component

function Greeting(props) {

  return <div>Hello, {props.name}!</div>;

}

2.Class components:

// Class Component

class Counter extends React.Component {

  constructor(props) {

    super(props);

    this.state = { count: 0 };

  }

  increment = () => {

    this.setState({ count: this.state.count + 1 });

  };

  render() {

    return (

      <div>

        <p>Count: {this.state.count}</p>

        <button onClick={this.increment}>Increment</button>

      </div>

    );

  }

}

**Q-6 What is Header and Content Components in React Js?**

**Ans.:** The header-content layout allows you to design pages with visually-distinct header and content zones.

**Header :**

import React from 'react';

const Header = () => {

  return (

    <header>

      <h1>My React App</h1>

    </header>

  );

};

export default Header;

Content:

import React from 'react';

const Content = () => {

  return (

    <div>

      <h2>Welcome to the Content</h2>

    </div>

  );

};

export default Content;

**Q-7 How to install React Js on Windows, Linux Operating System? How to Install NPM and How to check version of NPM?**

**Ans.:**  1.node -v

2.npm -v

3.npm -g install create-react-app

4.create-react-app appname

**Q-8 How to check version of React Js?**

**Ans.:**

* In NPM,

**npm show react version**

* Check React DevTools:

1. Open your browser's DevTools (usually by pressing **F12** or right-clicking on the page and selecting "Inspect").
2. Go to the "React" or "Components" tab.
3. At the top of the React DevTools panel, you will see the React version.

**Q-9 How to change in components of React Js?**

**Ans.:** setState() enqueues changes to the component state and tells React that this component and its children need to be re-rendered with the updated state. This is the primary method you use to update the user interface in response to event handlers and server responses.

**Q-10 How to Create a List View in React Js?**

**Ans.:**

import React from 'react'

function Car(props){

    return <li>I am a {props.brand}</li>

}

export default function Listrenders() {

    const cars = ['ford','bmw','kia']

  return (

    <>

        <ul>

            {cars.map((car) => <Car brand={car}/>)}

        </ul>

    </>

  )

}

**Q-11 Create Increment decrement state change by button click?**

**Ans.:**

import React, { useState } from 'react'

const Counter = () => {

  const [count, setCount] = useState(0)

  return (

    <>

    <div>

      <h1>Number : {count}</h1>

      <div>

        <button onClick={() => setCount((count) => count + 1)}>Increment</button>

        <button onClick={() => setCount((count) => count - 1)}>Decrement</button><br></br>

        <button onClick={() => setCount((count) => count = 0)}>Reset</button>

      </div>

    </div>

    </>

  )

}

export default Counter