**WEEK-7\_ReactJs\_HOL-10**

**SUPERSET ID:6393674**

**1.Define JSX**

JSX (JavaScript XML) is a syntax extension for JavaScript used in React. It allows you to write HTML-like code inside JavaScript, making it easier to describe the UI structure. JSX gets compiled to React.createElement() calls by Babel.

**2.Explain about ECMA Script**

ECMA Script is the standard specification on which JavaScript is based. ES6 (ECMAScript 2015) introduced modern features like let, const, arrow functions, classes, and modules, which are widely used in React applications.

**3. Explain React.createElement()**

React.createElement() is a method used to create React elements without JSX. It takes three arguments: the type of element, its props, and children. JSX is just syntactic sugar for this method.

**4. Explain how to create React nodes with JSX**

React nodes are created in JSX using HTML-like tags inside JavaScript. These elements are translated into React elements by Babel.

**5. Define how to render JSX to DOM**

To render JSX to the DOM, we use the ReactDOM.createRoot() and .render() methods.

**Example:**

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(<App />);

This mounts the React component inside the HTML element with the id root.

**6.Explain how to use JavaScript expressions in JSX**

JavaScript expressions can be embedded in JSX using curly braces {}. You can insert variables, function calls, or any valid expression.

**Example:**

const name = "John";

<h1>Hello, {name}</h1>

**7. Explain how to use inline CSS in JSX**

Inline CSS in JSX is written using a JavaScript object where property names are camelCased.

**Example:** <h1 style={{ color: 'blue', fontSize: '20px' }}>Hello</h1>

**Create a React Application named “officespacerentalapp” which uses React JSX to create elements, attributes and renders DOM to display the page.**

**App.js**

import React from 'react';

import './App.css';

function App() {

const office = {

name: 'DBS',

rent: 50000,

address: 'Chennai',

image: 'https://media.istockphoto.com/id/1408466830/photo/office-lobby-area.jpg?s=612x612&w=0&k=20&c=QqRjzAFh3Ulkt\_GIivd4QGi66XtXMyZAZQgYwV-hqS4='

};

const rentStyle = {

color: office.rent < 60000 ? 'red' : 'green',

fontWeight: 'bold'

};

return (

<div style={{ padding: '20px', fontFamily: 'Arial' }}>

<h1>Office Space , at Affordable Range</h1>

<img

src={office.image}

alt="Office Space"

style={{ width: '400px', height: 'auto', display: 'block', margin: '20px 0' }}

/>

<p><strong>Name:</strong> {office.name}</p>

<p style={rentStyle}>Rent: Rs. {office.rent}</p>

<p><strong>Address:</strong> {office.address}</p>

</div>

);

}

export default App;

**OUTPUT:**

