**Objectives**

**Define JSX**

JSX (JavaScript XML) is a syntax extension for JavaScript that looks similar to HTML but is used inside React. It allows us to write HTML-like code directly within JavaScript, which React then transforms into JavaScript objects. JSX makes React code more readable and easier to write.

**Explain about ECMA Script**

ECMA Script (often written as ES) is the standardized specification for JavaScript maintained by ECMA International. It defines the core features and syntax of JavaScript. New versions (like ES6, ES7, etc.) introduce modern features such as arrow functions, “let”/’const”, template literals, destructuring, classes, modules, and more.

**Explain React.createElement()**

React.createElement() is a built-in React method that creates a React element (a plain JavaScript object) describing what should appear on the screen. JSX is simply a shorthand for calling React.createElement() with the element type, props, and children.

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

In JSX, React nodes can be created by writing HYML-like code directly in JavaScript. Each JSX tag corresponds to a React element. You can nest elements, use components, and pass attributes as props.

**Define how to render JSX to DOM**

To render JSX to the DOM, React provides the ReactDOM.createRoot() (or older ReactDOM.render()) method. We pass the JSX element and the JSX element and the root DOM node where we want it to appear.

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

We can embed JavaScript expressions inside JSX by wrapping them in curly braces {}. These can be variables, function calls, or any valid JavaScript expression.

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

In JSX, inline CSS is written as a JavaScript object inside double curly braces. The property names use camelCase instead of kebab-case.

**Codes:**

**App.js:**

import React from 'react';

const offices=[

  {

    name:'DBS',

    rent:50000,

    address:'chennai',

    img:'https://www.peerspace.com/resources/wp-content/uploads/los-angeles-modern-beverly-hills-office-1-1024x683.jpg'

  },

  {

    name:'Skyline Plaza',

    rent:75000,

    address:'Bengaluru',

    img:'https://images.squarespace-cdn.com/content/v1/5cbf44b101232c7b9bfb3a32/1560357296444-7ZG2UFGRAGGOGKREJHA4/OV+5.jpg?format=1500w'

  },

  {

    name:'Metro office',

    rent:60000,

    address:'Hyderabad',

    img:'https://content.instantoffices.com/sc/Prod/images/centres/1600width/118819/118819-808866.jpg',

  },

];

function **OfficeCard**({office}){

  const isAffordable=office.rent<60000;

  const rentColor=office.rent<60000?'red':'green';

  const label=isAffordable?'Affordable Office Space':'Office Space'

  return(

    <div

*style*={{

      border:'ipx solid #cc',

      padding:'1rem',

      marginBottom:'1rem',

      maxWidth:'500px',

    }}

    >

      <h2 *style*={{margin: '0 0 0.5rem' }}>{label}</h2>

      <img

*src*={office.img}

*alt*={`${office.name} office`}

*width*="200"

*height*="150"

*style*={{display:'block',objectFit:'cover',marginBottom:'0.5rem'}}

      />

      <div>

        <h3>Name: {office.name}</h3>

        <p *style*={{margin:'0.25rem 0'}}>

          <strong *style*={{color:rentColor}}>

            Rent: Rs. {office.rent.**toLocaleString**()}

          </strong>

        </p>

        <p *style*={{margin: '0.25rem 0'}}>Address: {office.address}</p>

      </div>

    </div>

  );

}

function **App**() {

  return (

    <div *style*={{padding:'1rem',fontFamily:'Segoe UI, system-ui, sans-serif'}}>

      <h1 *style*={{textAlign:'center'}}>Office Space, at Affordable Range</h1>

      {

        offices.**map**((office,idx)=>(

          <**OfficeCard** *key*={idx} *office*={office}/>

        ))

      }

    </div>

  );

}

export default **App**;

**Output:**



