**WEEK -7 REACT**

**1.Code:**

**CohortDetails.module.css**

.box {

width: 300px;

display: inline-block;

margin: 10px;

padding: 10px 20px;

border: 1px solid black;

border-radius: 10px;

}

dt {

font-weight: 500;

}

**CohortDetails.js**

import React from 'react';

import styles from './CohortDetails.module.css';

const CohortDetails = (props) => {

return (

<div className={styles.box}>

<h3 style={{ color: props.status === 'ongoing' ? 'green' : 'blue' }}>

{props.title}

</h3>

<dl>

<dt>Status:</dt>

<dd>{props.status}</dd>

<dt>Start Date:</dt>

<dd>{props.startDate}</dd>

<dt>End Date:</dt>

<dd>{props.endDate}</dd>

</dl>

</div>

);

};

export default CohortDetails;

**App.js**

import React from 'react';

import CohortDetails from './components/CohortDetails';

function App() {

return (

<div>

<CohortDetails

title="React Bootcamp"

status="ongoing"

startDate="2025-08-01"

endDate="2025-08-31"

/>

<CohortDetails

title="Node.js Training"

status="completed"

startDate="2025-07-01"

endDate="2025-07-31"

/>

</div>

);

}

export default App;

2.Code:

**Create React App**

bash

CopyEdit

npx create-react-app cricketapp

cd cricketapp

code .

**2. ListofPlayers.js (Uses map() and arrow functions)**

import React from 'react';

const ListofPlayers = () => {

const players = [

{ name: "Virat", score: 85 },

{ name: "Rohit", score: 60 },

{ name: "Gill", score: 75 },

{ name: "Rahul", score: 50 },

{ name: "Pant", score: 90 },

{ name: "Hardik", score: 55 },

{ name: "Jadeja", score: 88 },

{ name: "Ashwin", score: 77 },

{ name: "Shami", score: 45 },

{ name: "Bumrah", score: 65 },

{ name: "Surya", score: 91 }

];

const filteredPlayers = players.filter(player => player.score >= 70);

return (

<div>

<h2>Players with Score >= 70</h2>

<ul>

{filteredPlayers.map((player, index) => (

<li key={index}>{player.name} - {player.score}</li>

))}

</ul>

</div>

);

};

export default ListofPlayers;

**3. IndianPlayers.js (Uses destructuring & merging arrays)**

import React from 'react';

const IndianPlayers = () => {

const oddTeam = ["Virat", "Gill", "Pant", "Jadeja", "Shami"];

const evenTeam = ["Rohit", "Rahul", "Hardik", "Ashwin", "Bumrah", "Surya"];

// Destructuring the first two from oddTeam and rest

const [odd1, odd2, ...oddRest] = oddTeam;

const T20players = ["Dhoni", "Kohli", "Raina"];

const RanjiTrophyPlayers = ["Wasim Jaffer", "Pujara", "Rahane"];

// Merging using spread operator

const mergedPlayers = [...T20players, ...RanjiTrophyPlayers];

return (

<div>

<h2>Odd Team Players</h2>

<ul>

<li>{odd1}</li>

<li>{odd2}</li>

{oddRest.map((player, i) => <li key={i}>{player}</li>)}

</ul>

<h2>Even Team Players</h2>

<ul>

{evenTeam.map((player, i) => <li key={i}>{player}</li>)}

</ul>

<h2>Merged T20 + Ranji Trophy Players</h2>

<ul>

{mergedPlayers.map((player, i) => <li key={i}>{player}</li>)}

</ul>

</div>

);

};

export default IndianPlayers;

**4. App.js (Handles conditional rendering using flag)**

import React from 'react';

import ListofPlayers from './ListofPlayers';

import IndianPlayers from './IndianPlayers';

function App() {

const flag = true; // Change this to false to see other component

return (

<div className="App">

<h1>Welcome to Cricket App</h1>

{flag ? <ListofPlayers /> : <IndianPlayers />}

</div>

);

}

export default App;

**5. Run the App**

npm start

**3.Code:**

**1. Create React App**

npx create-react-app officespacerentalapp

cd officespacerentalapp

code .

**2. Replace App.js with this code:**

import React from 'react';

function App() {

//Page heading using JSX

const heading = <h1 style={{ textAlign: 'center', color: '#333' }}>Office Space Rentals</h1>;

// Image with JSX attribute

const imageURL = 'https://via.placeholder.com/400x200?text=Office+Space';

const image = <img src={imageURL} alt="Office Space" style={{ width: '100%', marginBottom: '20px' }} />;

// Object of one office space

const office = {

name: 'Tech Park Tower',

rent: 55000,

address: '123 Business Bay, Chennai'

};

// List of multiple office spaces

const officeList = [

{ name: 'Tech Park Tower', rent: 55000, address: '123 Business Bay, Chennai' },

{ name: 'Skyline Hub', rent: 75000, address: '456 IT Highway, Bangalore' },

{ name: 'StartUp Nest', rent: 60000, address: '789 Silicon Valley, Hyderabad' },

{ name: 'Innovation Plaza', rent: 45000, address: '321 Future Zone, Pune' }

];

return (

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

{heading}

{image}

<h2>Featured Office</h2>

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

<p>

<strong>Rent:</strong>

<span style={{ color: office.rent < 60000 ? 'red' : 'green' }}> ₹{office.rent}</span>

</p>

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

<hr />

<h2>Available Offices</h2>

{officeList.map((item, index) => (

<div key={index} style={{

border: '1px solid #ccc',

padding: '10px',

margin: '10px 0',

borderRadius: '5px'

}}>

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

<p>

<strong>Rent:</strong>

<span style={{ color: item.rent < 60000 ? 'red' : 'green' }}> ₹{item.rent}</span>

</p>

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

</div>

))}

</div>

);

}

export default App;

**3. Run the App**

npm start

**4.Code**

**1. Set up your app**

npx create-react-app eventexamplesapp

cd eventexamplesapp

code .

2. Replace App.js with the following code:

import React, { Component } from 'react';

import CurrencyConvertor from './CurrencyConvertor';

class App extends Component {

constructor(props) {

super(props);

this.state = {

count: 0

};

// Bind methods

this.increment = this.increment.bind(this);

this.sayHello = this.sayHello.bind(this);

this.handleIncrease = this.handleIncrease.bind(this);

this.sayWelcome = this.sayWelcome.bind(this);

this.handleClick = this.handleClick.bind(this);

}

increment() {

this.setState(prevState => ({ count: prevState.count + 1 }));

}

sayHello() {

console.log("Hello! This is a static message.");

}

handleIncrease() {

this.increment();

this.sayHello();

}

decrement = () => {

this.setState(prevState => ({ count: prevState.count - 1 }));

};

sayWelcome(message) {

alert(message);

}

handleClick(event) {

// Synthetic event handling

alert("I was clicked");

console.log("Synthetic Event Object:", event);

}

render() {

return (

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

<h1>React Event Handling Lab</h1>

<h2>Counter: {this.state.count}</h2>

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

<button onClick={this.decrement}>Decrement</button>

<hr />

<button onClick={() => this.sayWelcome("Welcome!")}>Say Welcome</button>

<hr />

<button onClick={this.handleClick}>OnPress</button>

<hr />

<CurrencyConvertor />

</div>

);

}

}

export default App;

Create CurrencyConvertor.js inside src/:

import React, { Component } from 'react';

class CurrencyConvertor extends Component {

constructor(props) {

super(props);

this.state = {

rupees: '',

euro: ''

};

this.handleChange = this.handleChange.bind(this);

this.handleSubmit = this.handleSubmit.bind(this);

}

handleChange(event) {

this.setState({ rupees: event.target.value });

}

handleSubmit(event) {

event.preventDefault(); // Prevent page reload

const euroRate = 0.011; // Assume 1 INR = 0.011 EUR

const converted = this.state.rupees \* euroRate;

this.setState({ euro: converted.toFixed(2) });

}

render() {

return (

<div>

<h2>Currency Convertor</h2>

<form onSubmit={this.handleSubmit}>

<label>

Enter amount in ₹:

<input type="number" value={this.state.rupees} onChange={this.handleChange} />

</label>

<button type="submit">Convert</button>

</form>

{this.state.euro && <p>Converted to €: {this.state.euro}</p>}

</div>

);

}

}

export default CurrencyConvertor;

**5.Code:**

**Create React App**

npx create-react-app ticketbookingapp

cd ticketbookingapp

code .

**Replace App.js with the following code:**

import React, { Component } from 'react';

import GuestPage from './GuestPage';

import UserPage from './UserPage';

class App extends Component {

constructor(props) {

super(props);

this.state = {

isLoggedIn: false

};

}

handleLogin = () => {

this.setState({ isLoggedIn: true });

};

handleLogout = () => {

this.setState({ isLoggedIn: false });

};

render() {

let page;

let button;

// Element Variables and Conditional Rendering

if (this.state.isLoggedIn) {

page = <UserPage />;

button = <button onClick={this.handleLogout}>Logout</button>;

} else {

page = <GuestPage />;

button = <button onClick={this.handleLogin}>Login</button>;

}

return (

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

<h1> Ticket Booking App</h1>

{button}

<hr />

{page}

</div>

);

}

}

export default App;

**Create GuestPage.js in src/**

import React from 'react';

const GuestPage = () => {

return (

<div>

<h2>Welcome, Guest!</h2>

<p>You can view flight details but need to login to book tickets.</p>

<ul>

<li>Chennai → Delhi : ₹4500</li>

<li>Hyderabad → Mumbai : ₹3500</li>

<li>Bangalore → Kolkata : ₹5000</li>

</ul>

</div>

);

};

export default GuestPage;

**Create UserPage.js in src/**

import React from 'react';

const UserPage = () => {

return (

<div>

<h2>Welcome, User!</h2>

<p>You can now book tickets.</p>

<button>Book Chennai → Delhi</button><br /><br />

<button>Book Hyderabad → Mumbai</button><br /><br />

<button>Book Bangalore → Kolkata</button>

</div>

);

};

export default UserPage;

**6.Code:**

**Step 1: Create React App**

bash

CopyEdit

npx create-react-app bloggerapp

cd bloggerapp

code .

**Step 2: Create Component Files**

In the src/ directory, create 3 files:

* BookDetails.js
* BlogDetails.js
* CourseDetails.js

**BookDetails.js**

import React from 'react';

const BookDetails = ({ books }) => {

return (

<div>

<h2> Book Details</h2>

{books.length === 0 ? (

<p>No books found.</p>

) : (

<ul>

{books.map((book, index) => (

<li key={index}>

<strong>{book.title}</strong> by {book.author}

</li>

))}

</ul>

)}

</div>

);

};

export default BookDetails;

**BlogDetails.js**

import React from 'react';

const BlogDetails = ({ blogs }) => {

return (

<div>

<h2>Blog Posts</h2>

{blogs.length > 0 && blogs.map((blog, i) => (

<div key={i}>

<h4>{blog.title}</h4>

<p>{blog.content}</p>

<hr />

</div>

))}

</div>

);

};

export default BlogDetails;

**✅ CourseDetails.js**

import React from 'react';

const CourseDetails = ({ courses }) => {

return (

<div>

<h2>🎓 Course Details</h2>

{courses.map((course, id) =>

course.published ? (

<div key={id}>

<p>

<strong>{course.name}</strong> - {course.duration}

</p>

</div>

) : null

)}

</div>

);

};

export default CourseDetails;

**Replace App.js with:**

import React, { useState } from 'react';

import BookDetails from './BookDetails';

import BlogDetails from './BlogDetails';

import CourseDetails from './CourseDetails';

function App() {

const [view, setView] = useState('books');

const books = [

{ title: 'Atomic Habits', author: 'James Clear' },

{ title: 'Deep Work', author: 'Cal Newport' }

];

const blogs = [

{ title: 'React Tips', content: 'Learn how to manage state with hooks' },

{ title: 'JavaScript Tricks', content: 'Use map, filter, and reduce wisely' }

];

const courses = [

{ name: 'React Basics', duration: '4 weeks', published: true },

{ name: 'Node.js Mastery', duration: '6 weeks', published: false },

{ name: 'Full Stack Dev', duration: '8 weeks', published: true }

];

let content;

// Conditional Rendering via if-else

if (view === 'books') {

content = <BookDetails books={books} />;

} else if (view === 'blogs') {

content = <BlogDetails blogs={blogs} />;

} else if (view === 'courses') {

content = <CourseDetails courses={courses} />;

} else {

content = <p>Select a view</p>;

}

return (

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

<h1> Blogger App</h1>

{/\* Conditional rendering via ternary \*/}

<p>{view === 'books' ? 'Viewing Books' : `Viewing ${view}`}</p>

<div style={{ marginBottom: '20px' }}>

<button onClick={() => setView('books')}>Books</button>{' '}

<button onClick={() => setView('blogs')}>Blogs</button>{' '}

<button onClick={() => setView('courses')}>Courses</button>

</div>

{/\* Render selected content \*/}

{content}

</div>

);

}

export default App;