**Module-13) React - Applying Redux**

**File 1: ChecklistContext.js**

jsx

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// ChecklistContext.js

import React, { createContext, useState } from 'react';

// Create Context

export const ChecklistContext = createContext();

// Context Provider

export const ChecklistProvider = ({ children }) => {

// Business Logic: Manage selected items globally

const [selectedItems, setSelectedItems] = useState([]);

// Business Logic: Update selected items based on checkbox status

const toggleItem = (item) => {

setSelectedItems(prev =>

prev.includes(item)

? prev.filter(i => i !== item) // Remove if unchecked

: [...prev, item] // Add if checked

);

};

return (

<ChecklistContext.Provider value={{ selectedItems, toggleItem }}>

{children}

</ChecklistContext.Provider>

);

};

**📁 File 2: Checklist.js**

jsx

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// Checklist.js

import React, { useContext } from 'react';

import { ChecklistContext } from './ChecklistContext';

// Sample checklist items

const checklistOptions = ['React', 'JavaScript', 'Node.js', 'CSS', 'HTML'];

const Checklist = () => {

// Access context values

const { selectedItems, toggleItem } = useContext(ChecklistContext);

// Handler for checkbox change

const handleChange = (event) => {

const item = event.target.name;

toggleItem(item); // Trigger context update

console.log(`${item} has been ${event.target.checked ? 'checked' : 'unchecked'}`);

};

return (

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

<h2>📋 Select Your Skills</h2>

{/\* Business Logic: Render checkboxes \*/}

{checklistOptions.map((option) => (

<div key={option}>

<label>

<input

type="checkbox"

name={option}

checked={selectedItems.includes(option)}

onChange={handleChange}

/>

{` ${option}`}

</label>

</div>

))}

{/\* Display selected options \*/}

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

<h3>✅ Selected:</h3>

{selectedItems.length > 0 ? (

<ul>

{selectedItems.map((item) => (

<li key={item}>{item}</li>

))}

</ul>

) : (

<p>No options selected.</p>

)}

</div>

</div>

);

};

export default Checklist;

**📁 File 3: App.js**

jsx

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// App.js

import React from 'react';

import Checklist from './Checklist';

import { ChecklistProvider } from './ChecklistContext';

function App() {

return (

// Wrap app with context provider

<ChecklistProvider>

<div className="App">

<Checklist />

</div>

</ChecklistProvider>

);

}

export default App;