**TASK 8 – SHOPPING CART**

**Create a class component to simulate a basic shopping cart.**

**Use an array of objects in the state to represent items, each with a name, price, and quantity.**

**Implement functions to add items, remove items, and update item quantities.**

**Display the total price of all items in the cart.**

import React, { Component } from 'react'

export default class ShoppingCart extends Component {

    constructor(props) {

      super(props)

      this.state = {

         items:[]}}

    addItem = () =>{

        const newItem = {

            name: `Item ${this.state.items.length +1}`,

            price: Math.floor(Math.random()\*100)+1,

            quantity:1  }

        this.setState({

            items:[...this.state.items, newItem] })}

    updateItem = (index,quantity) =>{

        const updatedItems =[...this.state.items]

        updatedItems[index].quantity = quantity

        this.setState({

            items: updatedItems })}

    removeItem = (index) =>{

       const updatedItems =[...this.state.items]

       updatedItems.splice(index,1)

       this.setState({

            items: updatedItems })}

    calculatedPrice = () =>{

        return this.state.items.reduce((total,item)=>

        total+item.price\*item.quantity,0

        ).toFixed(2)

}

  render() {

    return (

      <div className='container mt-3'>

        <h2>Shopping Cart</h2>

        <button className='btn btn-primary mb-3' onClick={this.addItem}>Add Item</button>

        {this.state.items.length >0 ?(

            <ul className='list-group'>

                {this.state.items.map((item,index) =>(

                    <li key={index} className='list-group-item d-flex justify-content-between align-items-center'>

                        {item.name} - {item.price}

                        <input

                            type='number'

                            value={item.quantity}

                            min='1'

                            className='ml-2'

                            onChange={(e)=>this.updateItem(index,parseInt(e.target.value))}></input>

                            <button className='btn btn-danger btn-sm ml-3' onClick={()=>this.removeItem(index)}>Remove</button>

                    </li>

                ))}

            </ul>

        ):<p>No Items in cart</p>

        }

        <h4 className='mt-3'>Total: ${this.calculatedPrice()}</h4>

      </div>

    )}}

**OUTPUT:**

