

## UCS 2611 Internet Programming Lab

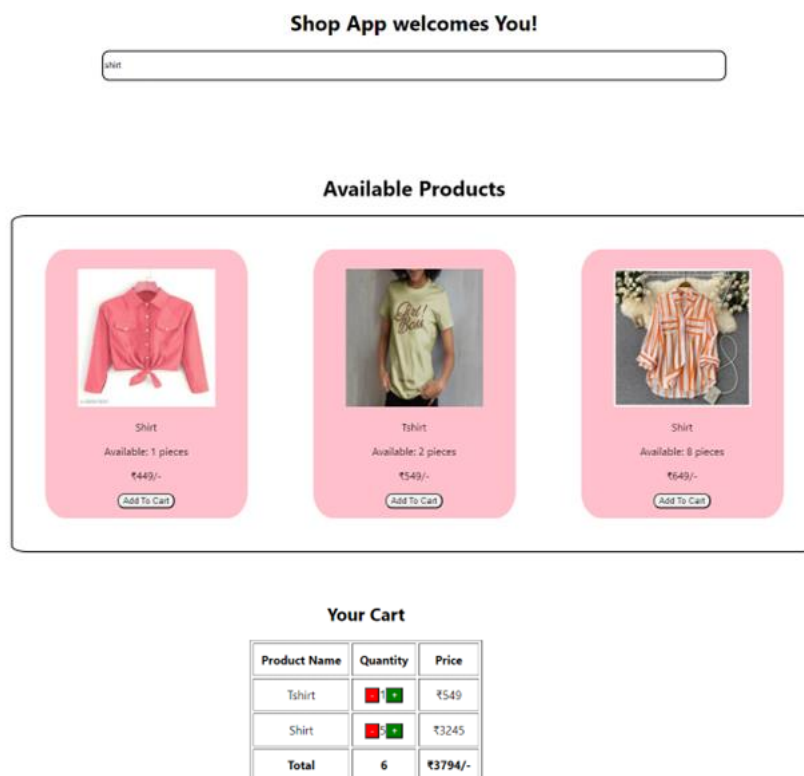
### Exercise 11. Online Shopping Application using ReactJS

Develop an Online Shopping Application to enable the users to order the products. [CO2, K3]

This Application contains necessary components namely, *App*, *Show*, and *Cart*. The *App* Component ensures maintaining the data related to products and the necessary functions. *Show* Component helps to show the details of the products to the users based on the input. *Cart* component is responsible for maintaining the data the user wishes to purchase.

Application has the following:

- The parent component App hosts the other components.
- Maintain the details of the products in the App component
- Define necessary functionalities in the required components to display the shopping cart application looks like below:



Best Practices to be followed:

1. Design before coding
2. Incremental coding
3. Usage of proper naming convention
4. Usage of Comments to the code
5. Indentation of code

**Program code:**

**index.js**

```
import React from 'react';  
import ReactDOM from 'react-dom/client';  
import './index.css';  
import App from './App';  
  
const root = ReactDOM.createRoot(document.getElementById('root'));  
root.render(  
  <React.StrictMode>  
    <App />  
  </React.StrictMode>  
);
```

**index.css**

```
body {  
  margin: 0;  
  
  font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', 'Roboto', 'Oxygen',  
    'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', 'Helvetica Neue',  
    sans-serif;  
  
  /* background-image: url("https://cdn.vectorstock.com/i/preview-1x/10/32/mobile-app-courier-  
delivering-online-shop-order-vector-41701032.jpg"); */  
  
  /* Add other background properties like background-size, background-position if needed */  
}  
  
code {  
  font-family: source-code-pro, Menlo, Monaco, Consolas, 'Courier New',  
    monospace;  
}  
  
p{  
  color: blue;
```

```
}
```

### Item.js

```
export default function Item({ name, quantity, price, result, setResult, image }) {  
  function addCart() {  
    const updatedResult = [...result, { name, quantity, price }];  
    console.log(result);  
    setResult(updatedResult);  
  }  
  
  return (  
    <div className="item">  
      <img  
        src={image} // Provide image path directly  
        alt="Unavailable"  
        className="image"  
      />  
      <p>{name}</p>  
      <p>Available: {quantity} pieces</p>  
      <p>₹{price}</p>  
      <button onClick={() => addCart()}>Add to Cart</button>  
    </div>  
  );  
}
```

### Header.js

```
import './App.css'  
  
export default function Header({ onItemChange }) {  
  return(  

```

```
<div>

  <h1>Shop App welcomes You!</h1>

  <input type="text" id="searchInput" onChange={(e) => {
    onItemChange(e.target.value);
  }}></input>

</div>

)
}
```

### App.js

```
import "./App.css";
import Header from "./Header";
import { useState } from "react";
import Item from "./Item";

const data = [
  {
    item: "Woodland Shoe",
    quantity: 1,
    price: 3999,
    image: "https://5.imimg.com/data5/GC/RA/OP/SELLER-92764478/mens-woodland-shoes.jpg"
  },
  {
    item: "Adidas Shoe",
    quantity: 2,
    price: 2999,
    image: "https://authentic-shoes.com/wp-content/uploads/2023/04/fy4976_b2b5f917c961485fbf74b55c9f431a32.png"
  },
  {
    item: "Puma Shoe",
    quantity: 3,
```

```
    price: 2499,  
  
    image:  
    "https://5.imimg.com/data5/ANDROID/Default/2023/12/366916351/TD/SL/OS/19051907/product-  
jpeg.jpeg"  
  },  
];
```

```
function App() {  
  const [item, setItem] = useState("");  
  const filteredResult =  
    item === ""  
    ? data  
    : data.filter(function (ele) {  
      return ele.item === item;  
    });
```

```
  const [result, setResult] = useState([]);
```

```
  const incrementQuantity = (index) => {  
    const updatedResult = [...result];  
    updatedResult[index].quantity++;  
    setResult(updatedResult);  
  };
```

```
  const decrementQuantity = (index) => {  
    const updatedResult = [...result];  
    if (updatedResult[index].quantity > 1) {  
      updatedResult[index].quantity--;  
      setResult(updatedResult);  
    }  
  };
```

```
return (  
  <div className="App">  
    <div>  
      <Header onItemChange={setItem} />  
    </div>  
    <div>  
      <h1>Available Products</h1>  
      <div className="mainFrame">  
        {filteredResult.map((ele) => {  
          return (  
            <Item  
              key={ele.item}  
              name={ele.item}  
              price={ele.price}  
              quantity={ele.quantity}  
              setResult={setResult}  
              result={result}  
              image={ele.image}  
            />  
          );  
        })}  
      </div>  
    </div>  
    <div>  
      <h1>Your Cart</h1>  
      <table id="cartTable" border="1">  
        <thead>  
          <tr>  
            <th>Product Name</th>  
            <th>Quantity</th>  
            <th>Price</th>
```

```
        </tr>
    </thead>
    <tbody>
        {result.map((ele, index) => {
            return (
                <tr key={ele.name}>
                    <td>{ele.name}</td>
                    <td id="button--quantity">
                        <button onClick={() => decrementQuantity(index)}>-</button>
                        <p>{ele.quantity}</p>
                        <button onClick={() => incrementQuantity(index)}>+</button>
                    </td>
                    <td>{ele.price * ele.quantity}</td>
                </tr>
            );
        })}
    </tbody>
    <tfoot>
        <th>Total</th>
        <th>
            {result.reduce((acc, ele) => {
                return acc + ele.quantity;
            }, 0)}
        </th>
        <th>
            {result.reduce((acc, ele) => {
                return acc + ele.quantity * ele.price;
            }, 0)}
        </th>
    </tfoot>
</table>
```

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06-05-2024

M. Rohith  
3122 21 5001 085

```
    </div>
  </div>
);
}
```

```
export default App;
```

### **App.css**

```
*{
  box-sizing: border-box;
}

.App {
  text-align: center;
}

#searchInput{
  width: 50rem;
  border-top-left-radius: 10px;
  border-top-right-radius: 10px;
  border-bottom-left-radius: 10px;
  border-bottom-right-radius: 10px;
  border: 2px solid black;
  height: 20px;
  margin-bottom: 2rem;
}
```

```
.mainFrame{
  height: 40rem;
  width: 100rem;
```



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```
border: 2px solid black;  
  
margin: auto;  
  
display: flex;  
  
justify-content: space-evenly;  
  
align-items: center;  
  
}
```

```
.item{  
  
width: 25rem;  
  
height: 30rem;  
  
background-color: yellowgreen;  
  
border-radius: 20px;  
  
padding: 20px;  
  
margin: 10px;  
  
}
```

```
.image{  
  
margin-top: 20px;  
  
width: 200px;  
  
height: 200px;  
  
  
  
}
```

```
.item button{  
  
background-color: white;  
  
color: black;  
  
border: 1px solid black;
```

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```
border-radius: 10px;  
padding: 5px;  
margin: 10px;  
cursor: pointer;  
}
```

```
#cartTable{  
margin: auto;  
/* padding: 10px; */  
}
```

```
#cartTable th{  
/* text-align: center; */  
padding: 10px;  
width: 33%;  
}
```

```
#button--quantity{  
display: flex;  
justify-content: space-evenly;  
align-items: center;  
}
```

```
#button--quantity button{  
display: flex;  
justify-content: center;  
align-items: center;  
width: 20px;
```

```
height: 20px;

background-color: rgb(245, 74, 74);

cursor: pointer;

}
```

```
h1{

color: red;

}
```

```
th{


color:blue;

}
```

Output:

Shop App welcomes You!

Available Products




Woodland Shoe

Available: 1 pieces

₹3999

Add to Cart




Adidas Shoe

Available: 2 pieces

₹2999

Add to Cart



Puma Shoe

Available: 3 pieces

₹2499

Add to Cart

Your Cart

Product Name	Quantity	Price
Total	0	0

## Shop App welcomes You!

Woodland Shoe

### Available Products



Woodland Shoe

Available: 1 pieces

₹3999

Add to Cart

### Your Cart

Product Name	Quantity	Price
Total	0	0

## Shop App welcomes You!

### Available Products



Woodland Shoe

Available: 1 pieces

₹3999

Add to Cart



Adidas Shoe

Available: 2 pieces

₹2999

Add to Cart



Puma Shoe

Available: 3 pieces

₹2499


Add to Cart

### Your Cart


Product Name	Quantity	Price
Woodland Shoe	<input type="text" value="1"/>	3999
Adidas Shoe	<input type="text" value="2"/>	5998
Puma Shoe	<input type="text" value="3"/>	7497
Total	6	17494

Shop App welcomes You!


### Available Products



Woodland Shoe  
Available: 1 pieces  
₹3999  
[Add to Cart](#)



Adidas Shoe  
Available: 2 pieces  
₹2999  
[Add to Cart](#)



Puma Shoe  
Available: 3 pieces  
₹2499  
[Add to Cart](#)

### Your Cart

Product Name	Quantity	Price
Woodland Shoe	<div><div></div>4<div></div></div>	15996
Adidas Shoe	<div><div></div>5<div></div></div>	14995
Puma Shoe	<div><div></div>6<div></div></div>	14994
Total	15	45985