Unit 6

BUILD SINGLE PAGE APPLICATION (Session: 5 AND 6)

Step 1: Inside you directory, execute the following command:

        npx create-react-app shopping-cart

This will allow us to create the basic structure of a React app. Now let's get inside our new directory and run the project on a *localhost*:

            cd shopping-cart
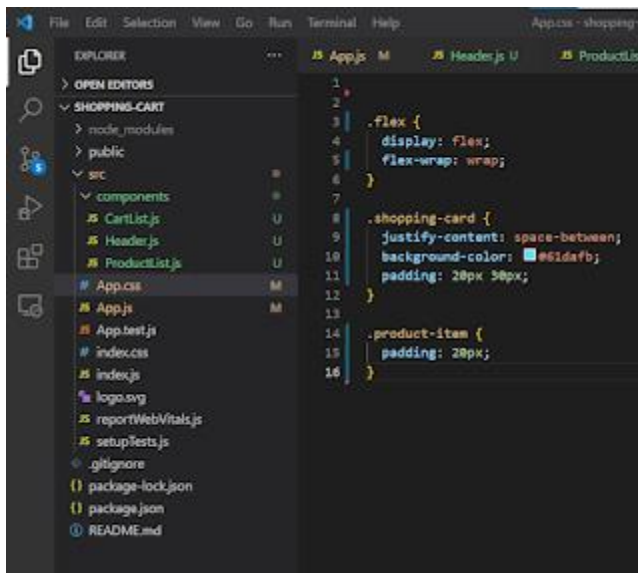
        npm start

Note: Delete files App.css and index.css from project, also remove them from the index.js and App.js files.

Install react router by typing below command in terminal.

        npm install react-router-dom

Step 2: Let's create a new folder called components, the folder structure should be containing three files in components folder as below :

Step 3: In App.js add the following code:

```
import "./App.css";
import Header from "./components/Header";
import ProductList from "./components/ProductList";
```

```
import CartList from "./components/CartList";
import { useState } from "react";


function App() {
  const [product, setProduct] = useState([
    {
      url: "https://picsum.photos/id/21/3008/2008 ",
      name: "TRQ White Shoes",
      category: "Shoes",
      seller: "AMZ Seller Ghz",
      price: 1999,
    },
    {
      url:    "https://5.imimg.com/data5/KC/PC/MY-38629861/dummy-
chronograph-watch-500x500.jpg",
      name: "LOREM Watch Black",
      category: "Watches",
      seller: "Watch Ltd Siyana",
      price: 2599,
    },
    {
      url: "https://picsum.photos/id/180/2400/1600",
      name: "AMZ Laptop 8GB RAM",
      category: "Laptops",
      seller: "Delhi Laptops",
      price: 50000,
    },
    {
      url: "https://picsum.photos/id/111/4400/2656",
      name: "Old Car",
```

```
      category: "Car",

      seller: "Camron LTD",

      price: 40000,

    },

    {

      url: "https://picsum.photos/id/30/367/267",

      name: "Mug",

      category: "Mug",

      seller: "Mug Ltd",

      price: 20,

    },

    {

      url: "https://picsum.photos/id/152/367/267",

      name: "Colourful Flowers",

      category: "Flowers",

      seller: "ABS Ltd",

      price: 100,

    },

  ]);


  const [cart, setCart] = useState([]);

  const [showCart, setShowCart] = useState(false);


  const addToCart = (data) => {

    setCart([...cart, { ...data, quantity: 1 }]);

  };

  const handleShow = (value) => {

    setShowCart(value);

  };

  return (
```

```jsx
  <div>
    <Header count={cart.length} handleShow={handleShow}></Header>
    {showCart ? (
      <CartList cart={cart}></CartList>
    ) : (
<ProductList                                    product={product}
addToCart={addToCart}></ProductList>
    )}
  </div>
 );
}
export default App;
```

Step 4: In App.css add the following css :

```css
.flex {
  display: flex;
  flex-wrap: wrap;
}
.shopping-card {
  justify-content: space-between;
  background-color: #61dafb;
  padding: 20px 30px;
}
.product-item {
  padding: 20px;
}
```

Step 5: In Header.js use the following code to show cart product count :

```jsx
import '../App.css';
function Header(props) {
```

```jsx
   return (
      <div className='flex shopping-card'>
         <div onClick={() => props.handleShow(false)} >Shopping Cart
App</div>
         <div onClick={() => props.handleShow(true)}> Cart
            <sup> {props.count} </sup>
         </div>
      </div>
   );
}
export default Header;
```

Step 6: In ProductList.js file loop over the array of objects that we get as a prop from the App component

```jsx
import '../App.css';
function ProductList({ product,addToCart }) {
   return (
      <div className='flex'>
         {
            product.map((productItem, productIndex) => {
               return (
                  <div style={{ width: '33%' }}>
                     <div className='product-item'>
                        <img src={productItem.url} width="100%" />
                        <p>{productItem.name} | {productItem.category} </p>
                        <p> {productItem.seller} </p>
                        <p> Rs. {productItem.price} /-</p>
                        <button
                           onClick={() => addToCart(productItem)}
                        >Add To Cart</button>
```

```
                    </div>
                </div>
            )
        })
    }
    </div>
  )
}
export default ProductList
```

Step 7: And finally in CartList.js :

```
import { useEffect, useState } from 'react';
import '../App.css';
function CartList({ cart }) {
  const [CART, setCART] = useState([])
  useEffect(() => {
    setCART(cart)
  }, [cart])
  return (
    <div>
      {
        CART?.map((cartItem, cartindex) => {
          return (
            <div>
              <img src={cartItem.url} width={40} />
              <span> {cartItem.name} </span>
              <button
                onClick={() => {
                    const _CART = CART.map((item, index) => {
```

```
                    return cartindex === index ? { ...item, quantity:
item.quantity > 0 ? item.quantity - 1 : 0 } : item
                  })
                  setCART(_CART)
                }}
              >-</button>
              <span> {cartItem.quantity} </span>
              <button
                onClick={() => {
                  const _CART = CART.map((item, index) => {
                    return cartindex === index ? { ...item, quantity:
item.quantity + 1 } : item
                  })
                  setCART(_CART)
                }}
              >+</button>
              <span> Rs. {cartItem.price * cartItem.quantity} </span>
            </div>
          )
        })
      }
      <p> Total  <span></span>
        {
          CART.map(item => item.price * item.quantity).reduce((total,
value) => total + value, 0)
        }
      </p>
    </div >
  )
}
```
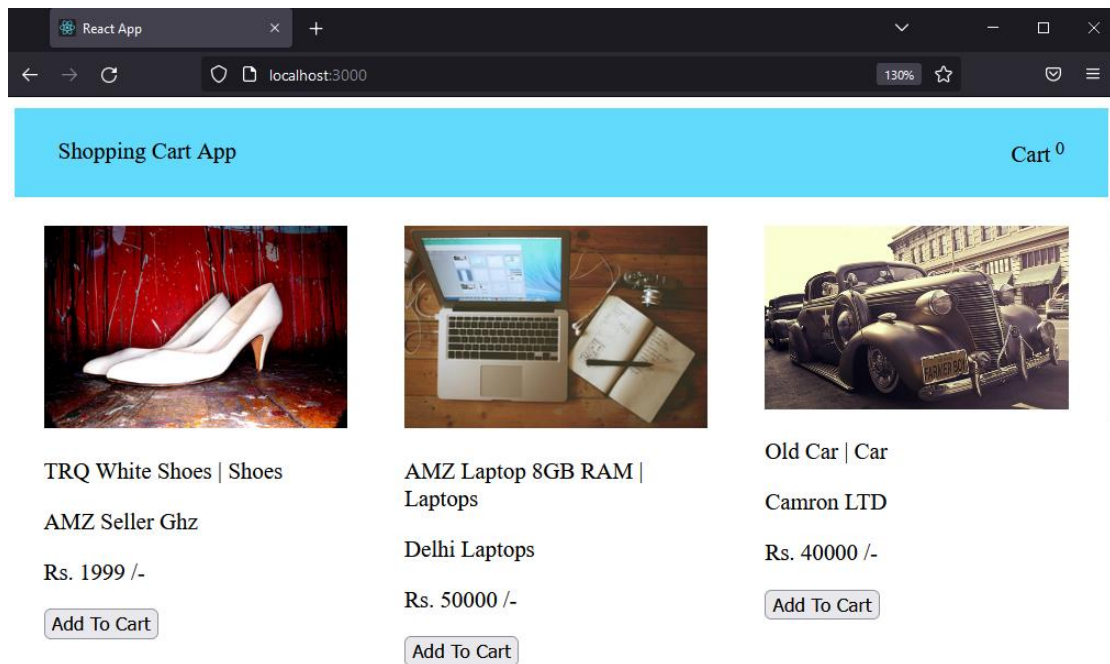
export default CartList

Output:

After adding itmes to cart and on clicking Cart on the navigation bar we get below output