

Create Components and Pages

```
src
  components
    Navbar.jsx
  pages
    cart
      Cart.jsx
      CartItem.jsx
    product
      Product.jsx
      Products.jsx
```

Installing the requirements

React Router

<https://reactrouter.com/en/main>

```
npm i react-router-dom
```

Font Awesome

<https://fontawesome.com/docs/web/use-with/react/>

```
npm i --save @fortawesome/fontawesome-svg-core
npm i --save @fortawesome/free-solid-svg-icons
npm i --save @fortawesome/free-regular-svg-icons
npm i --save @fortawesome/react-fontawesome@latest
```

Bootstrap

<https://getbootstrap.com/docs/5.0/getting-started/download/>

```
npm install bootstrap
```

Import css and js inside 'index.js'

```
import 'bootstrap/dist/css/bootstrap.min.css';  
import 'bootstrap/dist/js/bootstrap.min.js';
```

Loading Components

Adding routes in 'App.js'

```
import { BrowserRouter as Router, Routes, Route } from 'react-router-dom'  
  
function App() {  
  return (  
    <div className="App">  
      <Router>  
        <Routes>  
          <Route path="/" />  
          <Route path="/cart" />  
        </Routes>  
      </Router>  
    </div>  
  );  
}  
  
export default App;
```

<http://localhost:3000/>

<http://localhost:3000/cart>

Adding components 'App.js'

```
import { BrowserRouter as Router, Routes, Route } from 'react-router-dom'
import { Navbar } from '../components/Navbar'
import { Products } from '../pages/product/Products'
import { Cart } from '../pages/cart/Cart'

function App() {
  return (
    <div className="App">
      <Router>
        <Navbar/>
        <Routes>
          <Route path="/" element={<Products/>} />
          <Route path="/cart" element={<Cart/>} />
        </Routes>
      </Router>
    </div>
  );
}

export default App;
```

Adding function to components

Update "Navbar.jsx"

<https://getbootstrap.com/docs/5.0/components/navbar/#nav>

```
import React from 'react'
import { Link } from 'react-router-dom'

export const Navbar = () => {
  return (
    <nav className="navbar navbar-expand-lg navbar-light bg-light">
      <div className="container-fluid">
        <Link to="/" className="navbar-brand">zNova</Link>
        <button className="navbar-toggler" type="button"
          data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav"
          aria-expanded="false" aria-label="Toggle navigation">
```

```

        <span className="navbar-toggler-icon"></span>
      </button>
      <div className="collapse navbar-collapse" id="navbarNav">
        <ul className="navbar-nav">
          <li className="nav-item">
            <Link to="/" className="nav-link active"
aria-current="page">Products</Link>
          </li>
          <li className="nav-item">
            <Link to="/cart" className="nav-link">Cart</Link>
          </li>
        </ul>
      </div>
    </div>
  </nav>
)
}

```

Update 'Product.jsx'

```

import React from 'react'

export const Products = () => {
  return (
    <div>
      Products
    </div>
  )
}

```

Update 'Cart.jsx'

```

import React from 'react'

export const Cart = () => {
  return (
    <div>
      Cart
    </div>
  )
}

```

```
}
```

Product Listing

Adding Assets and Data

```
src
  assets
    products
      1.jpg
      2.jpg
      3.png
      4.jpg
      5.jpg
  products.js
```

Product Display

Update 'Products.jsx'

<https://getbootstrap.com/docs/5.0/utilities/flex/>

```
import React from 'react'
import { PRODUCTS } from '../products'
import { Product } from './Product'

export const Products = () => {
  return (
    <div className="products" style={{margin: '10px'}}>
      <div className="products-title">
        <h1>Products</h1>
      </div>
      <div className="products-list d-flex flex-wrap gap-2">
        {PRODUCTS.map(product => (<Product data={product} key={product.id}
/>))}
      </div>
```

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

Update 'Product.jsx'

<https://getbootstrap.com/docs/5.0/components/card/>

```
import React from 'react'

export const Product = (props) => {
  const { id, productName, productImage, price } = props.data

  return (
    <div className="card" style={{width: '18rem'}}>
      <img src={productImage} className="card-img-top" alt={productName}/>
      <div className="card-body">
        <h5 className="card-title">{productName}</h5>
        <p className="card-text">${price}</p>
        <button className="btn btn-primary">Add To Cart</button>
      </div>
    </div>
  )
}
```

Context

<https://reactjs.org/docs/context.html>

Context is designed to share data that can be considered “global” for a tree of React components, such as the current authenticated user, theme, or preferred language.

Creating Context

```
src
  context
    CartContext.jsx
```

Add functions to 'CartContext.jsx'

```
import React, { createContext, useState, useEffect } from 'react'

export const CartContext = createContext(null)

export const CartContextProvider = (props) => {
  const [cartItems, setCartItems] = useState([])

  useEffect(() => { console.log(cartItems) }, [cartItems])

  const contextValue = { cartItems }

  return (
    <CartContext.Provider value={contextValue}>
      {props.children}
    </CartContext.Provider>
  )
}
```

Apply Context in 'App.js'

```
import { BrowserRouter as Router, Routes, Route } from 'react-router-dom'
import { Navbar } from '../components/Navbar'
import { Products } from '../pages/product/Products'
import { Cart } from '../pages/cart/Cart'
import { CartContextProvider } from '../context/CartContext'

function App() {
  return (
    <div className="App">
      <CartContextProvider>
        <Router>
          <Navbar/>
          <Routes>
            <Route path="/" element={<Products/>} />
          </Routes>
        </Router>
      </CartContextProvider>
    </div>
  )
}
```

```

        <Route path='/cart' element={<Cart/>} />
      </Routes>
    </Router>
  </CartContextProvider>
</div>
);
}

export default App;

```

Add to Cart

Update 'CartContext.jsx'

```

const addToCart = (id) => {
  const item = cartItems.find(item => item.id === id)
  if(!item) {
    setCartItems([...cartItems, {id, count: 1}])
  } else {
    const updatedCart = cartItems.map(eachItem => {
      if(eachItem.id === id) {
        return {
          ...eachItem,
          count: eachItem.count + 1
        }
      }
      return eachItem
    })
    setCartItems(updatedCart)
  }
}

```

Update 'Product.jsx'

<https://getbootstrap.com/docs/5.0/components/badge/>


```

import React, { useContext } from 'react'
import { CartContext } from '../../context/CartContext'

export const Product = (props) => {
  const { id, productName, productImage, price } = props.data
  const { cartItems, addToCart } = useContext(CartContext)
  const cartItem = cartItems.find(item => item.id === id)

  return (
    <div className="card" style={{width: '18rem'}}>
      <img src={productImage} className="card-img-top" alt={productName}/>
      <div className="card-body">
        <h5 className="card-title">{productName}</h5>
        <p className="card-text">${price}</p>
        <button type="button" className="btn btn-primary position-relative"
onClick={ () => addToCart(id) }>
          Add To Cart
          <span className="position-absolute top-0 start-100
translate-middle badge rounded-pill bg-danger">
            {cartItem?.count}
          </span>
        </button>
      </div>
    </div>
  )
}

```

Update Navigation 'Navbar.js'

```

import React, { useContext } from 'react'
import { Link, useLocation } from 'react-router-dom'
import { CartContext } from '../context/CartContext'

export const Navbar = (props) => {
  const location = useLocation()
  const pathname = location.pathname
  const { cartItems } = useContext(CartContext)
  const totalItemCount = cartItems.reduce((sum, item) => { return sum + item.count},
0)

```

```

return (
  <nav className="navbar navbar-expand-lg navbar-light bg-light">
    <div className="container-fluid">
      <Link to="/" className="navbar-brand">zNova</Link>
      <button className="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav"
aria-expanded="false" aria-label="Toggle navigation">
        <span className="navbar-toggler-icon"></span>
      </button>
      <div className="collapse navbar-collapse" id="navbarNav">
        <ul className="navbar-nav">
          <li className="nav-item">
            <Link to="/" className={"nav-link " + ((pathname=== '/') &&
'active'))} aria-current="page">
              Products
            </Link>
          </li>
          <li className="nav-item">
            <Link to="/cart" className={"nav-link " +
((pathname=== '/cart') && 'active')}>
              Cart {totalItemCount > 0 && <span className="badge
bg-secondary">{totalItemCount}</span>}
            </Link>
          </li>
        </ul>
      </div>
    </div>
  </nav>
)
}

```

Cart

Update 'Cart.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../../context/CartContext'

```

```

import { PRODUCTS } from '../products'
import { CartItem } from './CartItem'

export const Cart = () => {
  const { cartItems } = useContext(CartContext)

  return (
    <div className="cart" style={{margin: '10px'}}>
      <div className="cart-title">
        <h3>Your Cart Items</h3>
      </div>
      <div className="cart-list d-flex flex-wrap gap-2">
        {cartItems.map(item => {
          const product = PRODUCTS.find(product => product.id === item.id)
          return <CartItem data={product} qty={item.count} key={product.id}
        />
        ))}
      </div>
    </div>
  )
}

```

Update 'CartItem.jsx'

<https://getbootstrap.com/docs/5.0/components/card/>

```

import React from 'react'

export const CartItem = (props) => {
  const { id, productName, productImage, price } = props.data
  const qty = props.qty

  return (
    <div className="card mb-3" style={{maxWidth: '540px'}}>
      <div className="row g-0">
        <div className="col-md-4">
          <img src={productImage} className="img-fluid rounded-start"
alt={productName}/>
        </div>
        <div className="col-md-8">

```

```

        <div className="card-body">
          <h5 className="card-title">{productName}</h5>
          <p className="card-text">${price}</p>
          <p className="card-text">
            {qty}
          </p>
        </div>
      </div>
    </div>
  </div>
</div>
)
}

```

Updating Cart

Update 'CartItem.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../context/CartContext'

export const CartItem = (props) => {
  const { id, productName, productImage, price } = props.data
  const qty = props.qty
  const { addToCart, removeFromCart, updateCartItemCount } = useContext(CartContext)

  return (
    <div className="card mb-3" style={{maxWidth: '540px'}}>
      <div className="row g-0">
        <div className="col-md-4">
          <img src={productImage} className="img-fluid rounded-start"
alt={productName}/>
        </div>
        <div className="col-md-8">
          <div className="card-body">
            <h5 className="card-title">{productName}</h5>
            <p className="card-text">${price}</p>
            <div className="card-text">
              <div className="input-group mb-3">

```

```

        <button className="btn btn-outline-secondary"
type="button" onClick={e=>removeFromCart(id)}>-</button>

        <input type="text" className="form-control"
            value={qty}

onChange={e=>updateCartItemCount(Number(e.target.value), id)}

            />
        <button className="btn btn-outline-secondary"
type="button" onClick={e=>addToCart(id)}>+</button>
    </div>
</div>
</div>
</div>
</div>
)
}

```

Update 'CartContext.jsx'

```

const removeFromCart = (id) => {
    const item = cartItems.find(item => item.id === id)
    if(item) {
        let updatedCart;
        if(item.count === 1) {
            updatedCart = cartItems.filter(item => item.id !== id)
        } else {
            updatedCart = cartItems.map(eachItem => {
                if(eachItem.id === id) {
                    return {
                        ...eachItem,
                        count: eachItem.count - 1
                    }
                }
                return eachItem
            })
        }
        setCartItems(updatedCart)
    }
}

```

```

    }

    const updateCartItemCount = (count, id) => {
      const item = cartItems.find(item => item.id === id)
      if(item) {
        let updatedCart;
        if(count === 0) {
          updatedCart = cartItems.filter(item => item.id !== id)
        } else {
          updatedCart = cartItems.map(eachItem => {
            if(eachItem.id === id) {
              return {
                ...eachItem,
                count: count
              }
            }
            return eachItem
          })
        }
        setCartItems(updatedCart)
      }
    }
  }
}

```

Cart Information

Update 'Cart.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../../context/CartContext'
import { PRODUCTS } from '../../products'
import { CartItem } from './CartItem'
import { useNavigate } from 'react-router-dom'

export const Cart = () => {
  const { cartItems, getTotalAmount } = useContext(CartContext)
  const totalAmount = getTotalAmount()
  const navigate = useNavigate()

```

```

return (
  <div className="container">
    <div className="cart-title">
      <h3>Your Cart Items</h3>
    </div>
    <div className="cart-list d-flex gap-5">
      <div className="cart-item d-flex flex-column gap-2">
        {cartItems.map(item => {
          const product = PRODUCTS.find(product => product.id ===
item.id)
          return <CartItem data={product} qty={item.count}
key={product.id} />
        })}
      </div>
      <div className="cart-info d-flex flex-column gap-2">
        Subtotal: ${totalAmount}
        <button className="btn btn-primary">Checkout</button>
        <button className="btn btn-primary"
onClick={()=>navigate('/')}>Continue Shopping</button>
      </div>
    </div>
  </div>
)
}

```

Update 'CartContext.jsx'

```

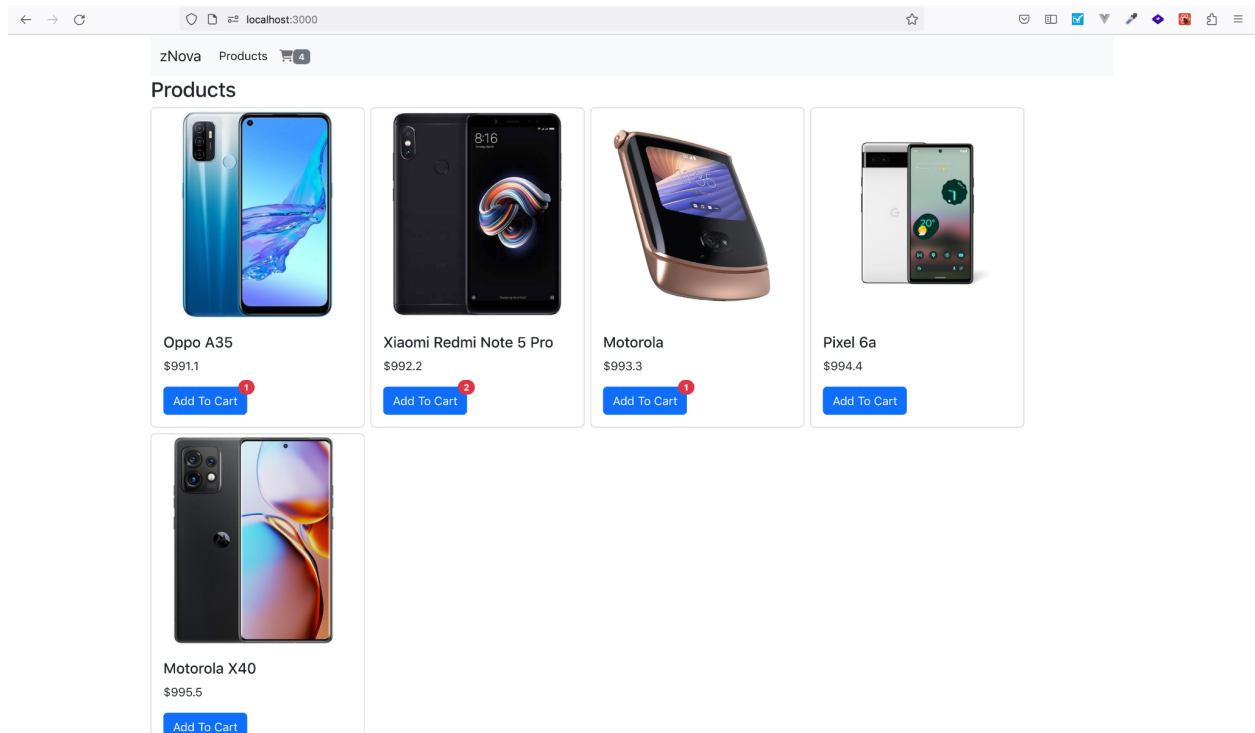
import { PRODUCTS } from '../products'

const getTotalAmount = () => {
  const totalAmount = cartItems.reduce((sum, item) => {
    const product = PRODUCTS.find(product => product.id === item.id)
    if(item.count === 1) {
      sum += product.price
    } else {
      sum += product.price * item.count
    }
  }, 0)
  return totalAmount.toFixed(2)
}

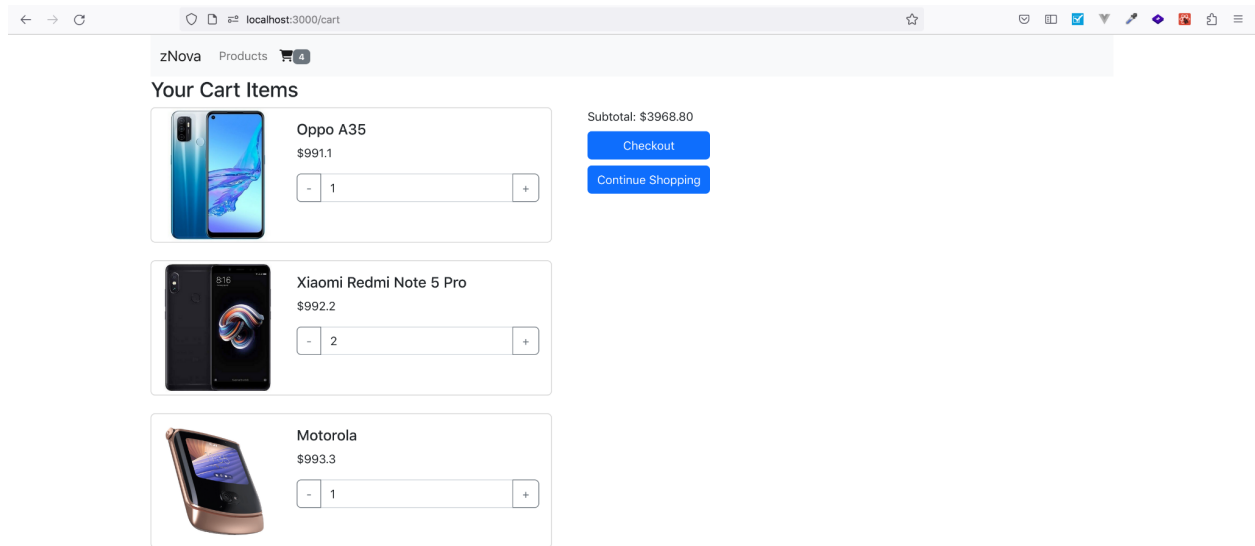
```

Project Final Screenshot

Product List



Cart List



Students Homework

Add Favorite

Update 'App.jsx'

```
import { BrowserRouter as Router, Routes, Route } from 'react-router-dom'
import { Navbar } from '../components/Navbar'
import { Products } from '../pages/product/Products'
import { Cart } from '../pages/cart/Cart'
import { Favorite } from '../pages/favorite/Favorite'
import { CartContextProvider } from '../context/CartContext'

function App() {
  return (
    <div className="App">
      <CartContextProvider>
        <Router>
          <Navbar/>
          <Routes>
```

```

        <Route path="/" element={<Products/>} />
        <Route path="/cart" element={<Cart/>} />
        <Route path="/favorite" element={<Favorite/>} />
      </Routes>
    </Router>
  </CartContextProvider>
</div>
);
}

export default App;

```

Update 'Product.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../../context/CartContext'
import { FontAwesomeIcon } from '@fortawesome/react-fontawesome'
import { faCartShopping, faHeart } from '@fortawesome/free-solid-svg-icons'

export const Product = (props) => {
  const { id, productName, productImage, price } = props.data
  const { cartItems, addToCart, favoriteIds, toggleFavorite } =
    useContext(CartContext)

  const cartItem = cartItems.find(item => item.id === id)
  const favoriteId = favoriteIds.find(fid => fid === id)

  return (
    <div className="card" style={{width: '18rem'}}>
      <img src={productImage} className="card-img-top" alt={productName}/>
      <div className="card-body">
        <h5 className="card-title">{productName}</h5>
        <p className="card-text">${price}</p>
        <button type="button" className="btn btn-outline-primary
position-relative me-2" onClick={()=>addToCart(id)}>
          <FontAwesomeIcon icon={faCartShopping} /> Add To Cart
          <span className="position-absolute top-0 start-100
translate-middle badge rounded-pill bg-danger">
            {cartItem?.count}
          </span>
        </button>
        <button type="button" className={'btn btn-outline-primary
position-relative ' + (favoriteId && 'text-danger')} onClick={()=>toggleFavorite(id)}>

```

```

        <FontAwesomeIcon icon={faHeart} />
      </button>
    </div>
  </div>
)
}

```

Update 'CartContext.jsx'

```

const [favoriteIds, setFavoriteIds] = useState([])

useEffect(() => { console.log(cartItems, favoriteIds) }, [cartItems, favoriteIds])

const toggleFavorite = (id) => {
  const favoriteId = favoriteIds.find(fid => fid === id)
  if(favoriteId) {
    const updateIds = favoriteIds.filter(fid => fid !== id)
    setFavoriteIds(updateIds)
  } else {
    setFavoriteIds([...favoriteIds, id])
  }
}

const contextValue = { cartItems, addToCart, removeFromCart, updateCartItemCount,
getTotalAmount, favoriteIds, toggleFavorite }

```

Add 'Favorite.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../../context/CartContext'
import { PRODUCTS } from '../../products'
import { FavoriteItem } from './FavoriteItem'

export const Favorite = () => {
  const { favoriteIds } = useContext(CartContext)
  return (
    <div className="container">
      <div className="products-title">
        <h3>Favorite Items</h3>
      </div>
      <div className="products-list d-flex flex-wrap gap-2">

```

```

        {favoriteIds.map(fid => {
            const product = PRODUCTS.find(product => product.id === fid)
            return <FavoriteItem data={product} key={fid} />
        })}
    </div>
</div>
)
}

```

Add 'FavoriteItem.jsx'

```

import React, { useContext } from 'react'
import { CartContext } from '../context/CartContext'
import { FontAwesomeIcon } from '@fortawesome/react-fontawesome'
import { faCartShopping, faHeart } from '@fortawesome/free-solid-svg-icons'

export const FavoriteItem = (props) => {
    const { id, productName, productImage, price } = props.data
    const { cartItems, addToCart, favoriteIds, toggleFavorite } =
useContext(CartContext)

    const cartItem = cartItems.find(item => item.id === id)
    const favoriteId = favoriteIds.find(fid => fid === id)

    return (
        <div className="card" style={{width: '18rem'}}>
            <img src={productImage} className="card-img-top" alt={productName}/>
            <div className="card-body">
                <h5 className="card-title">{productName}</h5>
                <p className="card-text">${price}</p>
                <button type="button" className="btn btn-outline-primary
position-relative me-2" onClick={()=>addToCart(id)}>
                    <FontAwesomeIcon icon={faCartShopping} /> Add To Cart
                    <span className="position-absolute top-0 start-100
translate-middle badge rounded-pill bg-danger">
                        {cartItem?.count}
                    </span>
                </button>
                <button type="button" className={'btn btn-outline-primary
position-relative ' + (favoriteId && 'text-danger')} onClick={()=>toggleFavorite(id)}>
                    <FontAwesomeIcon icon={faHeart} />
                </button>
            </div>
        </div>
    )
}

```

```

    </div>
  )
}

```

Update 'components/Navbar.jsx'

```

import React, { useContext } from 'react'
import { Link, useLocation } from 'react-router-dom'
import { CartContext } from '../context/CartContext'

const Navbar = (props) => {
  const location = useLocation()
  const pathname = location.pathname
  const { cartItems, favoriteIds } = useContext(CartContext)
  const totalItemCount = cartItems.reduce((sum, item) => { return sum + item.count},
0)

  return (
    <nav className="navbar navbar-expand-lg navbar-light bg-light">
      <div className="container-fluid">
        <Link to="/" className="navbar-brand">zNova</Link>
        <button className="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav"
aria-expanded="false" aria-label="Toggle navigation">
          <span className="navbar-toggler-icon"></span>
        </button>
        <div className="collapse navbar-collapse" id="navbarNav">
          <ul className="navbar-nav">
            <li className="nav-item">
              <Link to="/" className={"nav-link " + ((pathname=== '/') &&
'active')} aria-current="page">
                Products
              </Link>
            </li>
            <li className="nav-item">
              <Link to="/cart" className={"nav-link " +
((pathname=== '/cart') && 'active')}>
                Cart {totalItemCount > 0 && <span className="badge
bg-secondary">{totalItemCount}</span>}
              </Link>
            </li>

```

```

        <li className="nav-item">
            <Link to='/favorite' className={"nav-link " +
((pathname===' /favorite') && 'active')}>
                Favorite {favoriteIds.length > 0 && <span
className="badge bg-secondary">{favoriteIds.length}</span>}
            </Link>
        </li>
    </ul>
</div>
</div>
</nav>
)
}

export default Navbar;

```

Product Detail

Update 'App.js'

```

import { BrowserRouter as Router, Routes, Route } from 'react-router-dom'
import { Navbar } from '../components/Navbar'
import { Products } from '../pages/product/Products'
import { ProductDetail } from '../pages/product/ProductDetail'
import { Cart } from '../pages/cart/Cart'
import { Favorite } from '../pages/favorite/Favorite'
import { CartContextProvider } from '../context/CartContext'

function App() {
    return (
        <div className="App">
            <CartContextProvider>
                <Router>
                    <Navbar/>
                    <Routes>
                        <Route path="/" element={<Products/>} />
                        <Route path="/product/:id" element={<ProductDetail/>} />
                        <Route path="/cart" element={<Cart/>} />
                        <Route path="/favorite" element={<Favorite/>} />
                    </Routes>
                </Router>
            </CartContextProvider>
        </div>
    )
}

```

```

        </Routes>
      </Router>
    </CartContextProvider>
  </div>
);
}

export default App;

```

Add 'ProductDetail.jsx'

```

import React, { useContext } from 'react'
import { useParams } from 'react-router-dom'
import { CartContext } from '../../context/CartContext'
import { PRODUCTS } from '../../products'
import { FontAwesomeIcon } from '@fortawesome/react-fontawesome'
import { faCartShopping, faHeart } from '@fortawesome/free-solid-svg-icons'

export const ProductDetail = () => {
  const params = useParams()
  const product = PRODUCTS.find(product => product.id === Number(params.id))
  const { id, productName, productImage, price, description } = product
  const { cartItems, addToCart, favoriteIds, toggleFavorite } =
useContext(CartContext)

  const cartItem = cartItems.find(item => item.id === id)
  const favoriteId = favoriteIds.find(fid => fid === id)

  return (
    <div className="container">
      <div className="products-title">
        <h3>Product Detail</h3>
      </div>

      <div className="card mb-3">
        <div className="row g-0">
          <div className="col-md-4">
            <img src={productImage} className="img-fluid rounded-start"
alt={productName}/>
          </div>
          <div className="col-md-8">
            <div className="card-body">

```

```

        <h5 className="card-title">{productName}</h5>
        <p className="card-text">${price}</p>
        <p className="card-text">{description}</p>
        <button type="button" className="btn btn-outline-primary
position-relative me-2" onClick={ () =>addToCart(id) }>
            <FontAwesomeIcon icon={faCartShopping} /> Add To Cart
            <span className="position-absolute top-0 start-100
translate-middle badge rounded-pill bg-danger">
                {cartItem?.count}
            </span>
        </button>
        <button type="button" className={'btn btn-outline-primary
position-relative ' + (favoriteId && 'text-danger')} onClick={ () =>toggleFavorite(id) }>
            <FontAwesomeIcon icon={faHeart} />
        </button>
    </div>
</div>
</div>
)
}

```

Update 'Product.jsx'

```

import { Link } from 'react-router-dom'

        <h5 className="card-title">
            <Link to={` /product/${id}`} className="btn
btn-link">{productName}</Link>
        </h5>

```

Adding Related Products

Update 'ProductDetail.jsx'

```

import React, { useContext } from 'react'
import { useParams, Link } from 'react-router-dom'
import { CartContext } from '../../context/CartContext'
import { PRODUCTS } from '../../products'

```



```

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome'
import { faCartShopping, faHeart } from '@fortawesome/free-solid-svg-icons'

export const ProductDetail = () => {
  const params = useParams()
  const product = PRODUCTS.find(product => product.id === Number(params.id))
  const { id, productName, productImage, price, description } = product
  const { cartItems, addToCart, favoriteIds, toggleFavorite } =
useContext(CartContext)
  const cartItem = cartItems.find(item => item.id === id)
  const favoriteId = favoriteIds.find(fid => fid === id)
  const relatedItems = PRODUCTS.filter(product => product.id !== Number(params.id))

  return (
    <div className="container">
      <h3>Product Detail</h3>

      <div className="card mb-3">
        <div className="row g-0">
          <div className="col-md-4">
            <img src={productImage} className="img-fluid rounded-start"
alt={productName}/>
          </div>
          <div className="col-md-8">
            <div className="card-body">
              <h5 className="card-title">{productName}</h5>
              <p className="card-text">${price}</p>
              <p className="card-text">{description}</p>
              <button type="button" className="btn btn-outline-primary
position-relative me-2" onClick={()=>addToCart(id)}>
                <FontAwesomeIcon icon={faCartShopping} /> Add To Cart
                <span className="position-absolute top-0 start-100
translate-middle badge rounded-pill bg-danger">
                  {cartItem?.count}
                </span>
              </button>
              <button type="button" className={'btn btn-outline-primary
position-relative ' + (favoriteId && 'text-danger')} onClick={()=>toggleFavorite(id)}>
                <FontAwesomeIcon icon={faHeart} />
              </button>
            </div>
          </div>
        </div>
      </div>
    </div>
  )
}

```

```

        </div>
    </div>

    <h3>Related Products</h3>
    <div className="d-flex gap-2">
        {relatedItems.map(product => (
            <div className="card" key={product.id}>
                <img src={product.productImage} className="card-img-top"
alt={product.productName}/>
                <div className="card-body text-center">
                    <h5 className="card-title">
                        <Link
to={`\product/${product.id}`}>{product.productName}</Link>
                    </h5>
                    <p className="card-text">${product.price}</p>
                </div>
            </div>
        ))}
    </div>
</div>
)
}

```