Page Components
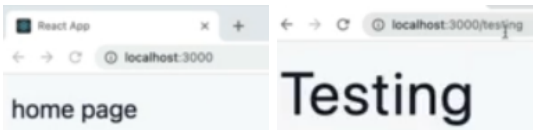
```jsx
import { BrowserRouter, Routes, Route } from "react-router-dom";

function App() {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<div>Home Page</div>} />
        <Route
          path="testing"
          element={
            <div>
              <h1>Testing Page</h1>
            </div>
          }
        />
      </Routes>
    </BrowserRouter>
  );
}

export default App;
```
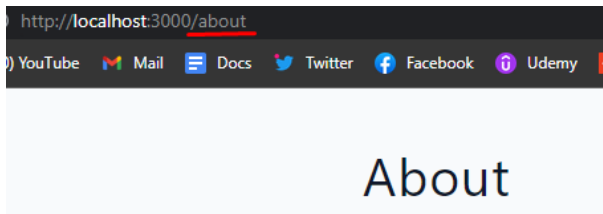
localhost:3000

home page

localhost:3000/testing

Testing

```jsx
import { BrowserRouter, Routes, Route } from "react-router-dom";

import Home from "./pages/Home";
import About from "./pages/About";
import Products from "./pages/Products";

function App() {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<Home />} />
        <Route path="about" element={<About />} />
        <Route path="products" element={<Products />} />
      </Routes>
    </BrowserRouter>
  );
}

export default App;
```

Link Component


```js
import { Link } from "react-router-dom";

const Home = () => {
  return (
    <section className="section">
      <h2>Home Page</h2>
      <Link to="/about" className="btn">
        About
      </Link>
    </section>
  );
};

export default Home;
```
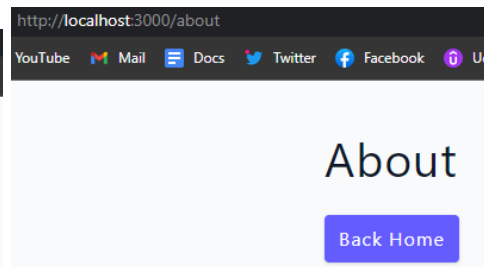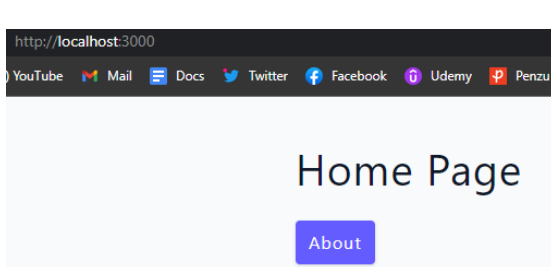
```js
import { Link } from "react-router-dom";

const About = () => {
  return (
    <section className="section">
      <h2>About</h2>
      <Link to="/" className="btn">
        Back Home
      </Link>
    </section>
  );
};

export default About;
```

Link component is used to connect the path between the pages.

Error Page:

```jsx
import { BrowserRouter, Routes, Route } from "react-router-dom";

import Home from "./pages/Home";
import About from "./pages/About";
import Products from "./pages/Products";
import Error from "./pages/Error";

function App() {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<Home />} />
        <Route path="about" element={<About />} />
        <Route path="products" element={<Products />} />
        <Route path="*" element={<Error />} />
      </Routes>
    </BrowserRouter>
  );
}

export default App;
```

```jsx
import { Link } from "react-router-dom";

const Error = () => {
  return (
    <section className="section">
      <h2>402</h2>
      <p>Page Not Found</p>
      <Link to="/">Back To Home</Link>
    </section>
  );
};
export default Error;
```

http://localhost:3000/abouttt

YouTube   M Mail   ≣ Docs   🐦 Twitter   f Facebook   ⓤ Udemy

402

Page Not Found

Back To Home

Navbar:

```javascript
function App() {
  return (
    <BrowserRouter>
      <nav>our navbar</nav>
      <Routes>
        <Route path='/' element={<Home />} />
        <Route path='about' element={<About />} />
        <Route path='products' element={<Products />} />
        <Route path='*' element={<Error />} />
      </Routes>
      <footer>our footer</footer>
    </BrowserRouter>
  );
}
export default App;
```
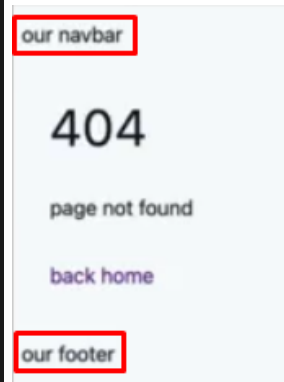
our navbar

404

page not found

back home

our footer

Nested Routes:

```javascript
const App = () => {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<Home />}>
          <Route path="about" element={<About />} />
          <Route path="products" element={<Products />} />
          <Route path="*" element={<Error />} />
        </Route>
      </Routes>
    </BrowserRouter>
  );
};
```
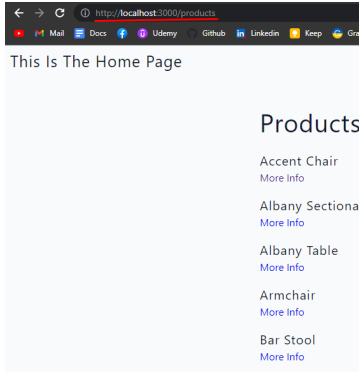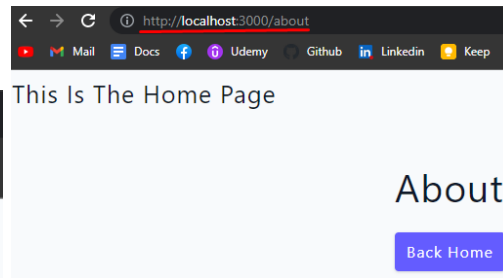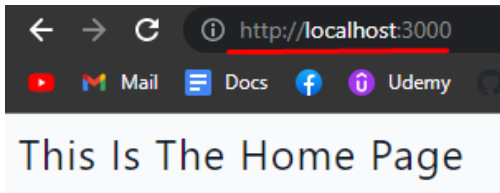
But to go to the actual pages,we need to do another thing.

```javascript
import { Link, Outlet } from "react-router-dom";
import Navbar from "../components/Navbar";

const Home = () => {
  return (
    <>
      <h4>This is the Home Page</h4>
      <Outlet />
    </>
  );
};
export default Home;
```

But we need to use the outlet into the nested's parent's component.

Shared Layout:

```jsx
import { Link, Outlet } from 'react-router-dom';
const Home = () => {
  return (
    <section className='section'>
      <h2>Home Page</h2>
      <Outlet />
    </section>
  );
};
export default Home;
```


- Here, Home component er moddhe <Outlet /> use kora hoyeche. Tate jeta hobe, Ei Home component every jaigai shared hoye jabe/every page e use hobe/every page e ei text show korbe.

- Ekhane ekta jinish mathai rakhte hobe,shei shob jaigai e shared layout hobe jegulo nested route e ache.

```jsx
import { Link, Outlet } from 'react-router-dom';
import Navbar from '../components/Navbar';
const Home = () => {
  return (
    <>
      <Navbar />
      <section className='section'>
        <Outlet />
      </section>
    </>
  );
};
export default Home;
```
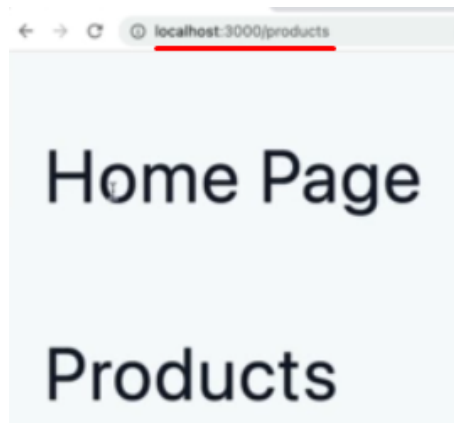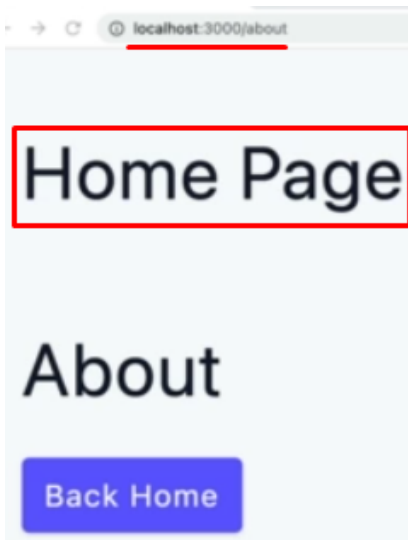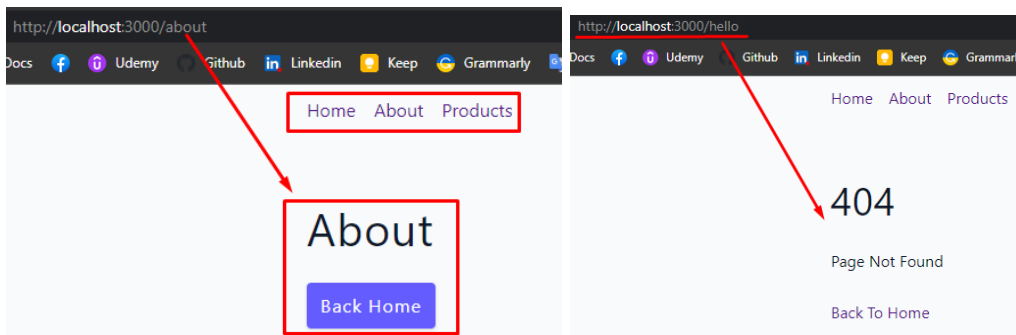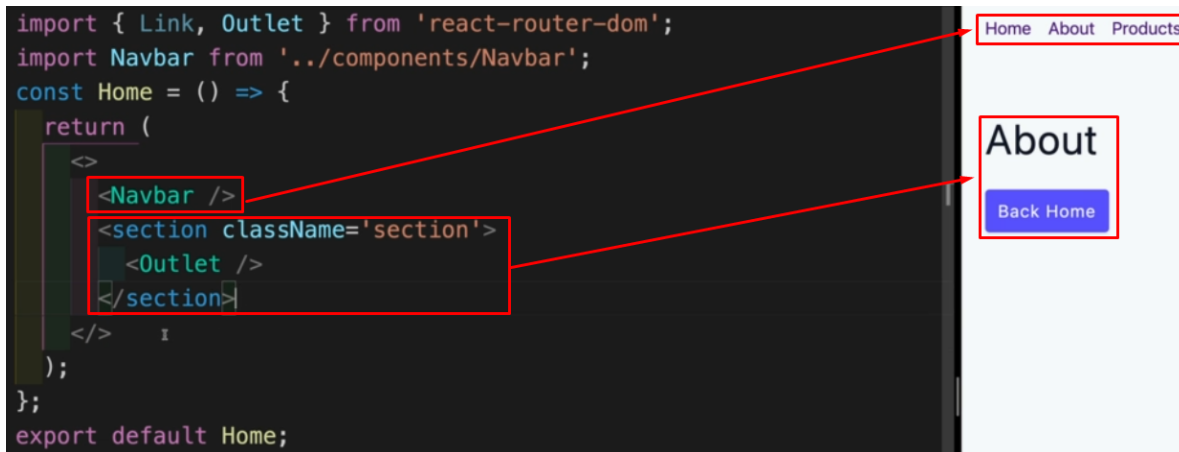
Home About Products

About

Back Home

http://localhost:3000/about

Home About Products

About

Back Home

http://localhost:3000/hello

Home About Products

404

Page Not Found

Back To Home

Index Pages:

```jsx
import { BrowserRouter, Routes, Route } from "react-router-dom";

import Home from "./pages/Home";
import About from "./pages/About";
import Products from "./pages/Products";
import Error from "./pages/Error";
import SharedLayout from "./pages/SharedLayout";
import SingleProduct from "./pages/SingleProduct";

const App = () => {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<SharedLayout />}>
          <Route index element={<Home />} />
          <Route path="about" element={<About />} />
          <Route path="products" element={<Products />} />
          <Route path="*" element={<Error />} />
        </Route>
      </Routes>
    </BrowserRouter>
  );
};

export default App;
```

```
mponents > JS Navbar.js > ...
import { Link } from "react-router-dom";

const Navbar = () => {
  return (
    <nav className="navbar">
      <Link to="/">Home</Link>
      <Link to="/about">About</Link>
      <Link to="/products">Products</Link>
    </nav>
  );
};

export default Navbar;
```

```
ges > JS SharedLayout.js > ...
import { Link, Outlet } from "react-router-dom";
import StyledNavbar from "../components/StyledNavbar";
import Navbar from "../components/Navbar";

const SharedLayout = () => {
  return (
    <>
      {/* <StyledNavbar /> */}
      <Navbar />
      <Outlet />
    </>
  );
};

export default SharedLayout;
```
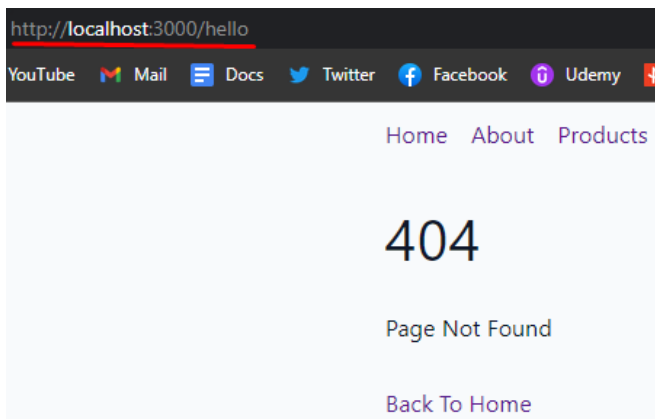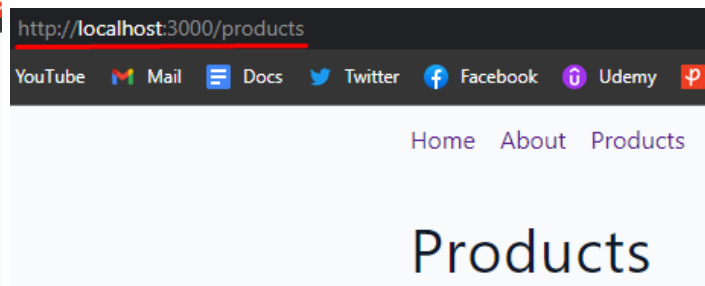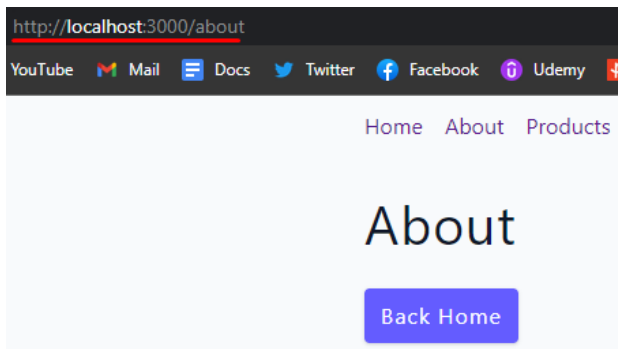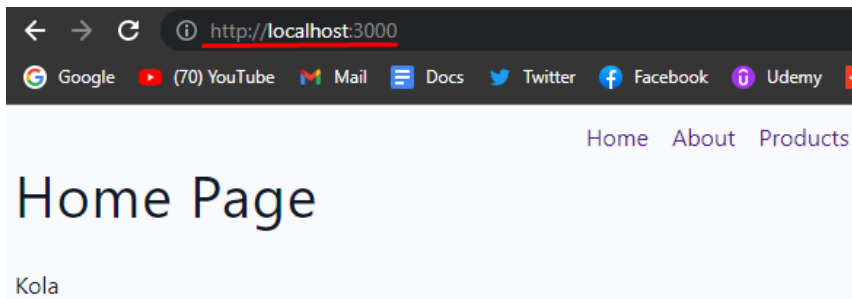
-> Ekhane SharedLayout every page e share hoye geche.

-> R ekhane <Home/> component er sathe index use kora hoyeche. *Ermane holo eta route page hishebe use hobe.*

NavLink:

The NavLink is used when you want to highlight a link as active. So, on every routing to a page, the link is highlighted according to the activeClassName . Link is for links that need no highlighting. And a is for external links.

```jsx
export const Navbar = () => {
  const navLinkStyles = ({ isActive }) => {
    return {
      fontWeight: isActive ? 'bold' : 'normal',
      textDecoration: isActive ? 'none' : 'underline',
    }
  }

  return (
    <nav>
      <NavLink style={navLinkStyles} to='/'>
        Home
      </NavLink>
      <NavLink style={navLinkStyles} to='/about'>
        About
      </NavLink>
    </nav>
  )
}
```

```jsx
const Navbar = () => {
  const navLinkStyles = ({ isActive }) => {
    return {
      color: isActive ? "red" : "grey",
    };
  };

  return (
    <nav className="navbar">
      <NavLink to="/" style={navLinkStyles}>
        Home
      </NavLink>
      <NavLink to="/about">About</NavLink>
      <NavLink to="/products">Products</NavLink>
    </nav>
  );
};
```

Ekhane amra style korte chaile sheti destructure kore evabeo korte pari abar nicher style eo korte pari. Dutoi same.

```jsx
omponents > JS StyledNavbar.js
import { NavLink } from "react-router-dom";

const Navbar = () => {
  return (
    <nav className="navbar">
      <NavLink
        to="/"
        style={({ isActive }) => {
          return { color: isActive ? "red" : "grey" };
        }}
      >
        Home
      </NavLink>
      <NavLink to="/about">About</NavLink>
      <NavLink to="/products">Products</NavLink>
    </nav>
  );
};

export default Navbar;
```

Home   About   Products

Home Page

Kola

```js
import { NavLink } from "react-router-dom";
const Navbar = () => {
  return (
    <nav className="navbar">
      <NavLink
        to="/"
        className={({ isActive }) => (isActive ? "link active" : "link")}
      >
        Home
      </NavLink>
      <NavLink
        to="/about"
        className={({ isActive }) => (isActive ? "link active" : "link")}
      >
        About
      </NavLink>
      <NavLink
        to="/products"
        className={({ isActive }) => (isActive ? "link active" : "link")}
      >
        Products
      </NavLink>
    </nav>
  );
};
export default Navbar;
```

```css
.link {
  color: var(--grey-500);
}

.active {
  color: red;
}
```

Or,

```js
const Navbar = () => {
  const navLinkStyles = ({ isActive }) => {
    return {
      color: isActive ? "red" : "grey",
    };
  };

  return (
    <nav className="navbar">
      <NavLink to="/" style={navLinkStyles}>
        Home
      </NavLink>
      <NavLink to="/about" style={navLinkStyles}>
        About
      </NavLink>
      <NavLink to="/products" style={navLinkStyles}>
        Products
      </NavLink>
    </nav>
  );
};
```

Home Page

Kola

Home About Products

Home About Products

About

Back Home

Home About Products

Products

```
▼<nav class="navbar"> flex
    <a aria-current="page" class="link active" href="/">Home</a> == $0
    <a class="link" href="/about">About</a>
    <a class="link" href="/products">Products</a>
  </nav>
```

```css
.link {
  color: var(--grey-500);
}

.active {
  color: red;
}
```

URL Params/useParams():

```jsx
import { BrowserRouter, Routes, Route } from "react-router-dom";

import Home from "./pages/Home";
import About from "./pages/About";
import Products from "./pages/Products";
import Error from "./pages/Error";
import SharedLayout from "./pages/SharedLayout";
import SingleProduct from "./pages/SingleProduct";

const App = () => {
  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<SharedLayout />}>
          <Route index element={<Home />} />
          <Route path="about" element={<About />} />
          <Route path="products" element={<Products />} />
          <Route path="products/:productId" element={<SingleProduct />} />
          <Route path="*" element={<Error />} />
        </Route>
      </Routes>
    </BrowserRouter>
  );
};

export default App;
```
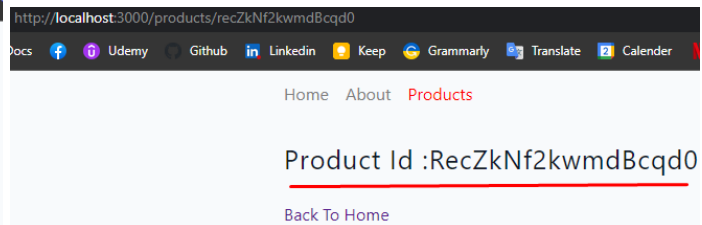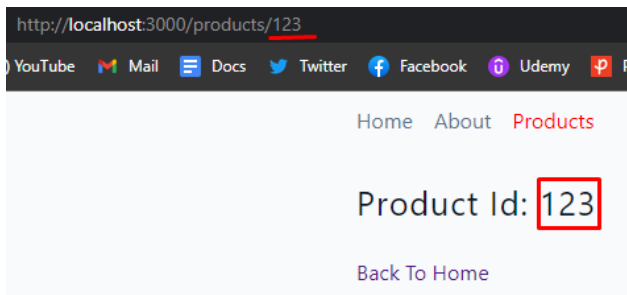
```
ges > JS SingleProduct.js > [∅] SingleProduct
import { Link, useParams } from "react-router-dom";

const SingleProduct = () => {
  const { productId } = useParams();
  return (
    <section className="section product">
      <h4>Product Id: {productId}</h4>
      <Link to="/products">Back To Home</Link>
    </section>
  );
};

export default SingleProduct;
```

useParams will play here

http://localhost:3000/products/123

YouTube M Mail ☰ Docs 🐦 Twitter f Facebook 🎓 Udemy P P

Home   About   Products

Product Id: 123

Back To Home

http://localhost:3000/products/recZkNf2kwmdBcqd0

ocs f 🎓 Udemy ○ Github in Linkedin 📌 Keep ✓ Grammarly 🔤 Translate 2️⃣ Calender

Home   About   Products

Product Id :RecZkNf2kwmdBcqd0

Back To Home

All Products:

```
ges > JS Products.js > ...
import { Link } from "react-router-dom";
import products from "../data";

const Products = () => {
  return (
    <>
      <section className="section">
        <h2>products</h2>
        <div className="products">
          {products.map((product) => {
            return (
              <article key={product.id}>
                <h5>{product.name}</h5>
                <Link to={`/products/${product.id}`}>More Info</Link>
              </article>
            );
          })}
        </div>
      </section>
    </>
  );
};

export default Products;
```
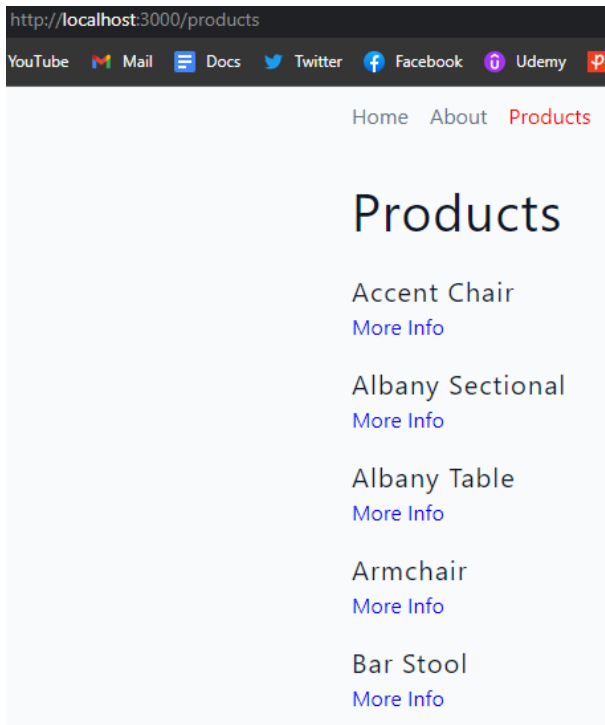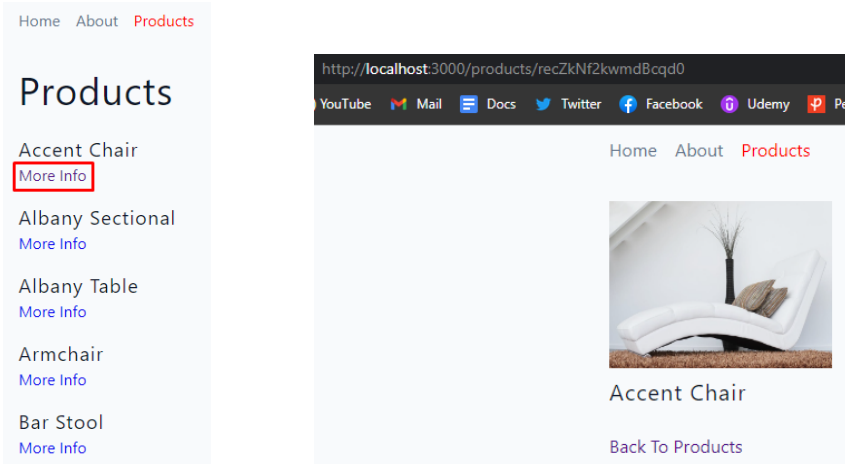
YouTube | M Mail | 📄 Docs | 🐦 Twitter | f Facebook | 🎓 Udemy | P

Home   About   Products

Products

Accent Chair
More Info

Albany Sectional
More Info

Albany Table
More Info

Armchair
More Info

Bar Stool
More Info

---

ages > JS SingleProduct.js > [∅] default

```js
import { Link, useParams } from "react-router-dom";
import products from "../data";

const SingleProduct = () => {
  const { productId } = useParams();
  const product = products.find((product) => product.id === productId);
  const { image, name } = product;

  return (
    <section className="section product">
      <img src={image} alt={name} />
      <h5>{name}</h5>
      <Link to="/products">Back To Products</Link>
    </section>
  );
};

export default SingleProduct;
```

useNavigate():

Code -1

```js
// pages > JS Login.js > Login > handleSubmit
import { useState } from "react";
import { useNavigate } from "react-router-dom";
const Login = ({ setUser }) => {
  const [name, setName] = useState("");
  const [email, setEmail] = useState("");

  const navigate = useNavigate();

  const handleSubmit = async (e) => {
    e.preventDefault();
    console.log(name, email);
    if (!name || !email) return;
    setUser({ name: name, email: email });
    navigate("/dashboard");
  };

  return (
    <section className="section">
      <form className="form" onSubmit={handleSubmit}>
        <h5>login</h5>
        <div className="form-row">
          <label htmlFor="name" className="form-label">
            name
          </label>
          <input
            type="text"
            className="form-input"
            id="name"
            value={name}
            onChange={(e) => setName(e.target.value)}
          />
        </div>
        <div className="form-row">
          <label htmlFor="email" className="form-label">
            email
          </label>
          <input
            type="email"
            className="form-input"
            id="email"
            value={email}
            onChange={(e) => setEmail(e.target.value)}
          />
        </div>
        <button type="submit" className="btn btn-block">
          login
        </button>
      </form>
    </section>
  );
};
export default Login;
```

```
src > pages > JS Dashboard.js > [∅] Dashboard
1    const Dashboard = ({ user }) => {
2      return (
3        <section className="section">
4          <h4>Hello, {user?.name}</h4>
5        </section>
6      );
7    };
8    export default Dashboard;
```

```
App.js > [∅] App
import { BrowserRouter, Routes, Route } from "react-router-dom";
import React, { useState } from "react";

import Home from "./pages/Home";
import About from "./pages/About";
import Products from "./pages/Products";
import Login from "./pages/Login";
import Dashboard from "./pages/Dashboard";
import Error from "./pages/Error";
import SharedLayout from "./pages/SharedLayout";
import SingleProduct from "./pages/SingleProduct";

const App = () => {
  const [user, setUser] = useState(null);

  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<SharedLayout />}>
          <Route index element={<Home />} />
          <Route path="about" element={<About />} />
          <Route path="products" element={<Products />} />
          <Route path="products/:productId" element={<SingleProduct />} />
          <Route path="login" element={<Login setUser={setUser} />} />
          <Route path="dashboard" element={<Dashboard user={user} />} />
          <Route path="*" element={<Error />} />
        </Route>
      </Routes>
    </BrowserRouter>
  );
};

export default App;
```
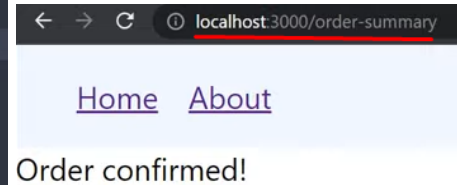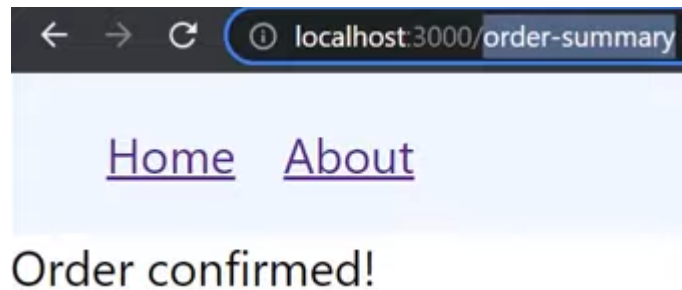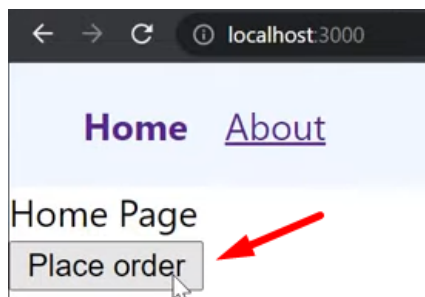
```
                   JS OrderSummary.js U  ✕        JS Navbar.js
s
mponents > JS OrderSummary.js > ...
 export const OrderSummary = () => {
     return <div>Order confirmed!</div>
 }
```

```
function App() {
  return (
    <>
      <Navbar />
      <Routes>
        <Route path='/' element={<Home />} />
        <Route path='about' element={<About />} />
        <Route path='order-summary' element={<OrderSummary />} />
      </Routes>
    </>
  )
}
```

```
← → C    ⓘ localhost:3000/order-summary

      Home   About

Order confirmed!
```

```
mponents > JS Home.js > ...
import { useNavigate } from 'react-router-dom'

export const Home = () => {
  const navigate = useNavigate()
  return (
    <>
      <div>Home Page</div>
      <button onClick={() => navigate('order-summary')}>Place order</button>
    </>
  )
}
```
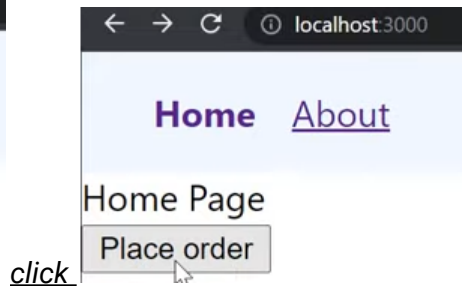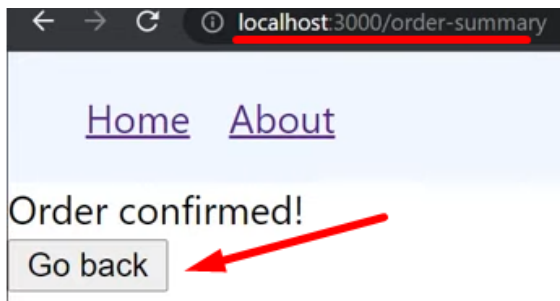
```
← → C   ⓘ localhost:3000

   Home   About

Home Page
 Place order
```

```
← → C   ⓘ localhost:3000/order-summary

   Home   About

Order confirmed!
```

click—>

```
mponents > JS OrderSummary.js > ...
import { useNavigate } from 'react-router-dom'

export const OrderSummary = () => {
  const navigate = useNavigate()

  return (
    <>
      <div>Order confirmed!</div>
      <button onClick={() => navigate(-1)}>Go back</button>
    </>
  )
}
```

click

Protected Route:

```jsx
const App = () => {
  const [user, setUser] = useState(null);

  return (
    <BrowserRouter>
      <Routes>
        <Route path="/" element={<SharedLayout />}>
          <Route index element={<Home />} />
          <Route path="about" element={<About />} />
          <Route path="products" element={<Products />} />
          <Route path="products/:productId" element={<SingleProduct />} />
          <Route path="login" element={<Login setUser={setUser} />} />
          <Route
            path="dashboard"
            element={
              <ProtectedRoute user={user}>
                <Dashboard user={user} />
              </ProtectedRoute>
            }
          />
          <Route path="*" element={<Error />} />
        </Route>
      </Routes>
    </BrowserRouter>
  );
};
```
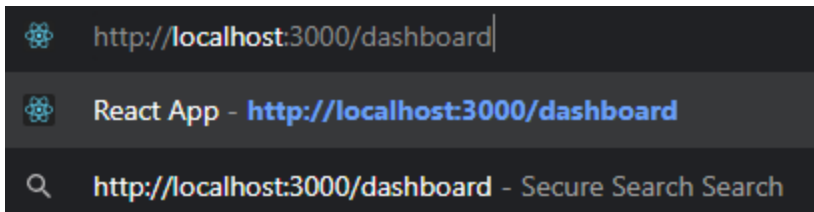
```jsx
import { Navigate } from "react-router-dom";

const ProtectedRoute = ({ user, children }) => {
  console.log(user, children);
  if (!user) {
    return <Navigate to="/" />;
  }
  return children;
};

export default ProtectedRoute;
```
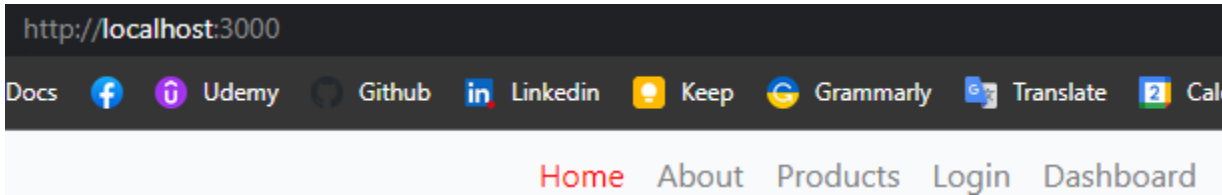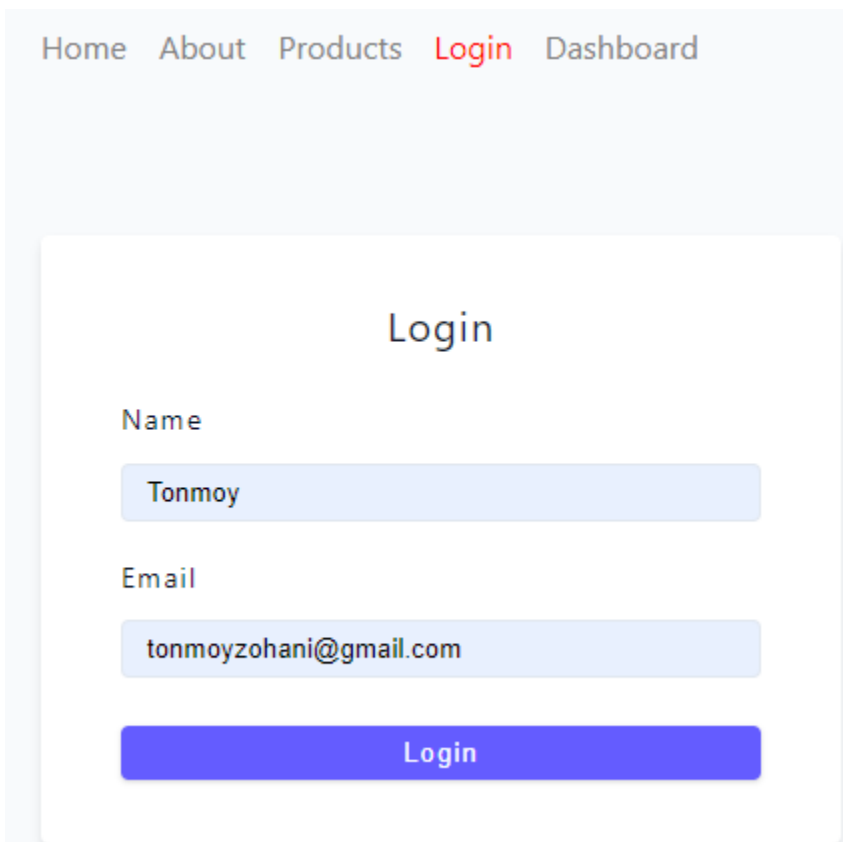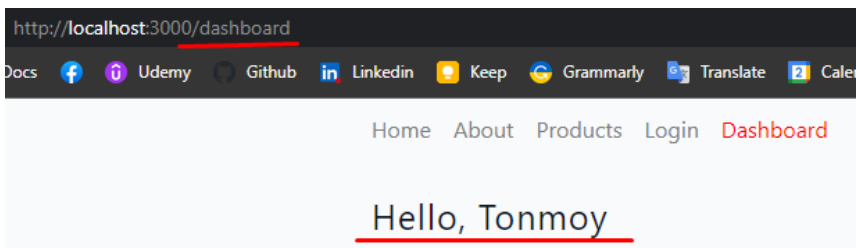
if there is no user, go to the root page

Hit Enter but

Root page

Now give the username in login page

Now it will go to the dashboard