

Laporan Praktikum Minggu-4
Mata Kuliah Pemrograman Berbasis Framework
“MODUL 5: React Router”



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JURUSAN TEKNOLOGI INFORMASI
PROGRAM STUDI D-IV TEKNIK INFORMATIKA
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1.1 Practicum Steps

A. Basic Router

- Source Code

```
import React from 'react';
import {
  BrowserRouter as Router,
  Switch,
  Route,
  Link
} from 'react-router-dom'
import { Redirect, useHistory, useLocation, useParams,
useRouteMatch
} from 'react-router-dom/cjs/react-router-dom.min';

export default function BasicExample() {
  return (
    <Router>
      <div>
        <ul>
          <li>
            <Link to="/">Home</Link>
          </li>
          <li>
            <Link to="/about">About</Link>
          </li>
          <li>
            <Link to="/dashboard">Dashboard</Link>
          </li>
        </ul>
        <hr/>
        <Switch>
          <Route exact path="/">
            <Home />
          </Route>
          <Route exact path="/about">
            <About />
          </Route>
          <Route exact path="/dashboard">
            <Dashboard />
          </Route>
        </Switch>
      </div>
    </Router>
  )
}
```

```

    );
  }

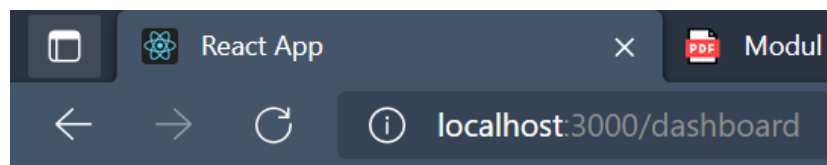
  function Home() {
    return (
      <div>
        <h2>Home</h2>
      </div>
    );
  }

  function About() {
    return (
      <div>
        <h2>About</h2>
      </div>
    );
  }

  function Dashboard() {
    return (
      <div>
        <h2>Dashboard</h2>
      </div>
    );
  }

```

- Hasil



- [Home](#)
- [About](#)
- [Dashboard](#)

Dashboard

B. URL Parameters

- Source Code

```

export default function ParamsExample() {
  return (
    <Router>
      <div>

```

```

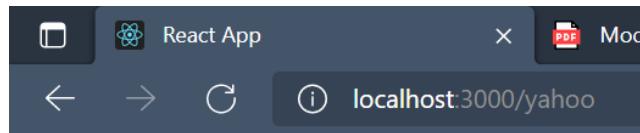
    <h2>Accounts</h2>
    <ul>
      <li>
        <Link to="/netflix">Netflix</Link>
      </li>
      <li>
        <Link to="/gmail">Gmail</Link>
      </li>
      <li>
        <Link to="/yahoo">Yahoo</Link>
      </li>
      <li>
        <Link to="/amazon">Amazon</Link>
      </li>
    </ul>
    <hr />

    <Switch>
      <Route path="/:id" children={<Child />} />
    </Switch>
  </div>
</Router>
);
}

function Child() {
  let { id } = useParams();
  return (
    <div>
      <h3>ID: {id}</h3>
    </div>
  );
}

```

- Hasil



Accounts

- [Netflix](#)
 - [Gmail](#)
 - [Yahoo](#)
 - [Amazon](#)
-

ID: yahoo

C. Use Nesting Router

- Source Code

```
export default function NestingExample() {  
  return (  
    <Router>  
      <div>  
        <ul>  
          <li>  
            <Link to="/">Home</Link>  
          </li>  
          <li>  
            <Link to="/topics">Topics</Link>  
          </li>  
        </ul>  
        <hr />  
  
        <Switch>  
          <Route exact path="/">  
            <Home />  
          </Route>  
          <Route path="/topics">  
            <Topics />  
          </Route>  
        </Switch>  
      </div>  
    </Router>  
  );  
}  
  
function Home() {
```

```

    return (
      <div>
        <h2>Home</h2>
      </div>
    );
  }

function Topics() {
  let { path, url } = useRouteMatch();

  return (
    <div>
      <h2>Topics</h2>
      <ul>
        <li>
          <Link to={`${url}/Sate, Nasi goreng`}>Kuliner</Link>
        </li>
        <li>
          <Link to={`${url}/Wisata alam,
Museum`}>Travelling</Link>
        </li>
        <li>
          <Link to={`${url}/Salaris, JW Marriot`}>Review
Hotel</Link>
        </li>
      </ul>

      <Switch>
        <Route exact path={path}>
          <h3>Please select a topic.</h3>
        </Route>
        <Route path={`${path}/:topicId`}>
          <Topic />
        </Route>
      </Switch>
    </div>
  );
}

function Topic() {
  let { topicId } = useParams();

  return (

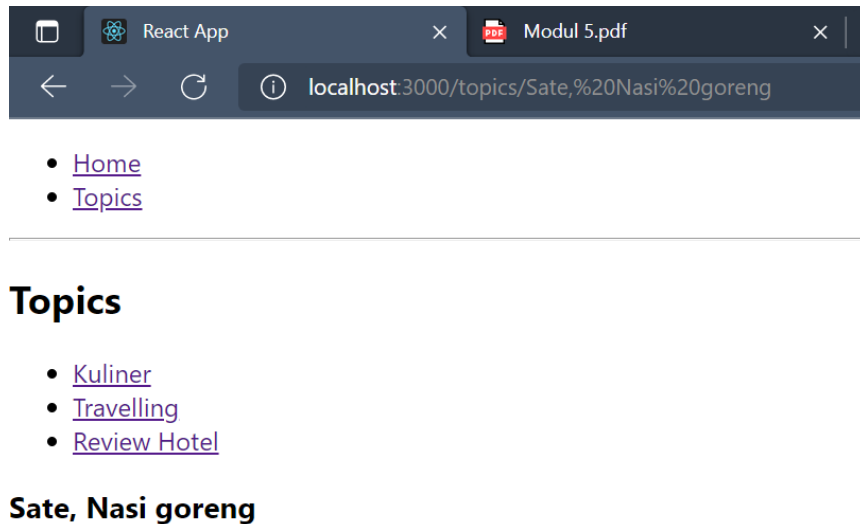
```

```

    <div>
      <h3>{topicId}</h3>
    </div>
  );
}

```

- Hasil



D. Use Redirects (Auth)

- Source Code

```

// import logo from './logo.svg';
// import './App.css';
import React from 'react';
import {
  BrowserRouter as Router,
  Switch,
  Route,
  Link
} from 'react-router-dom'
import { Redirect, useHistory, useLocation, useParams,
useRouteMatch
} from 'react-router-dom/cjs/react-router-dom.min';

export default function AuthExample() {
  return (
    <Router>
      <div>
        <AuthButton />

        <ul>
          <li>

```

```

        <Link to="/public">Public Page</Link>
      </li>
      <li>
        <Link to="/private">Private Page</Link>
      </li>
    </ul>

    <Switch>
      <Route path="/public">
        <PublicPage />
      </Route>
      <Route path="/login">
        <LoginPage />
      </Route>
      <PrivateRoute path="/private">
        <ProtectedPage />
      </PrivateRoute>
    </Switch>
  </div>
</Router>
);
}

const fakeAuth = {
  isAuthenticated: false,
  authenticate(cb) {
    fakeAuth.isAuthenticated = true;
    setTimeout(cb, 100);
  },
  signout(cb) {
    fakeAuth.isAuthenticated = false;
    setTimeout(cb, 100);
  },
};

function AuthButton() {
  let history = useHistory();
  let location = useLocation();
  let { from } = location.state || { from: { pathname: "/" } };

  return fakeAuth.isAuthenticated ? (
    <p>
      Welcome!{" " }

```



```

      <button
        onClick={() => {
          fakeAuth.signout(() => history.push(from));
        }}
      >
        Sign out
      </button>
    </p>
  ) : (
    <p>You are not logged in.</p>
  );
}

```

```

function PrivateRoute({ children, ...rest }) {
  return (
    <Route
      {...rest}
      render={({ location }) =>
        fakeAuth.isAuthenticated ? (
          children
        ) : (
          <Redirect
            to={{
              pathname: "/login",
              state: { from: location },
            }}
          />
        )
      >
    </Route>
  );
}

```

```

function PublicPage() {
  return (
    <div>
      <h3>Public</h3>
    </div>
  );
}

```

```

function ProtectedPage() {
  return (

```

```

    <div>
      <h3>Private</h3>
    </div>
  );
}

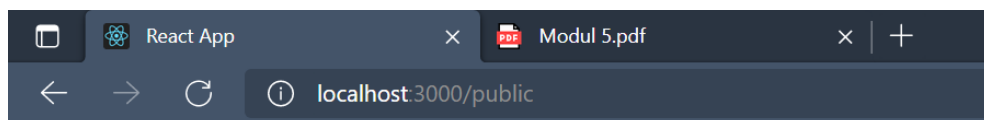
function LoginPage() {
  let history = useHistory();
  let location = useLocation();

  let { from } = location.state || { from: { pathname: "/" } };
  let login = () => {
    fakeAuth.authenticate(() => {
      history.replace(from);
    });
  };

  return (
    <div>
      <p>You must log in to view the page at {from.pathname}</p>
      <button onClick={login}>Log in</button>
    </div>
  );
}

```

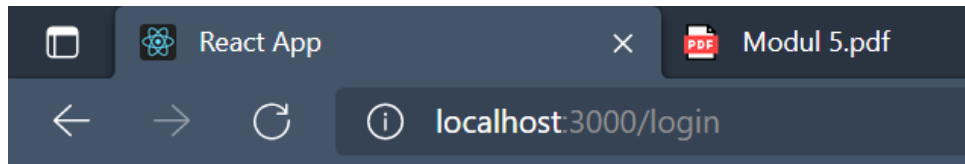
- Hasil



You are not logged in.

- [Public Page](#)
- [Private Page](#)

Public



You are not logged in.

- [Public Page](#)
- [Private Page](#)

You must log in to view the page at /private

Log in

TUGAS

source code

```
import React from 'react';
import {
  BrowserRouter as Router,
  Switch,
  Route,
  Link
} from 'react-router-dom'
import {
  Redirect, useHistory, useLocation, useParams, useRouteMatch
} from 'react-router-dom/cjs/react-router-dom.min';
import G1 from './img/g1.png';
import G2 from './img/g2.png';
import G3 from './img/g3.png';

export default function AuthExample() {
  return (
    <Router>
      <div>
        <AuthButton />

        <ul>
          <li>
            <Link to="/public">About US</Link>
          </li>
          <li>
            <Link to="/private">Catalog Page</Link>
          </li>
        </ul>
      </div>
    </Router>
  )
}
```

```

    </ul>

    <Switch>
      <Route path="/public">
        <PublicPage />
      </Route>
      <Route path="/login">
        <LoginPage />
      </Route>
      <PrivateRoute path="/private">
        <ProtectedPage />
      </PrivateRoute>
    </Switch>
  </div>
</Router>
);
}

const fakeAuth = {
  isAuthenticated: false,
  authenticate(cb) {
    fakeAuth.isAuthenticated = true;
    setTimeout(cb, 100);
  },
  signout(cb) {
    fakeAuth.isAuthenticated = false;
    setTimeout(cb, 100);
  },
};

function AuthButton() {
  let history = useHistory();
  let location = useLocation();
  let { from } = location.state || { from: { pathname: "/" } };

  return fakeAuth.isAuthenticated ? (
    <p>
      Welcome to our Online Shop!{" "}
      <button
        onClick={() => {
          fakeAuth.signout(() => history.push(from));
        }}
      >

```

```

        Sign out
      </button>
    </p>
  ) : (
    <p>Anda masih belum login.</p>
  );
}

function PrivateRoute({ children, ...rest }) {
  return (
    <Route
      {...rest}
      render={({ location }) =>
        fakeAuth.isAuthenticated ? (
          children
        ) : (
          <Redirect
            to={{
              pathname: "/login",
              state: { from: location },
            }}
          />
        )
      }
    />
  );
}

function PublicPage() {
  return (
    <div>
      <h3>About Us</h3>
      <h4>Online Shop - 2022</h4>
      <h5>Owner : Khosy Robbin Hood</h5>
    </div>
  );
}

function ProtectedPage() {
  return (
    <div>
      <h3>Silahkan melihat Barang-barang di Toko kami</h3>
      <ul>

```

```

        <li>Sepatu G1</li>
        <img src={G1}></img>
        <li>Sepatu G2</li>
        <img src={G2}></img>
        <li>Sepatu G3</li>
        <img src={G3}></img>
      </ul>
    </div>
  );
}

function LoginPage() {
  let history = useHistory();
  let location = useLocation();

  let { from } = location.state || { from: { pathname: "/" } };
  let login = () => {
    fakeAuth.authenticate(() => {
      history.replace(from);
    });
  };

  return (
    <div>
      <p>Silahkan Login untuk melihat barang {from.pathname}</p>
      <button onClick={login}>Log in</button>
    </div>
  );
}

```

Hasil

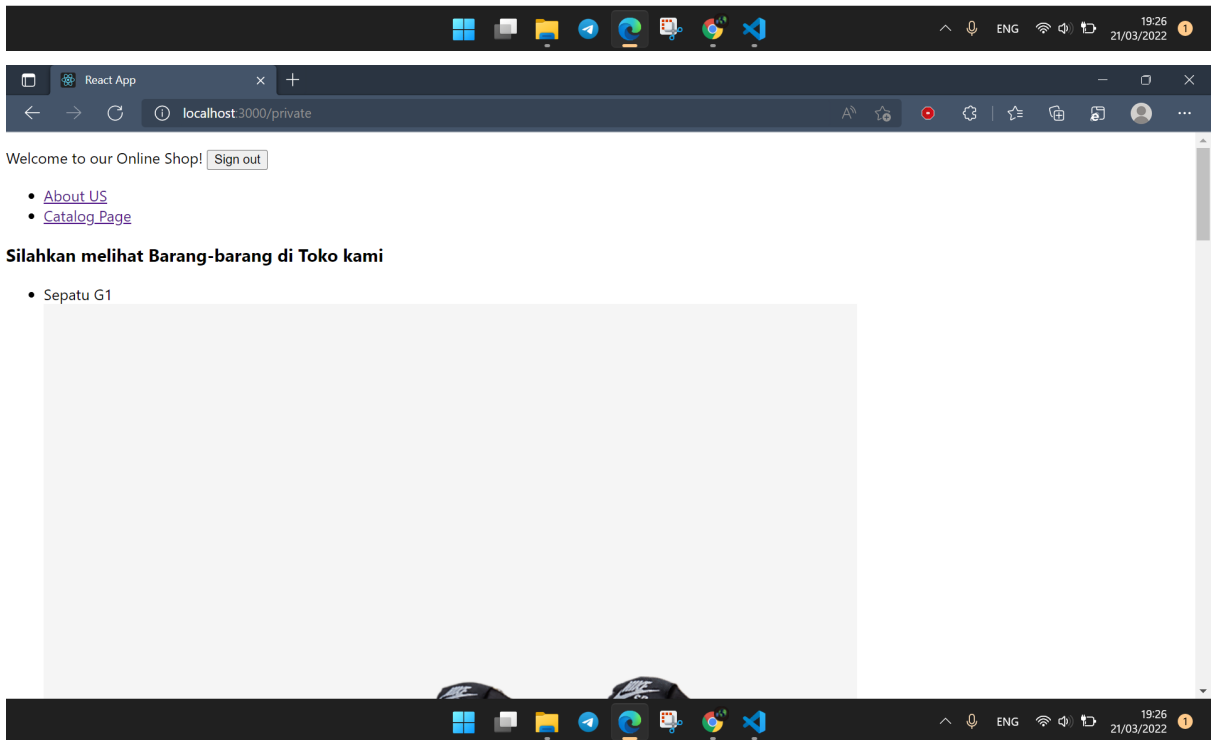


Anda masih belum login.

- [About US](#)
- [Catalog Page](#)

Silahkan Login untuk melihat barang /private

[Log in](#)



Welcome to our Online Shop! [Sign out](#)

- [About US](#)
- [Catalog Page](#)

Silahkan melihat Barang-barang di Toko kami

- Sepatu G1

