

React Routes

O que são rotas?

É o recurso que permite que o usuário navegue entre diferentes partes da aplicação. No react isso é gerenciado por uma biblioteca chamada React Router Dom.

```
npm install react-router-dom
```

Utilizando createBrowserRouter

```
import React from 'react'
import ReactDOM from 'react-dom/client'
import {createBrowserRouter, RouterProvider} from 'react-router-dom'
import './index.css'
import App from './App'
import PageNotFound from './Pages/PageNotFound'
import Sobre from './Pages/Sobre'
import Servicos from './Pages/Servicos'
import Contato from './Pages/Contato'
import ConteudoPrincipal from './Componentes/ConteudoPrincipal'

const router = createBrowserRouter([
  {
    path: '/',
    element: <App/>,

    children: [
      {index:true, element: <ConteudoPrincipal/>},
    ]
  }
])
```

```

    {path: 'sobre', element: <Sobre/>},
    {path: 'servicos',
    element: <Servicos/>,
    children: [
      {path: 'website', element: <h1>Website</h1>},
      {path: 'ecommerce', element: <h1>E-commerce</h1>},
      {path: 'app', element: <h1>App</h1>},
    ]},
    {path: 'contato', element: <Contato/>},
    {path: '*', element: <PageNotFound/>}
  ]
}
])

ReactDOM.createRoot(document.getElementById('root')).render(
  <React.StrictMode>
    <RouterProvider router={router}/>
  </React.StrictMode>,
)

```

Primeiro passo é importar:

```
import {createBrowserRouter, RouterProvider} from 'react-router-dom'
```

Estrutura básica do Router:

```

import {createBrowserRouter, RouterProvider} from 'react-router-dom'

const router = createBrowserRouter([
  // ...
])

```

```
ReactDOM.createRoot(document.getElementById('root')).render(
  <React.StrictMode>
    <RouterProvider router={router}/>
  </React.StrictMode>,
)
```

Toda rota recebe duas propriedades: path e element

path: indica o caminho da rota (indicado pela /), ou seja, quando a pessoa acessar, por exemplo a pagina "site.com/sobre", o que será carregado.

element: indica o componente que está sendo carregado

```
const router = createBrowserRouter([
  {
    path: '/',
    element: <App/>,
  }])
```

Como eu insiro um link para uma rota:

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

export default function NavBar() {
  <ul>
    <li>
      <Link to='/servicos'>Serviços</Link>
    </li>
  </ul>
}
```

Nested Routes

Para criar subrotas, ou seja, "site.com/sobre/projeto1" por exemplo, existem as nested routes.

```

const router = createBrowserRouter([
  {
    path: '/',
    element: <App/>,

    children: [
      {index:true, element: <ConteudoPrincipal/>},
      {path:'sobre', element: <Sobre/>},
      {path:'servicos',
        element: <Servicos/>,
        children:[
          {path: 'website', element: <h1>Website</h1>},
          {path: 'ecommerce', element: <h1>E-commerce</h1>},
          {path: 'app', element: <h1>App</h1>},
        ]},
      {path:'contato', element: <Contato/>},
      {path:'*', element: <PageNotFound/>}
    ]
  }
])

```

Para que essa rota apareça no conteúdo, nós devemos informar ao componente pai, onde inseri-la. Fazemos isso com <Outlet/>:

```

import {Outlet, Link} from 'react-router-dom'
export default function Servicos(){
  return(
    <>
      <h1>Página Serviços</h1>
      <Link to='website'>Website</Link>
      <Link to='ecommerce'>E-commerce</Link>
      <Link to='app'>Aplicativo</Link>
      <Outlet/>
    </>
  )
}

```

```
)  
}
```

Ao final devemos informar ao React quem é o responsável pelo controle de rotas, nesse caso nossa variável `router`, através do componente `RouterProvider`.

```
ReactDOM.createRoot(document.getElementById('root')).render(  
  <React.StrictMode>  
    <RouterProvider router={router}/>  
  </React.StrictMode>,  
)
```

Referências

<https://dev.to/tywenk/how-to-use-nested-routes-in-react-router-6-4jhd>

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

<https://css-tricks.com/learning-react-router/>

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<https://coderpad.io/blog/development/guide-to-react-router/>