

DBStart

React

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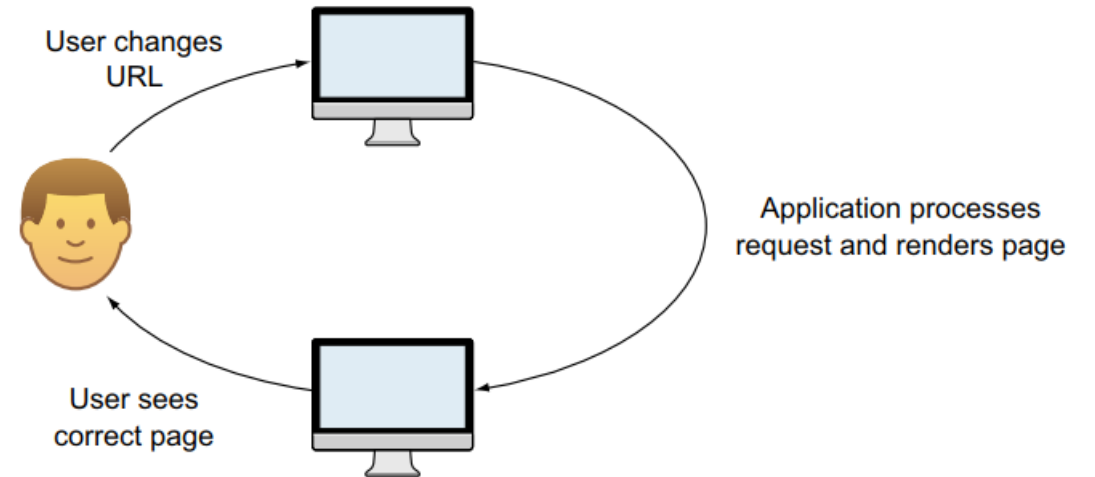
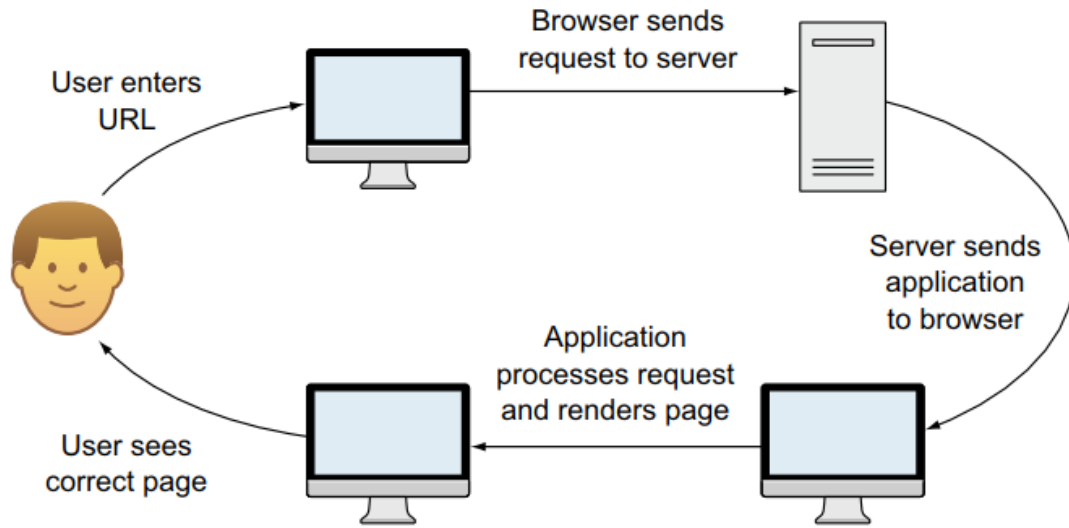
Single Page Applications



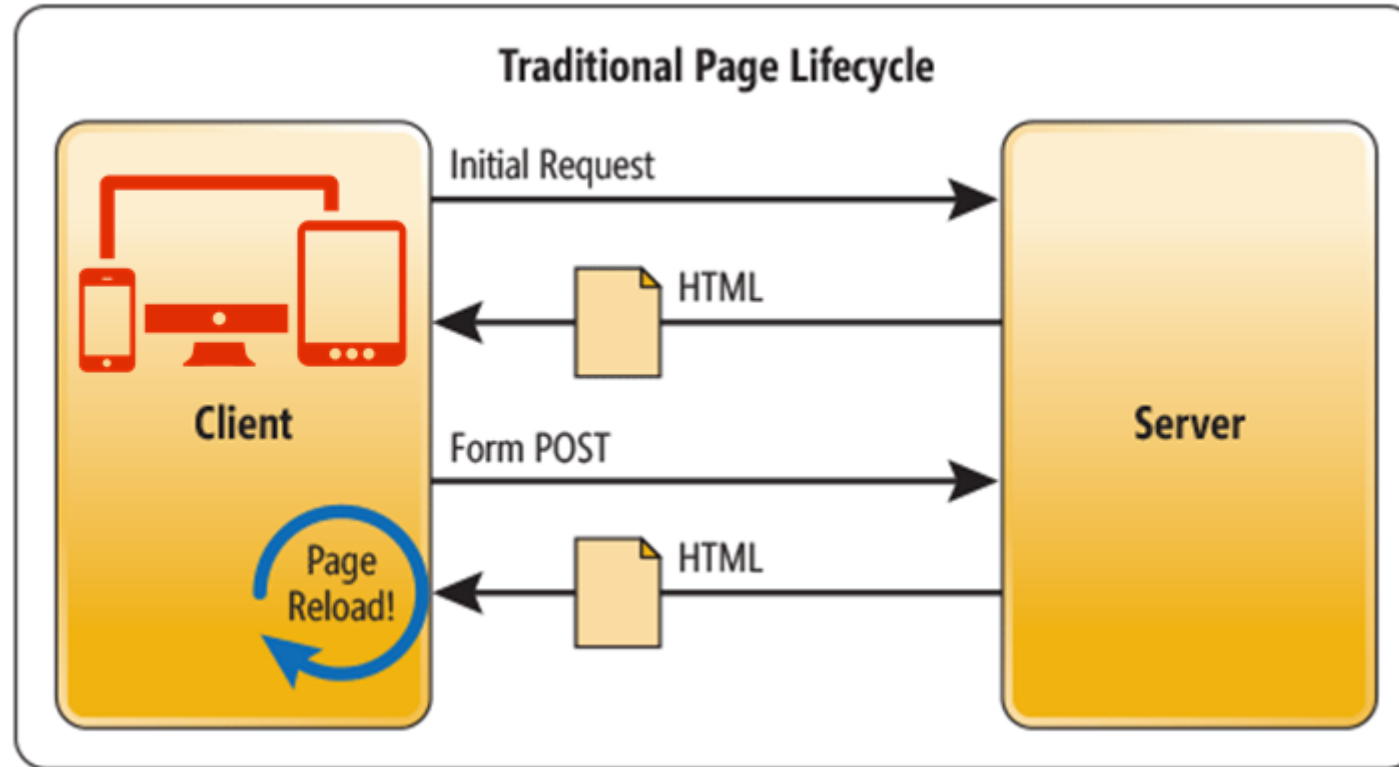
Single Page Applications

- Uma SPA ou *Single Page Application* é uma aplicação web que se baseia em uma única página.
- Página inicial a ser renderizada funciona como uma “casca”, um pedaço de HTML que irá conter as diferentes *views* parciais.
- Uma SPA se utiliza dos mecanismos de renderização parcial de páginas de forma assíncrona sem a necessidade de uma nova requisição completa a um servidor.

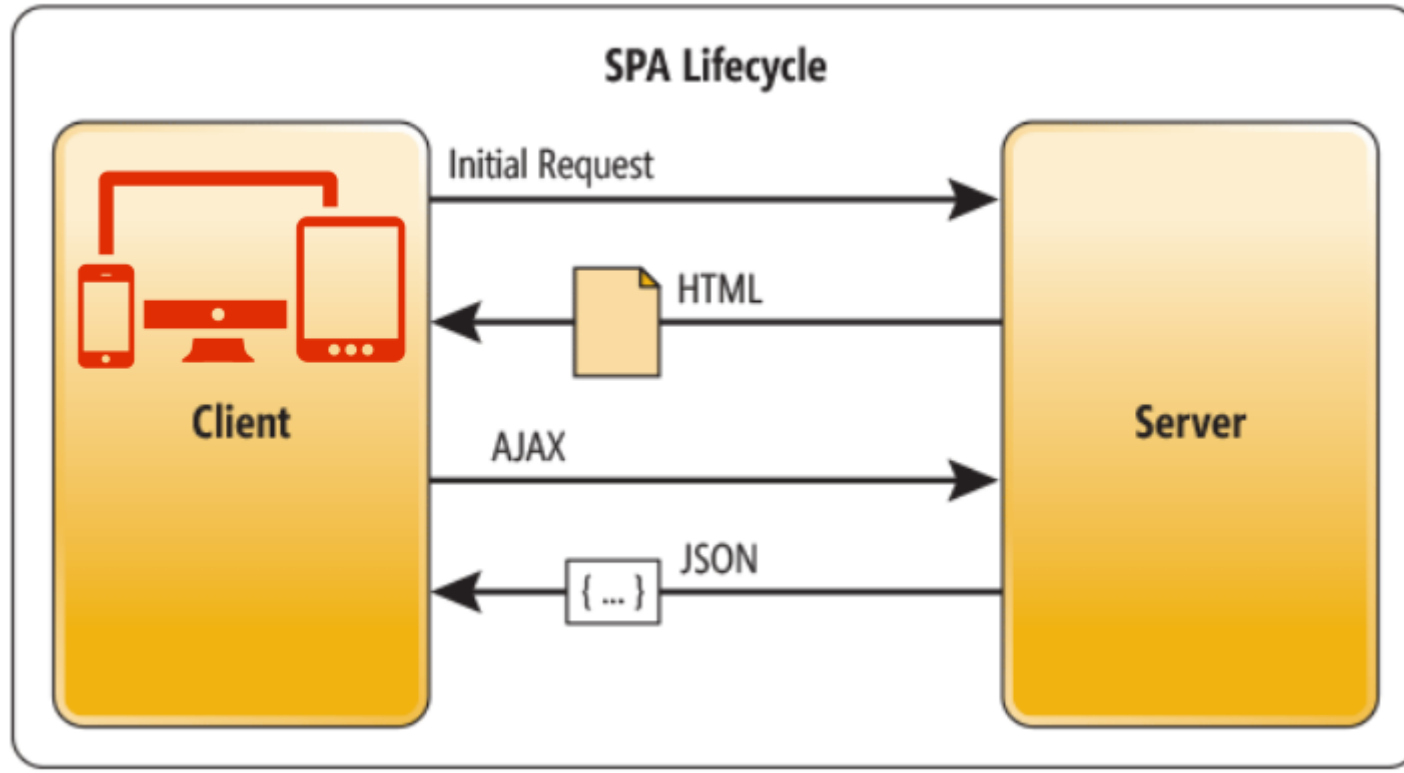
Single Page Applications



Single Page Applications



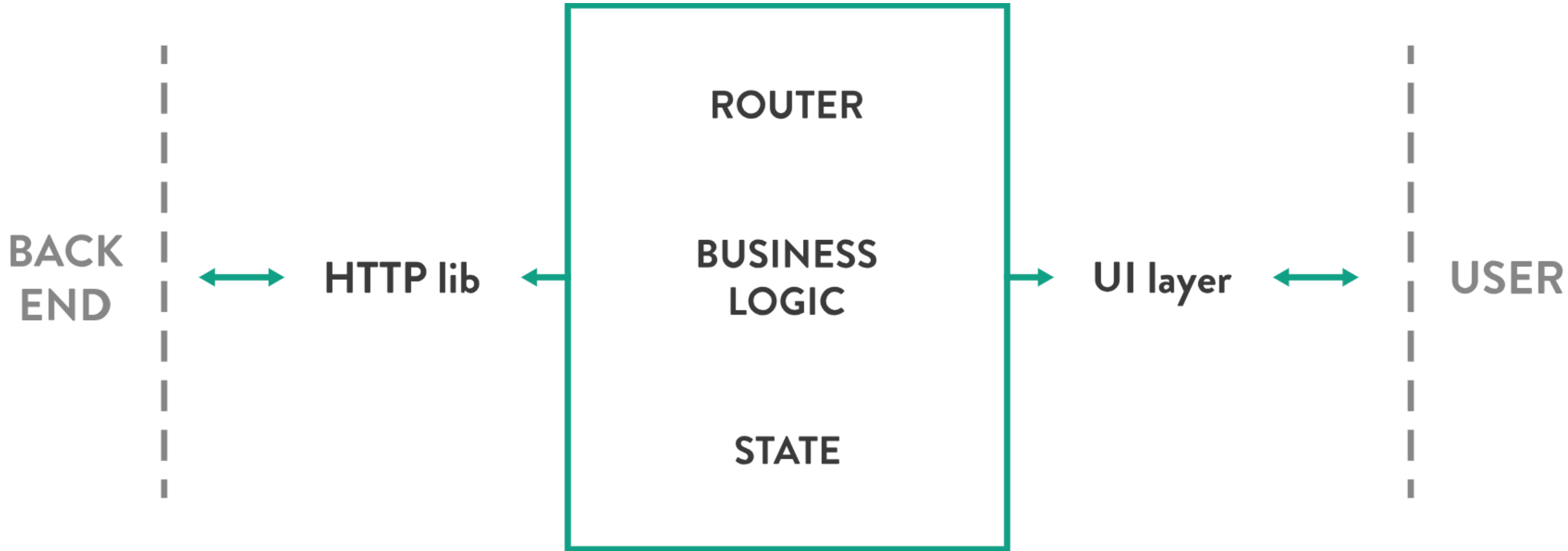
Single Page Applications



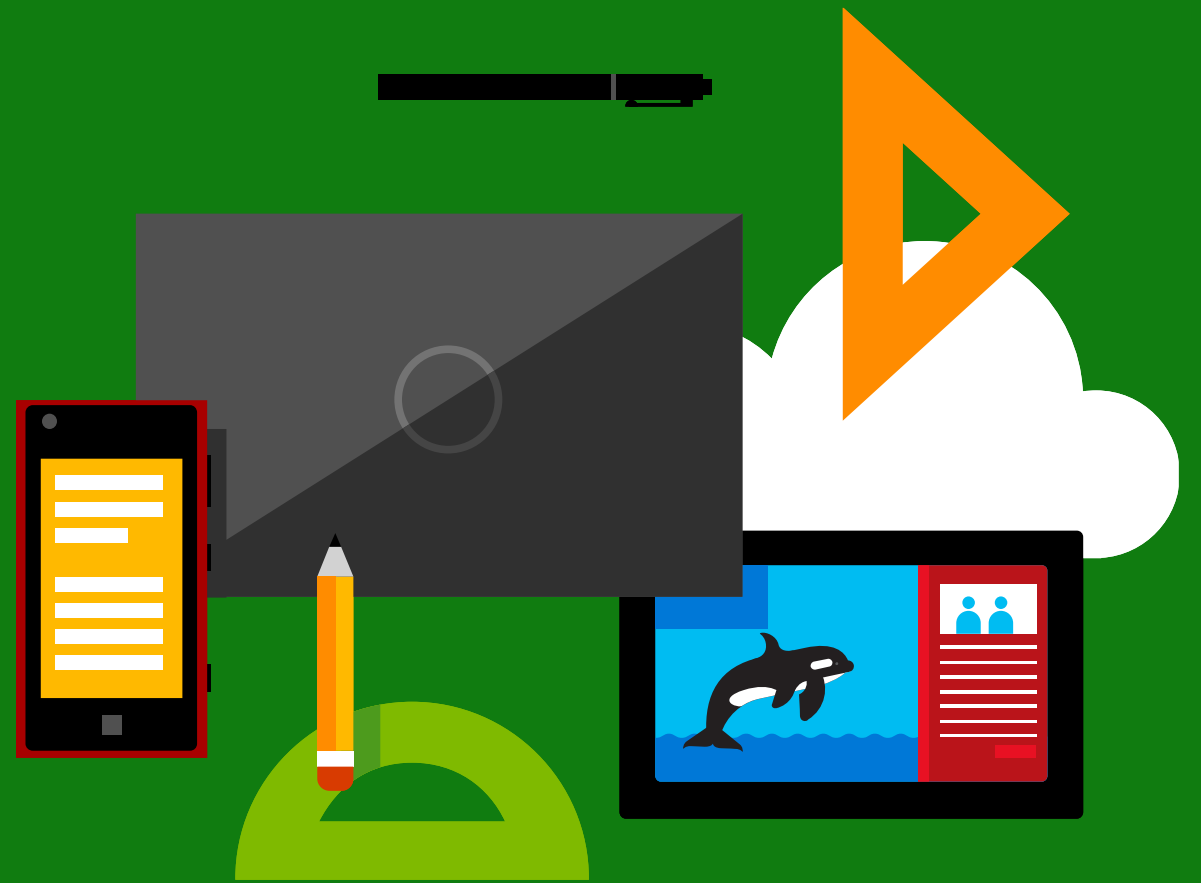
Single Page Applications

- Recursos usualmente utilizados por frameworks para criação de SPAs:
 - Views baseadas em template
 - Roteamento entre views
 - Gerenciamento de estado
 - Requisições assíncronas para o backend

Single Page Applications



O que iremos explorar?



Tópicos

- React
 - Ferramentas de construção
 - Componentes
 - JSX
 - Hooks
 - Consumo de APIs REST
 - Formulários

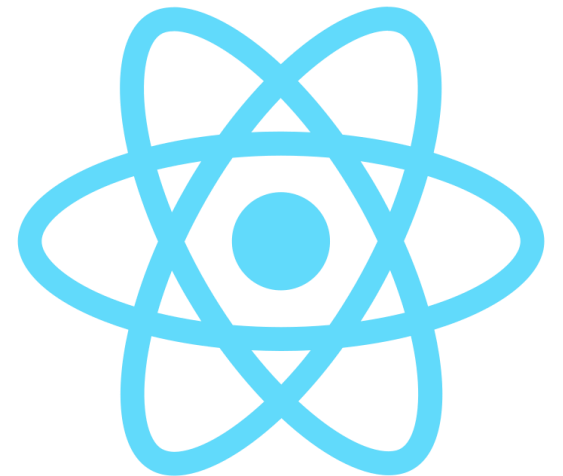
React



React

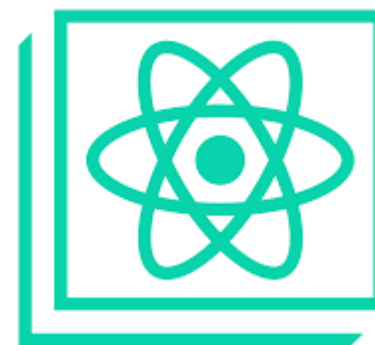
- Biblioteca para criação de interfaces com o usuário
- Suporta o desenvolvimento de aplicações web, mobile e desktop
- Código aberto

<https://react.dev/>



React - Configuração de Ferramentas

- Ferramentas para configuração inicial de um projeto SPA:
- Create React App <https://create-react-app.dev/> (em desuso)
- Vite <https://vitejs.dev/>
- Parcel <https://parceljs.org/>
- IDEs online
- Frameworks – Next.js, Remix, etc



Demonstração Create React App

- Criação do projeto:
- `npx create-react-app@latest aplicacaocra`

```
Success! Created aplicacaocra at D:\Temp\arquiteturaclientside\aplicacaocra
Inside that directory, you can run several commands:
```

```
npm start
```

```
  Starts the development server.
```

```
npm run build
```

```
  Bundles the app into static files for production.
```

```
npm test
```

```
  Starts the test runner.
```

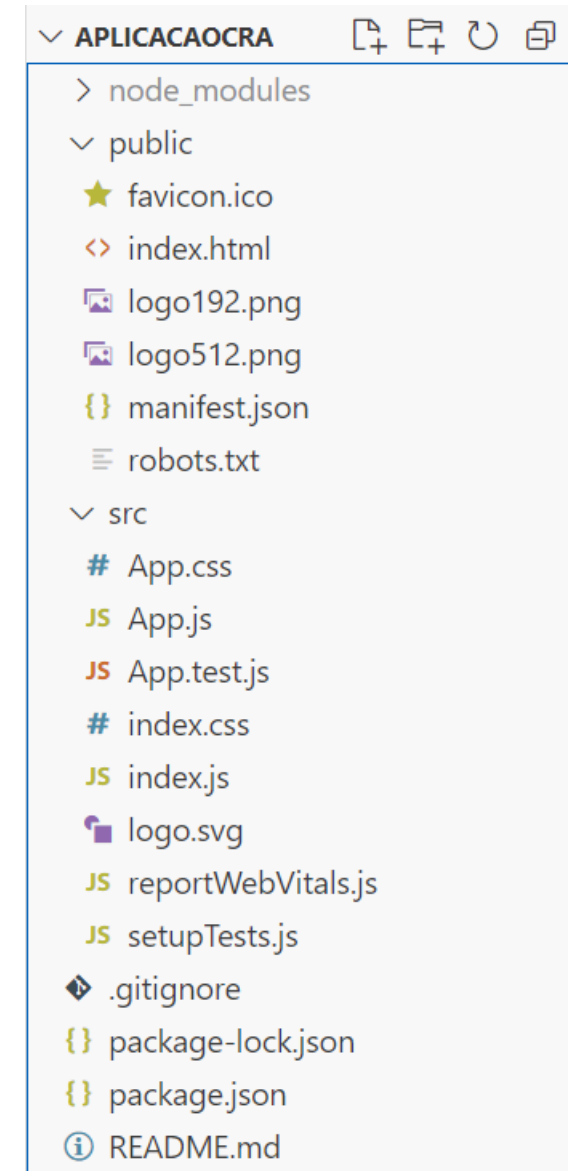
```
npm run eject
```

```
  Removes this tool and copies build dependencies, configuration files
  and scripts into the app directory. If you do this, you can't go back!
```

```
We suggest that you begin by typing:
```

```
cd aplicacaocra
```

```
npm start
```



Demonstração Vite

- Criação do projeto:
- `npm create vite@latest aplicacaovite`

Need to install the following packages:

create-vite@4.3.2

Ok to proceed? (y) y

? Select a framework: » - Use arrow-keys. Return to submit.

> Vanilla

Need to install the following packages:

create-vite@4.3.2

Ok to proceed? (y) y

? Select a framework: » Read

Need to install the following packages:

create-vite@4.3.2

Ok to proceed? (y) y

? Select a framework: » Read

? Select a variant: » JavaScript

VITE v4.3.9 ready in 4522 ms

→ Local: <http://localhost:5173/>

→ Network: use `--host` to expose

→ press `h` to show help

Scaffolding project in D:\Temp\arqui

Done. Now run:

`cd aplicacaovite`

`npm install`

`npm run dev`

Shortcuts

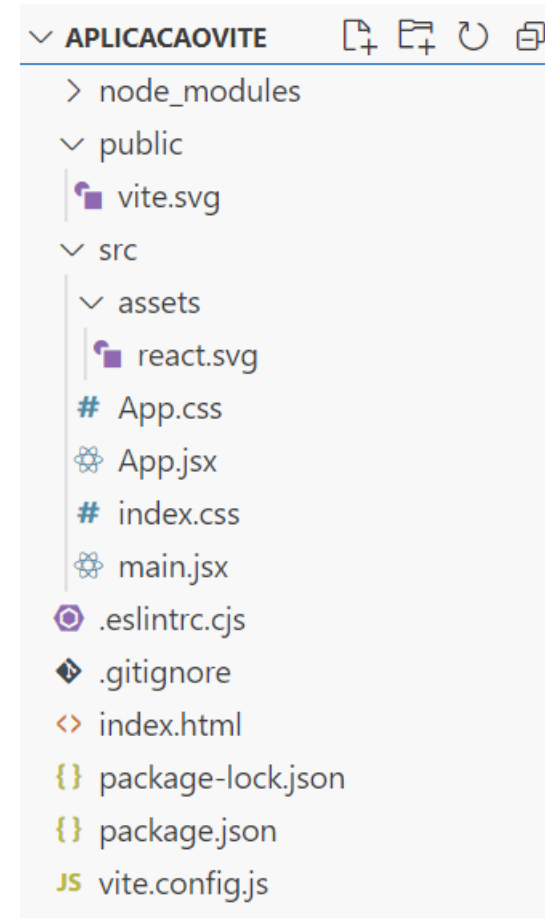
press `r` to restart the server

press `u` to show server url

press `o` to open in browser

press `c` to clear console

press `q` to quit



Demonstração IDEs Online

- CodeSandbox
 - <https://codesandbox.io/>
- StackBlitz
 - <https://stackblitz.com/>
- Replit
 - <https://replit.com/>

[**https://vite.new/react-ts**](https://vite.new/react-ts)

Laboratório

- Siga as instruções do arquivo Lab01_React

