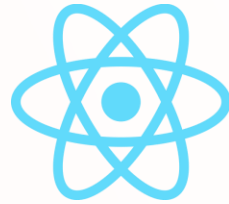


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# React Intro



João Gonçalves

Interactive Developer / Trainer / Consultant

Applied Mathematics Degree

Master Multimedia Communication

<http://joaogoncalves.net>

[edu@joaogoncalves.net](mailto:edu@joaogoncalves.net)

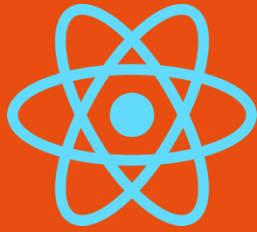
[@joaopapin](#)

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# React - Introdução

João Gonçalves

# Requisitos



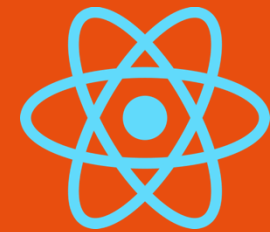
Confortáveis com **HTML5**

Confortáveis com **Javascript** (intro)

Bons **ES6, ES7, ES8, ..., ES2022, ESNext**

**Node.js** e **NPM** (opcional)

# Preparação Ambiente de trabalho



Instalar **Node.js** e **GIT**

Abrir (instalar) Chrome, e extensões para React:

React Developer Tools & Redux developer tools

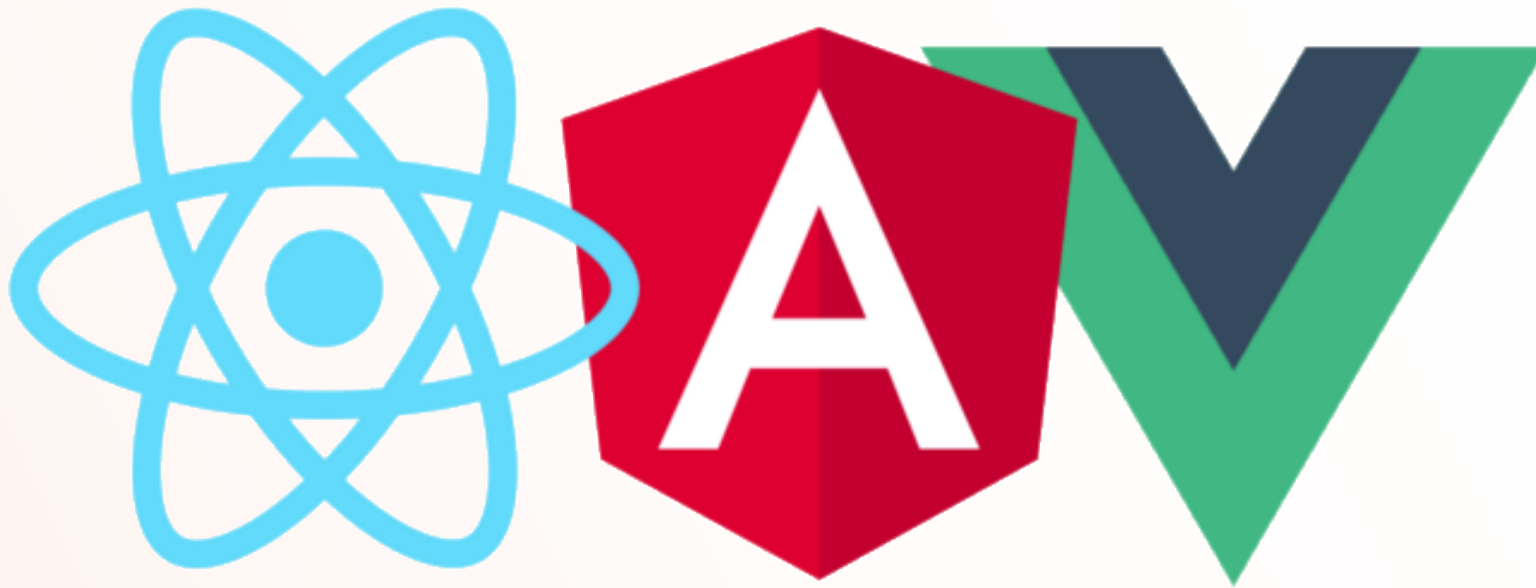
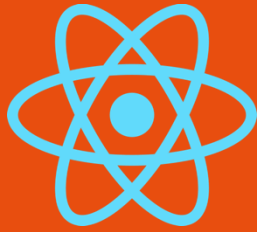
Escolher Editor de Código e instalar (**VSCode**)

**VSCode, extensões:**

ES7+ React/Redux/React-Native/JS snippets,  
Simple React Snippets,  
ou

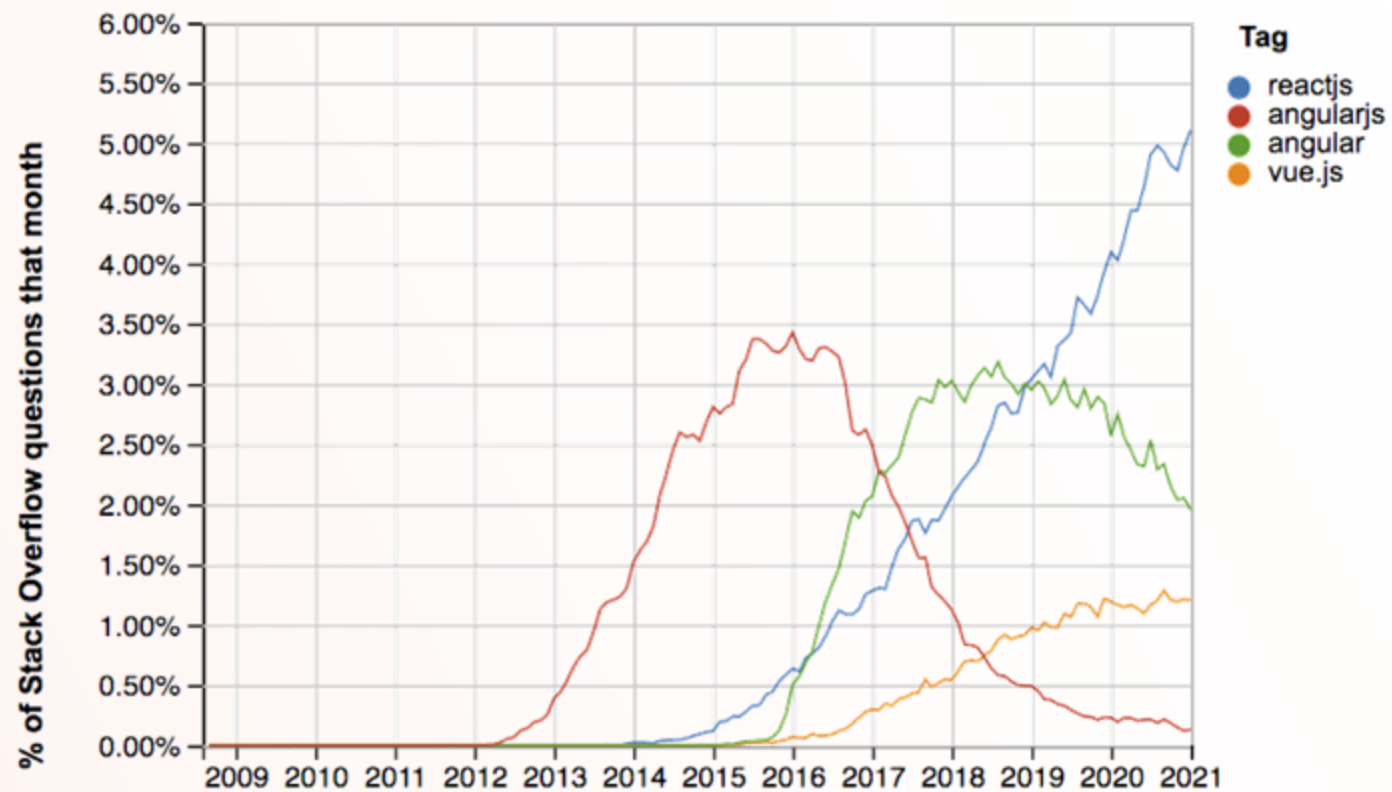
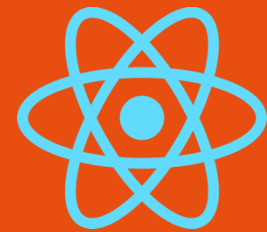
**React Extension Pack**

# History...

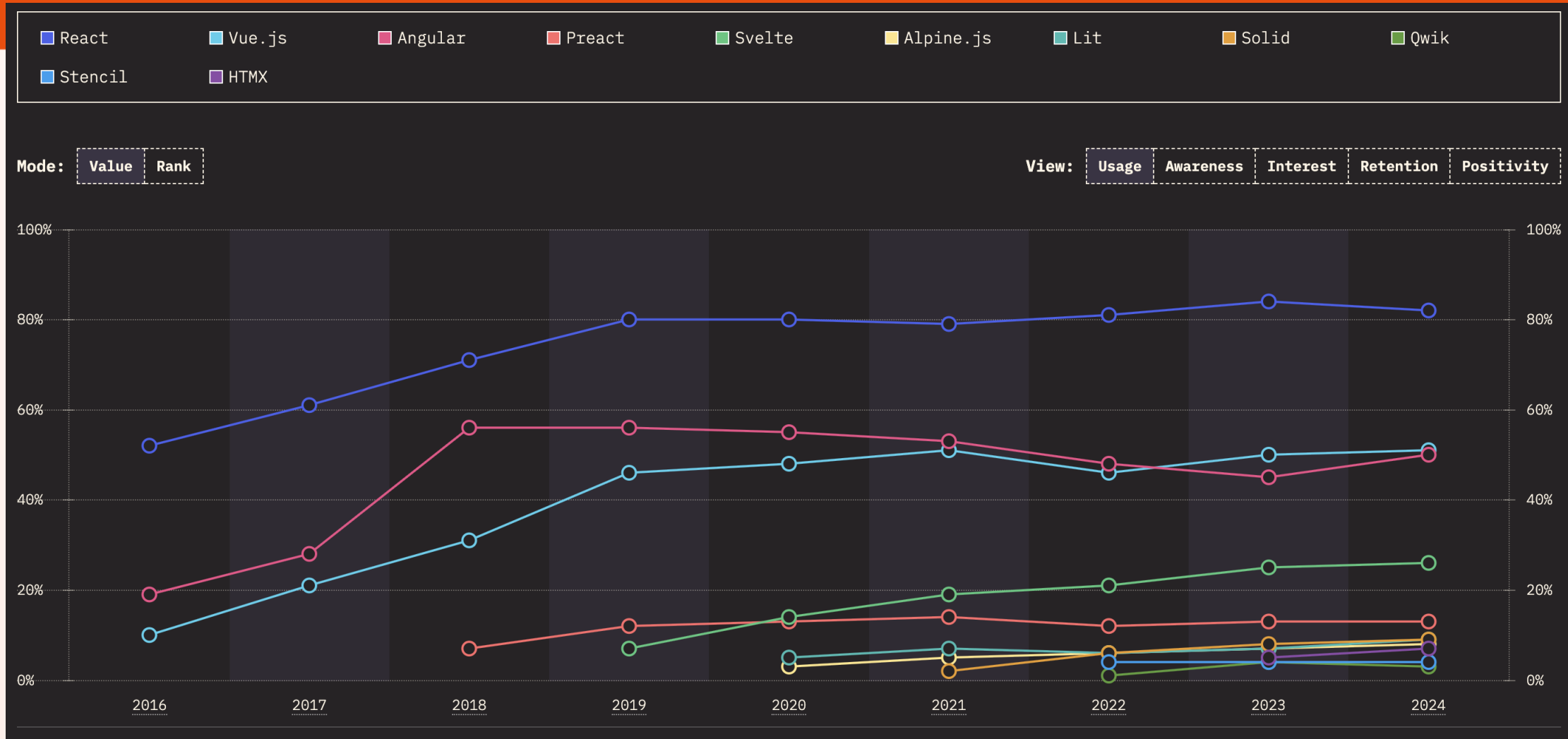
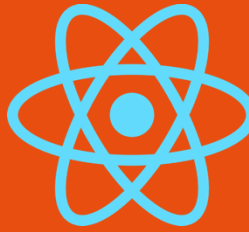


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# History ...

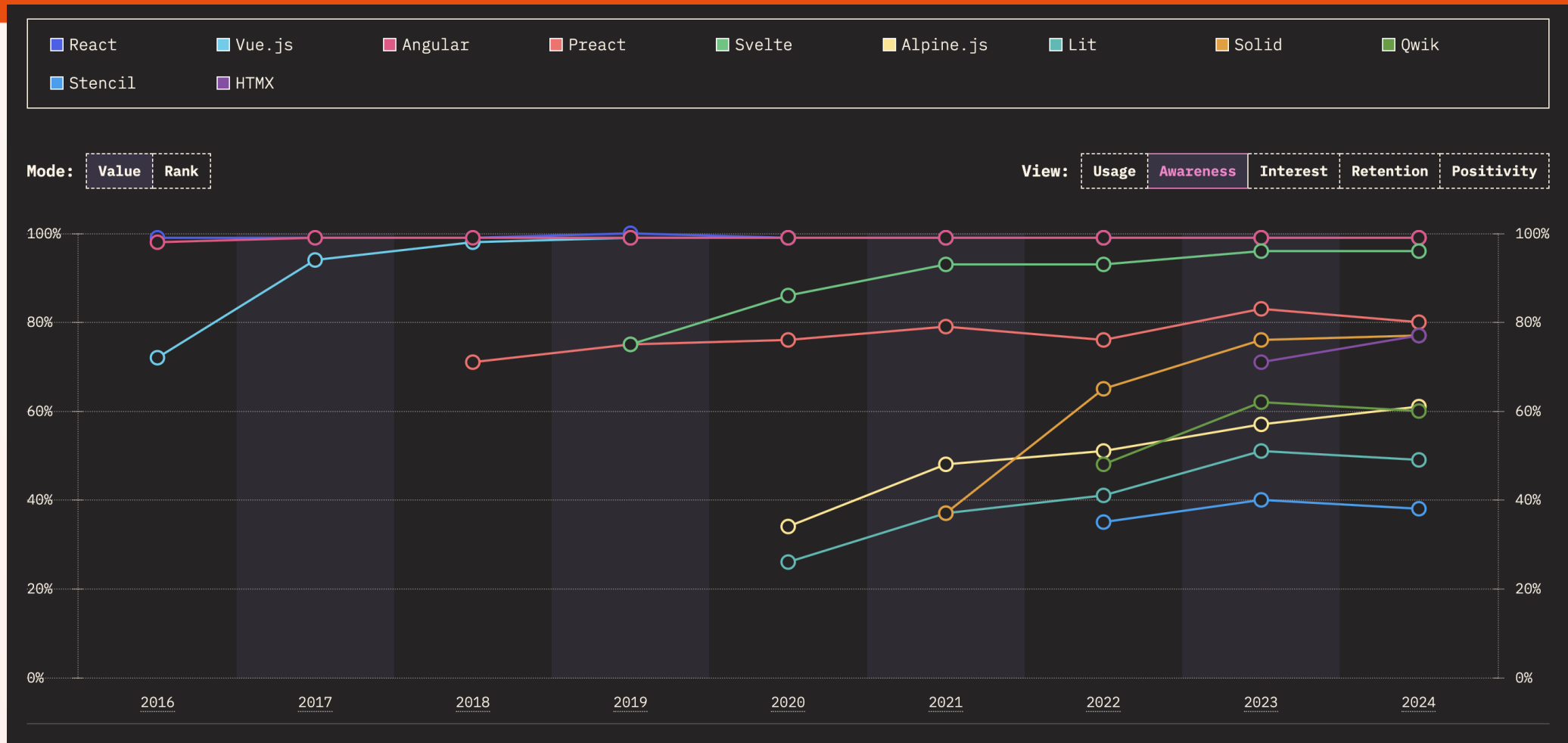
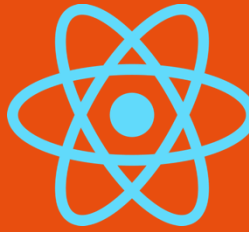


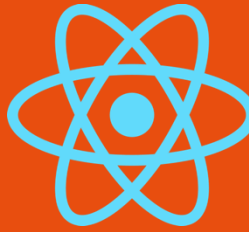
# StateOfJs (usage)





# Interest (stateofjs)

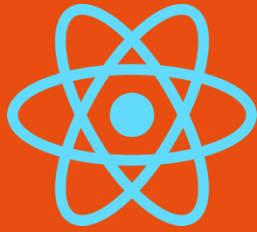




With **React** or **Vue**, you'll also need to select other products for **routing**, **dependency injection**, **forms**, **bundling** and **deploying** ...



The **Angular** framework is a platform that includes  
**all you need for developing and deploying** a Web app

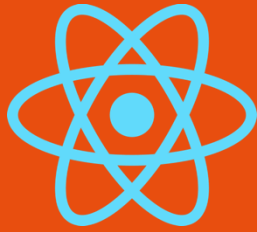


Open Source Javascript library since **2013**

Developed by **Facebook** & **Instagram** Dev's

Intended to be the “**V**” in a **MVC**

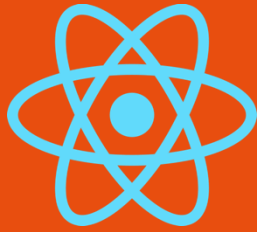
Great for **SPA** (Single Page Application)



**Virtual DOM**

**JSX**

(sintaxe de XML para Javascript, opcional)



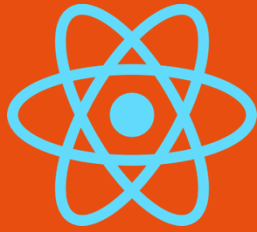
**JS Objects** are faster than **DOM Objects**

**React Virtual DOM** is a **JS Object**

React **never** read from the “real” DOM

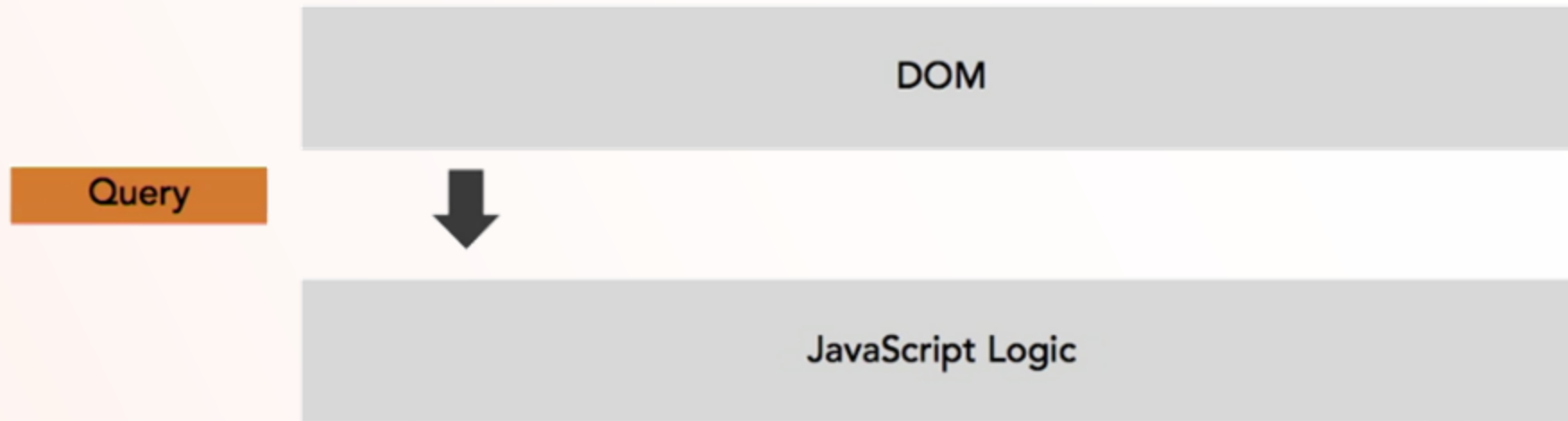
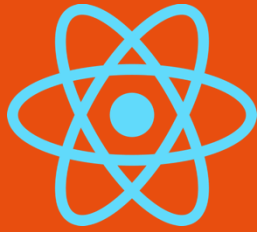
React only writes in the “real” DOM if **needed**

Updates **efficiently** the **DOM**

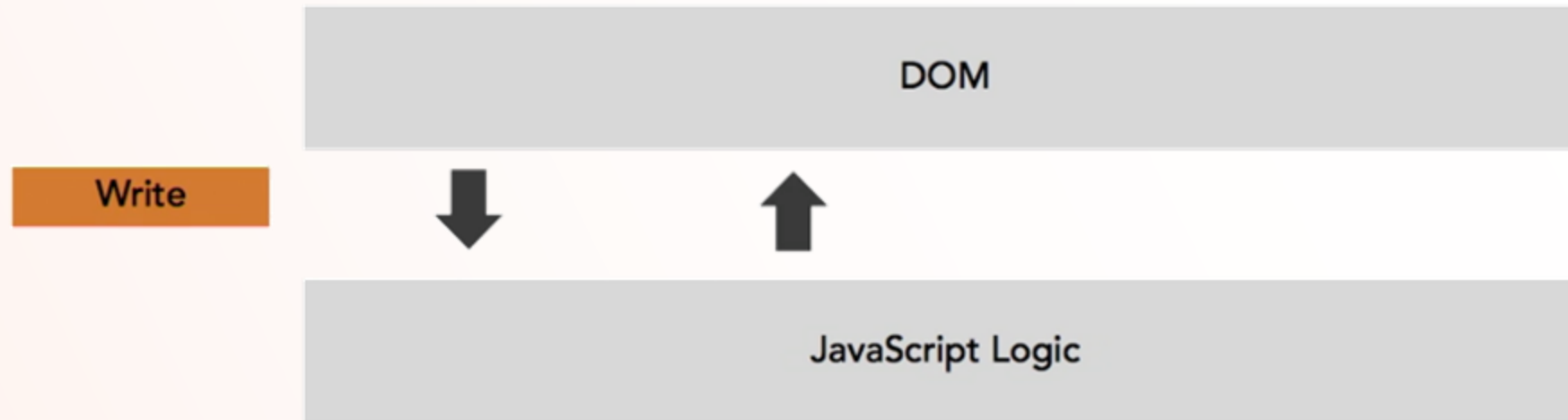


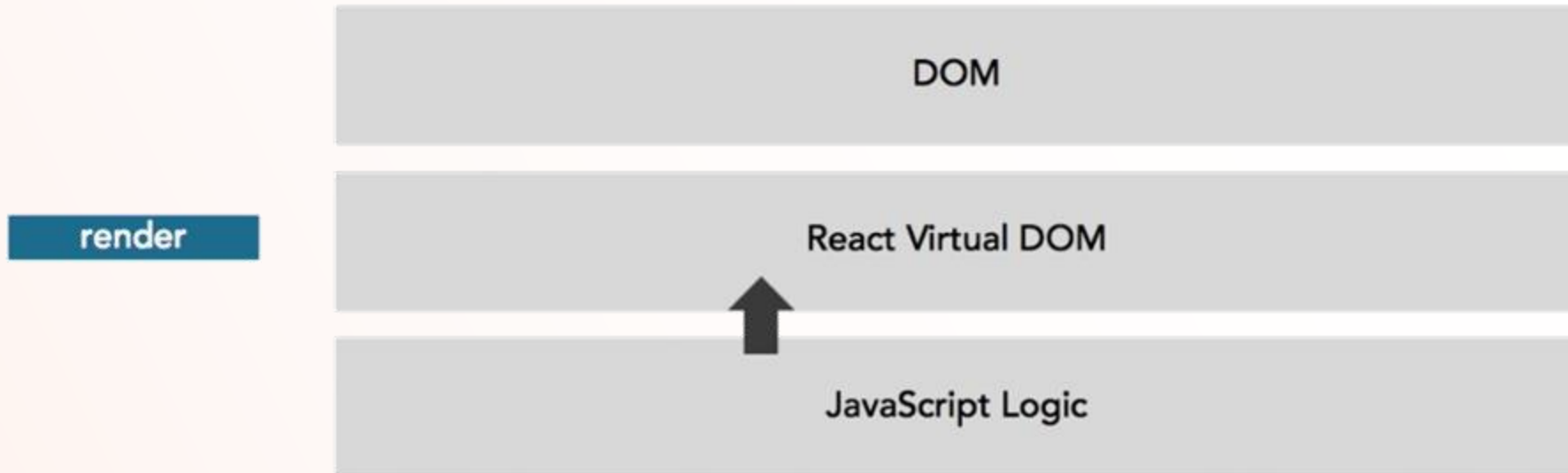
DOM

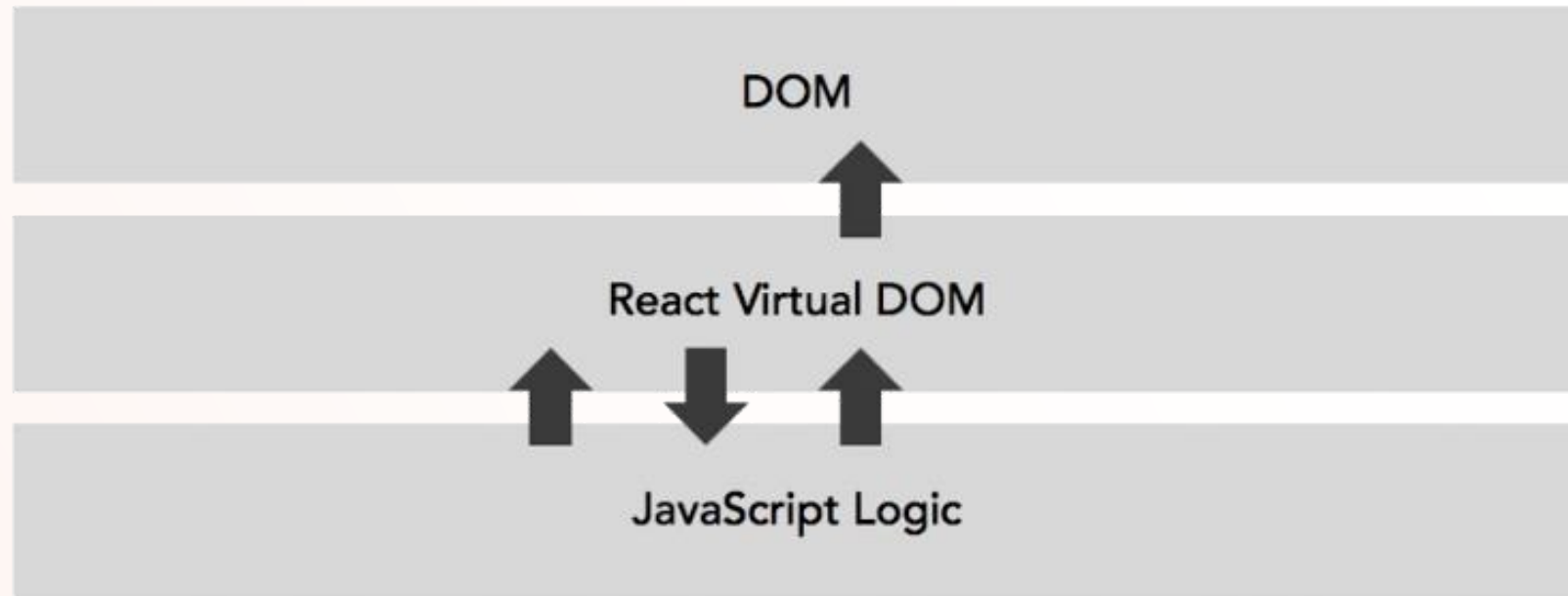
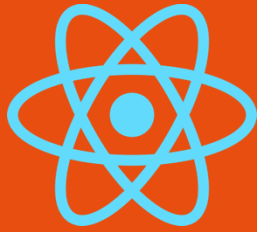
JavaScript Logic

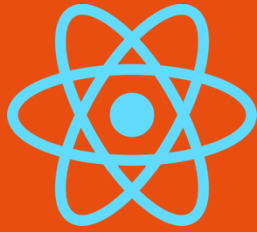




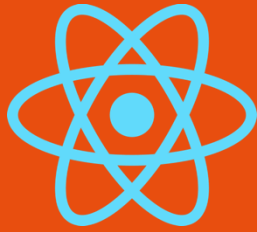








Exemplo....



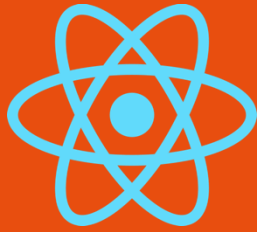
**Component** Focused

**One-Way Data Flow**

**States**

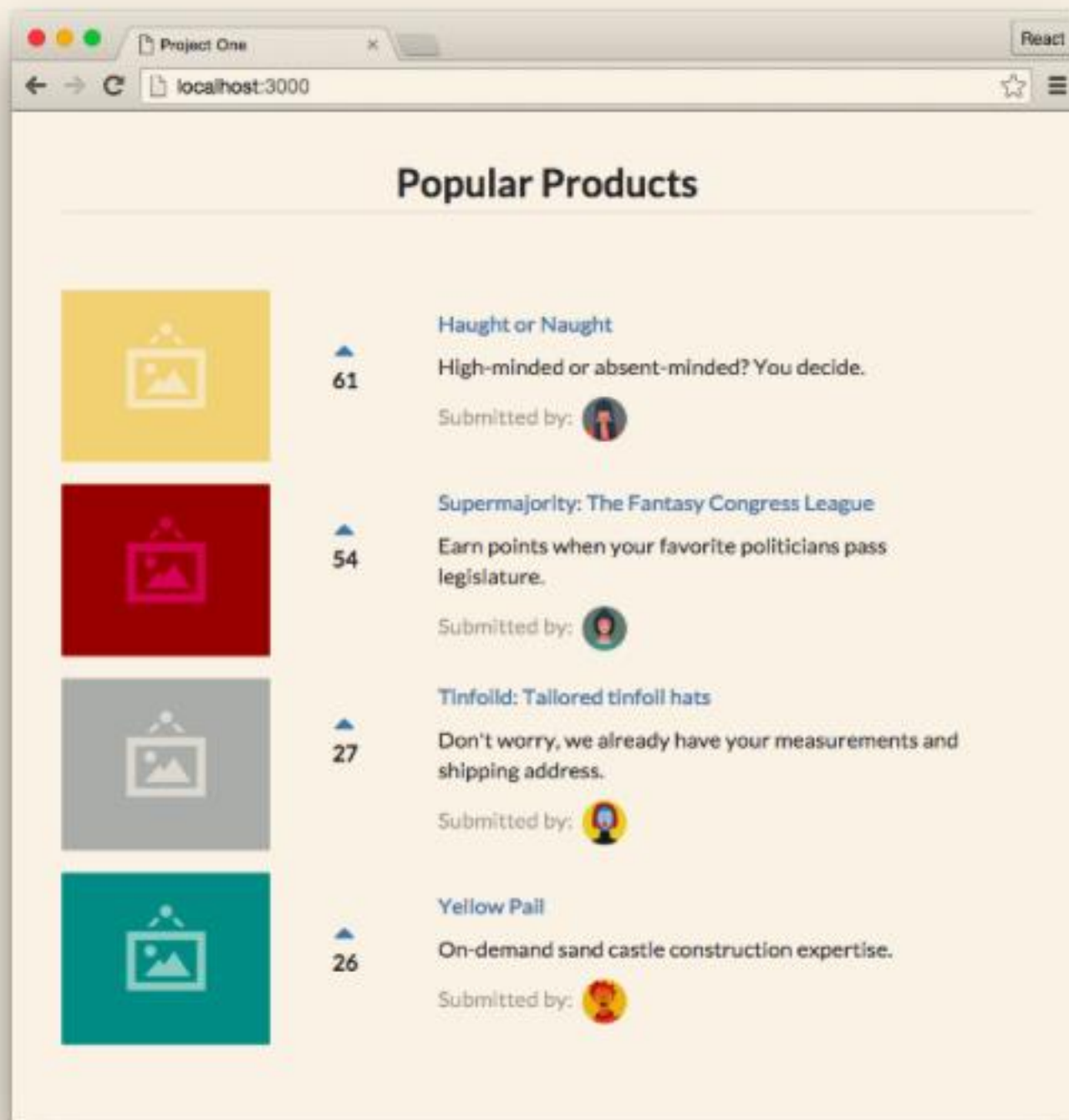
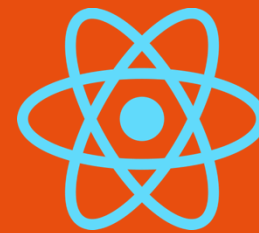
**Props**

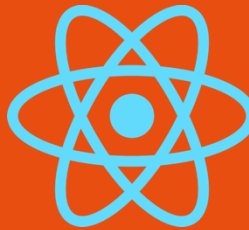
# Exemplo



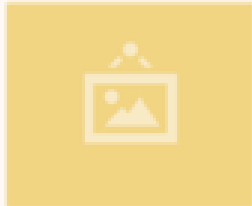


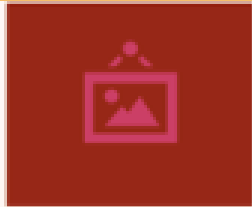





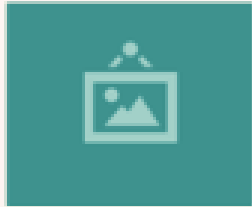


VOTING APP

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## Popular Products

	 61	<p><a href="#">Haught or Naught</a></p> <p>High-minded or absent-minded? You decide.</p> <p>Submitted by: </p>
	 54	<p><a href="#">Supermajority: The Fantasy Congress League</a></p> <p>Earn points when your favorite politicians pass legislature.</p> <p>Submitted by: </p>
	 27	<p><a href="#">Tinfoil: Tailored tinfoil hats</a></p> <p>Don't worry, we already have your measurements and shipping address.</p> <p>Submitted by: </p>
	 26	<p><a href="#">Yellow Pail</a></p> <p>On-demand sand castle construction expertise.</p> <p>Submitted by: </p>

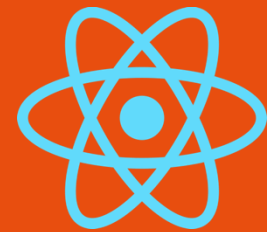


# React Component



```
export default function Xpto() {  
  return (  
    <div>Xpto</div>  
  )  
}
```

# JS vs JSX



```
// JS Vanilla
```

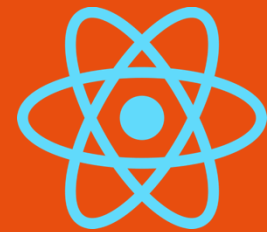
```
export const Xpto = () =>  
  React.createElement('div', {className: 'ui items'}, 'Hello, friend! I am a basic React  
  component.'
```

```
export const Xpto1 = () =>  
  React.createElement('div', {className: 'ui items'},  
    React.createElement('p', null, 'Hello, friend! I am a basic React component')  
  )
```



```
//JSX
```

```
export const Xpto2 = () => <h2>Ola do  
  XPTO</h2>
```



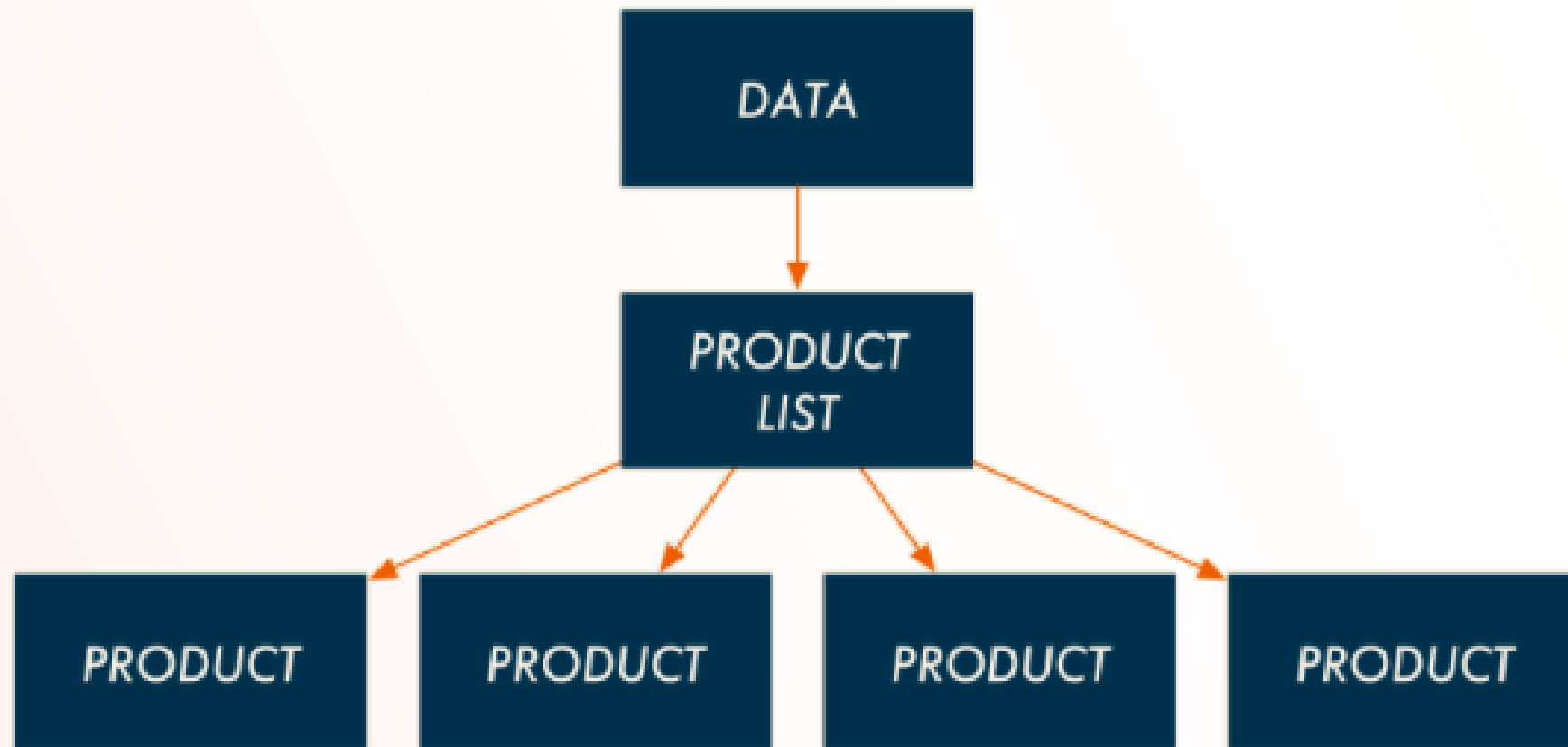
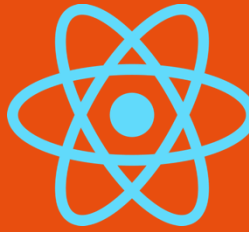
Codigo...

`npm create vite`

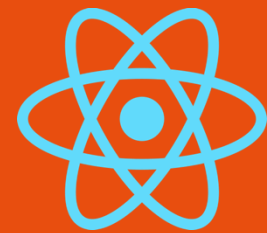
ou









`yarn create vite`

# React - PROPS

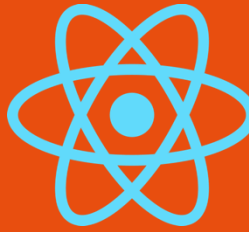


# React – “key” attribute



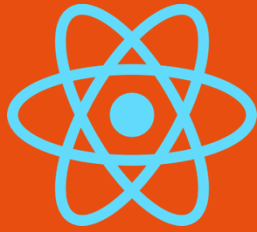
	<p>▲ 16</p> <p>Yellow Pail</p> <p>Submitted by: </p>	ID 1
	<p>▲ 59</p> <p>Supermajority: The Fantasy Congress League</p> <p>Submitted by: </p>	ID 2
	<p>▲ 53</p> <p>Tinfoild: Tailored tinfoil hats</p> <p>Submitted by: </p>	ID 3
	<p>▲ 28</p> <p>Haught or Naught</p> <p>Submitted by: </p>	ID 4

**Product components (orange) inside of the ProductList component (red)**



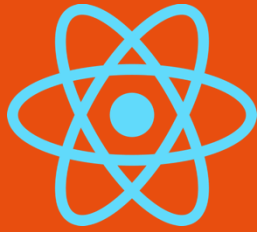
Whereas **props** are **immutable** and owned by a component's **parent**

**state** is owned by the component.



when the **state** or **props**  
of a **component** update,

the component **will re-render itself**



Organize your React App in **Components**

**JSX** inside **render** method

**Data Flow** from Parent to Child through **props**

**Event** flow through **functions**

**State** vs **Props**

How to **manipulate State**

React **LifeCycle** Methods





1

A acrescentar botao para retirar votos

2

A acrescentar 1 botao para alterar a visualização da ProductList alternadamente por ordem descendente e ascendente

# FLAG

[www.flag.pt](http://www.flag.pt)

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**PORTO** Rua Oliveira Monteiro, N° 168, 4050-438 Porto email: [querosabermais@porto.flag.pt](mailto:querosabermais@porto.flag.pt) Tel. 226 094 789

*uma marca*

**Rumos** | Knowledge  
training | sharing