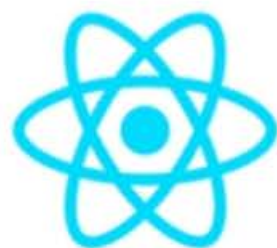


WHAT IS REACT?

WHAT IS REACT?

REACT

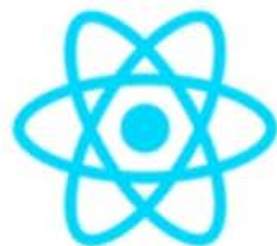
**JAVASCRIPT LIBRARY FOR BUILDING
USER INTERFACES**



WHAT IS REACT?

REACT

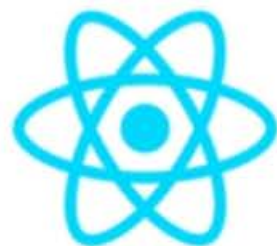
EXTREMELY POPULAR, DECLARATIVE,
COMPONENT-BASED, STATE-DRIVEN **JAVASCRIPT**
LIBRARY FOR BUILDING USER INTERFACES,
CREATED BY FACEBOOK 🤔 🤬 😂



WHAT IS REACT?

REACT

EXTREMELY POPULAR DECLARATIVE,
COMPONENT-BASED STATE-DRIVEN JAVASCRIPT
LIBRARY FOR BUILDING USER INTERFACES,
CREATED BY FACEBOOK 🤔 🤬 😂



WHAT IS REACT?

Based on components

Declarative

State-driven

JavaScript library

Extremely popular

Created by facebook

REACT

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REACT IS BASED ON COMPONENTS

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👉 Components are the **building blocks** of user interfaces in React



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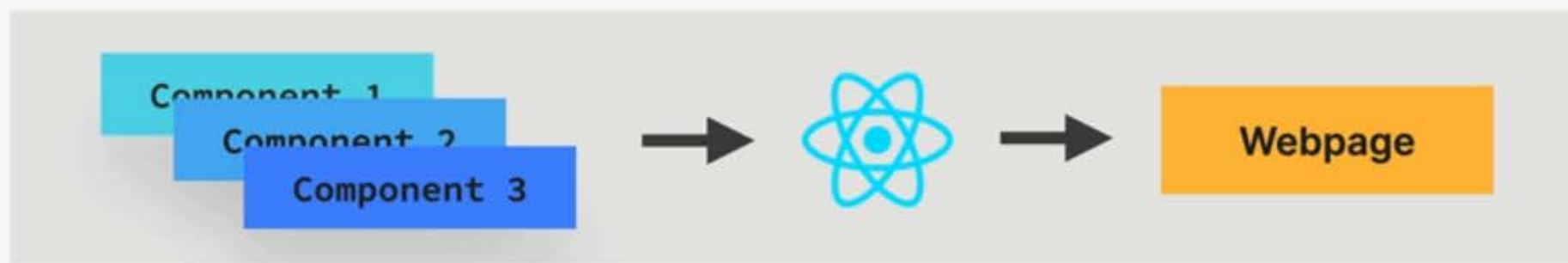
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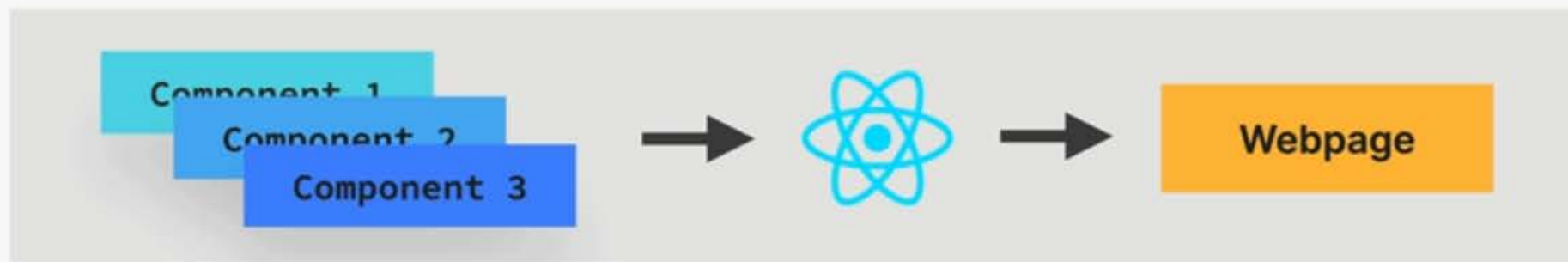
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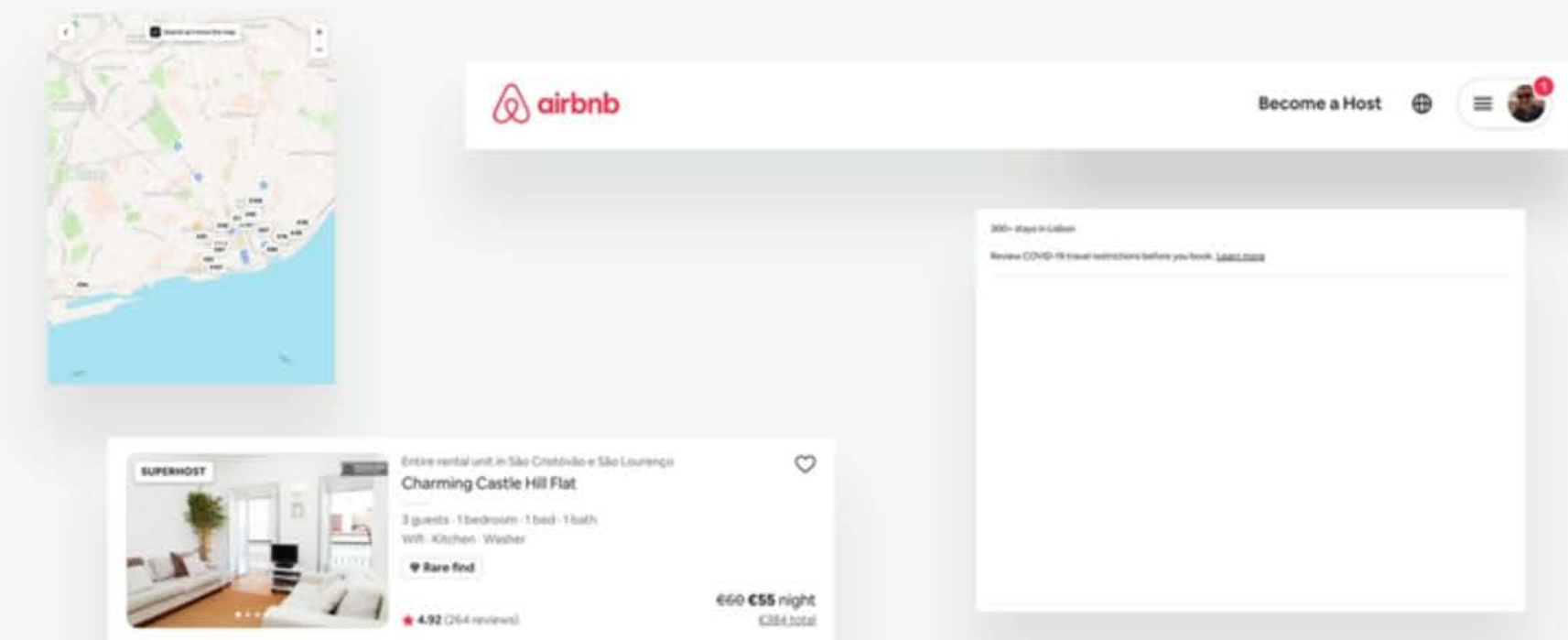
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👉 Components are the **building blocks** of user interfaces in React



👉 We build complex UIs by **building and combining multiple components**



REACT IS BASED ON COMPONENTS

Based on components

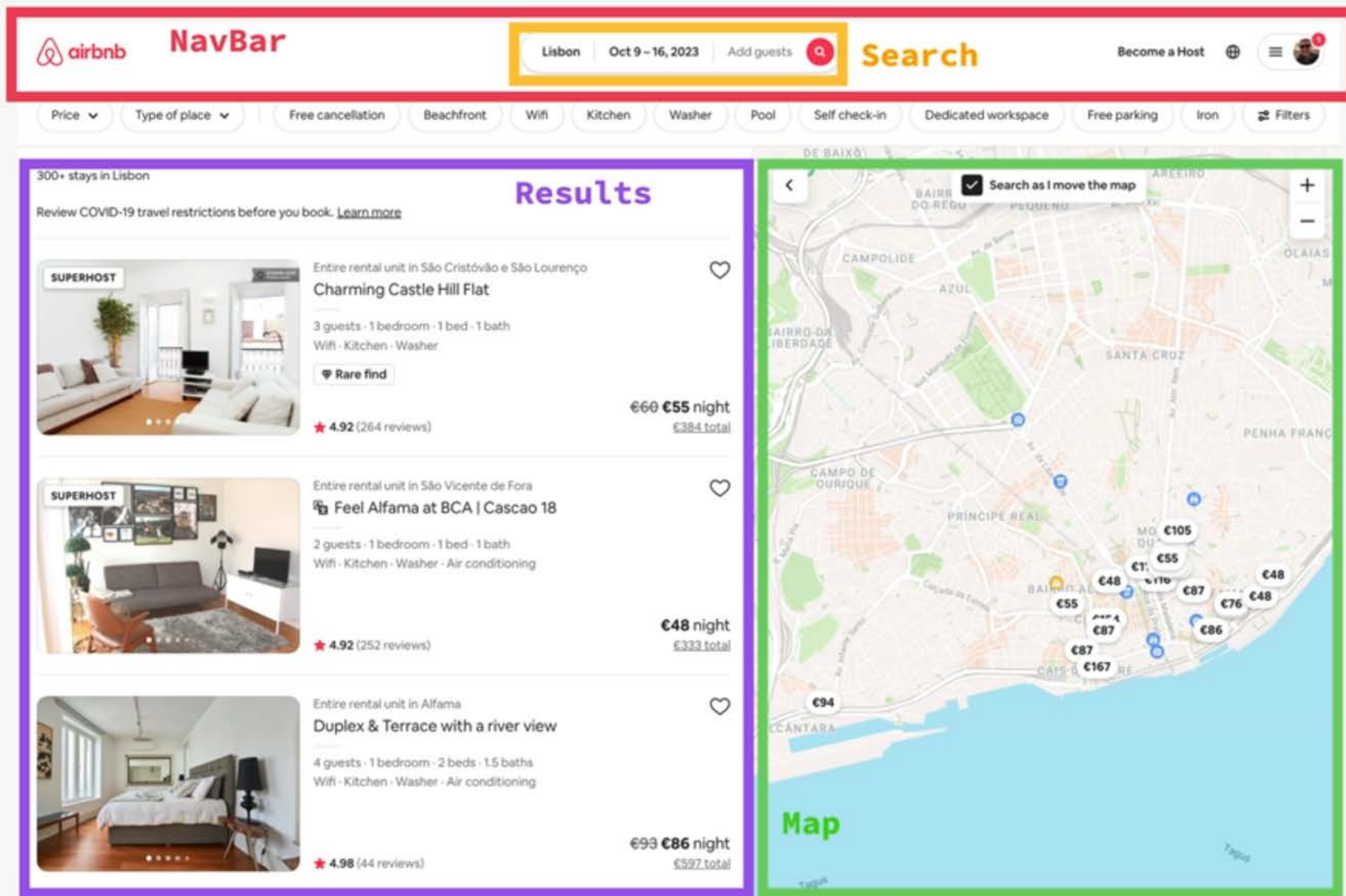
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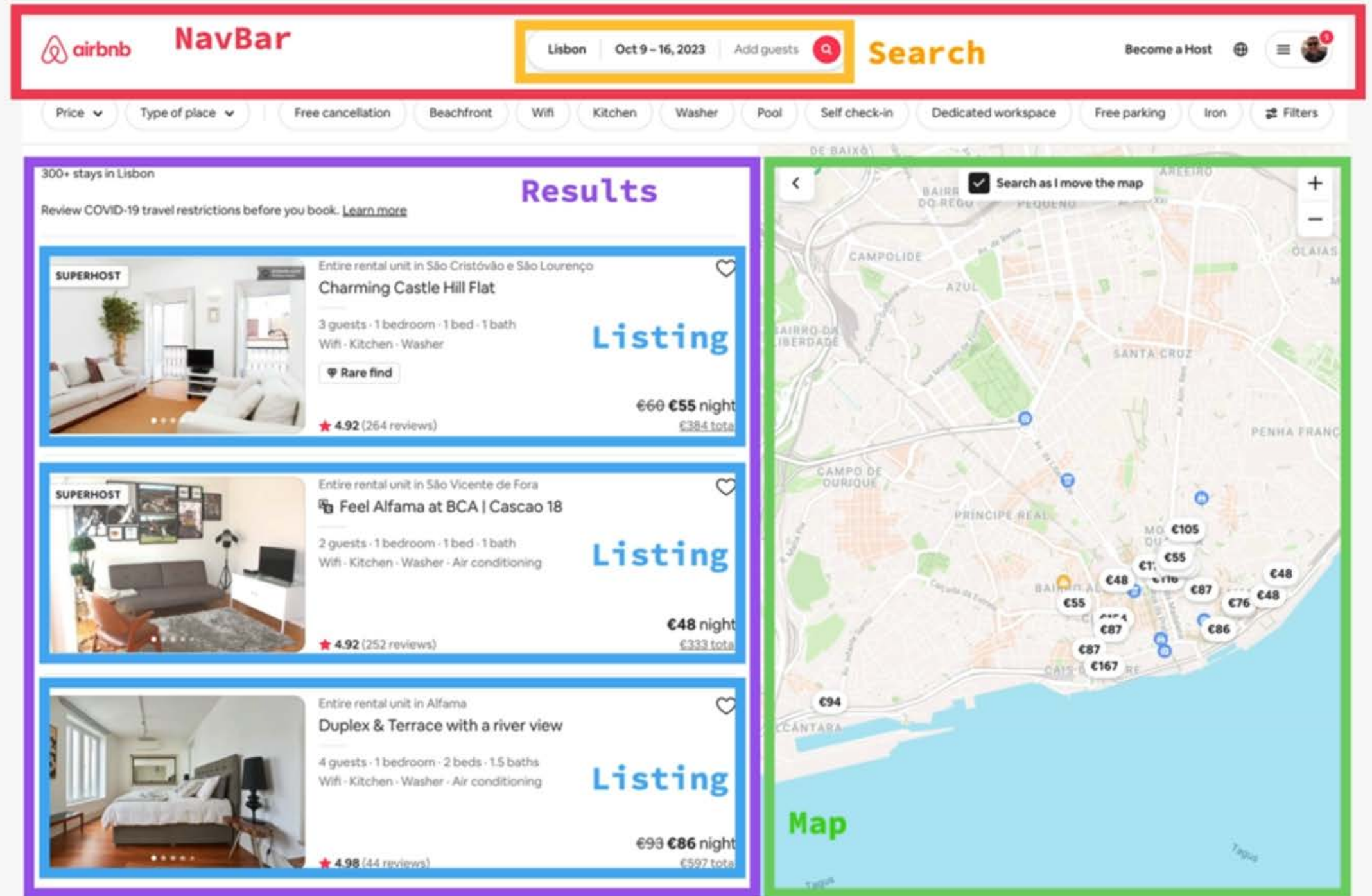
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REACT IS DECLARATIVE

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👉 We **describe** how components look like and how they work using a **declarative syntax called JSX**

REACT IS DECLARATIVE

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- 👉 We **describe** how components look like and how they work using a **declarative syntax called JSX**
- 👉 **Declarative:** telling React what a component should look like, **based on current data/state**

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- 👉 We **describe** how components look like and how they work using a **declarative syntax called JSX**
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- 👉 React is **abstraction** away from DOM: we **never touch the DOM**
- 👉 **JSX**: a syntax that **combines** **HTML** **CSS** **JavaScript** as well as referencing **other components**

JSX returned from a component

```
return (
  <main>
    <NavBar>
      <h1 style={ { fontSize: '3.2rem' } }>AirBnB</h1>
      <Search />
      <a href='#'>Become a host</a>
    </NavBar>
    <Results>
      <p style={ { fontSize: '1.6rem', margin: '1.2rem' } }>
        {numListings} stays in Lisbon
      </p>
      <Listing listing={listings[0]} />
      <Listing listing={listings[1]} />
      <Listing listing={listings[2]} />
    </Results>
    <Map listings={listings} onClick={moveMap} />
  </main>
);
```

REACT IS STATE-DRIVEN

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Example: array
of apartments



STATE

REACT IS STATE-DRIVEN

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STATE

1

RENDER

UI

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STATE

1

RENDER

UI

Components
written with JSX

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Example: array
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STATE

1

RENDER

UI

Components
written with JSX

Search apartments

2

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STATE

1

RENDER

UI

Components
written with JSX

Search apartments

2

3

UPDATE STATE

REACT IS STATE-DRIVEN

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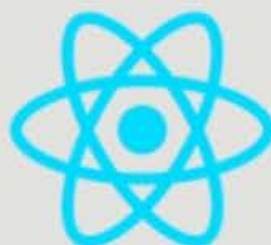
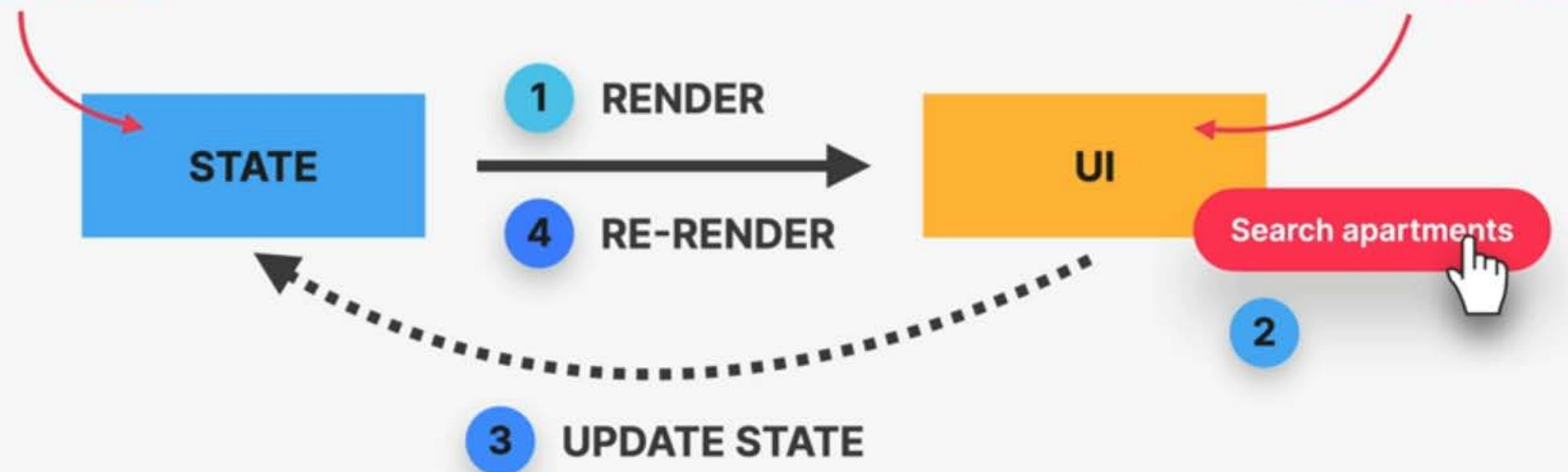
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REACT *REACTS* TO STATE CHANGES
BY RE-RENDERING THE UI

REACT IS A JAVASCRIPT LIBRARY

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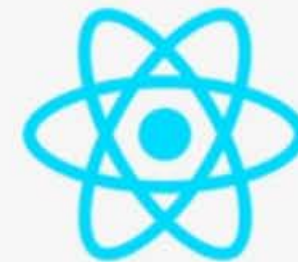
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Is React a library or a framework?



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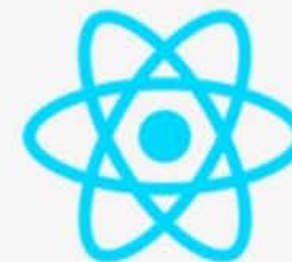
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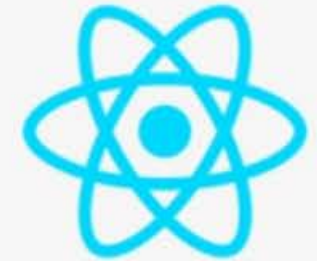
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Is React a **library** or a framework?



Because React is only the “view” layer. We need to pick multiple external libraries to build a complete application

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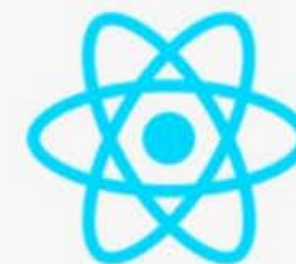
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NEXT.js

Remix

Complete frameworks built on top of React

REACT IS EXTREMELY POPULAR

Based on components

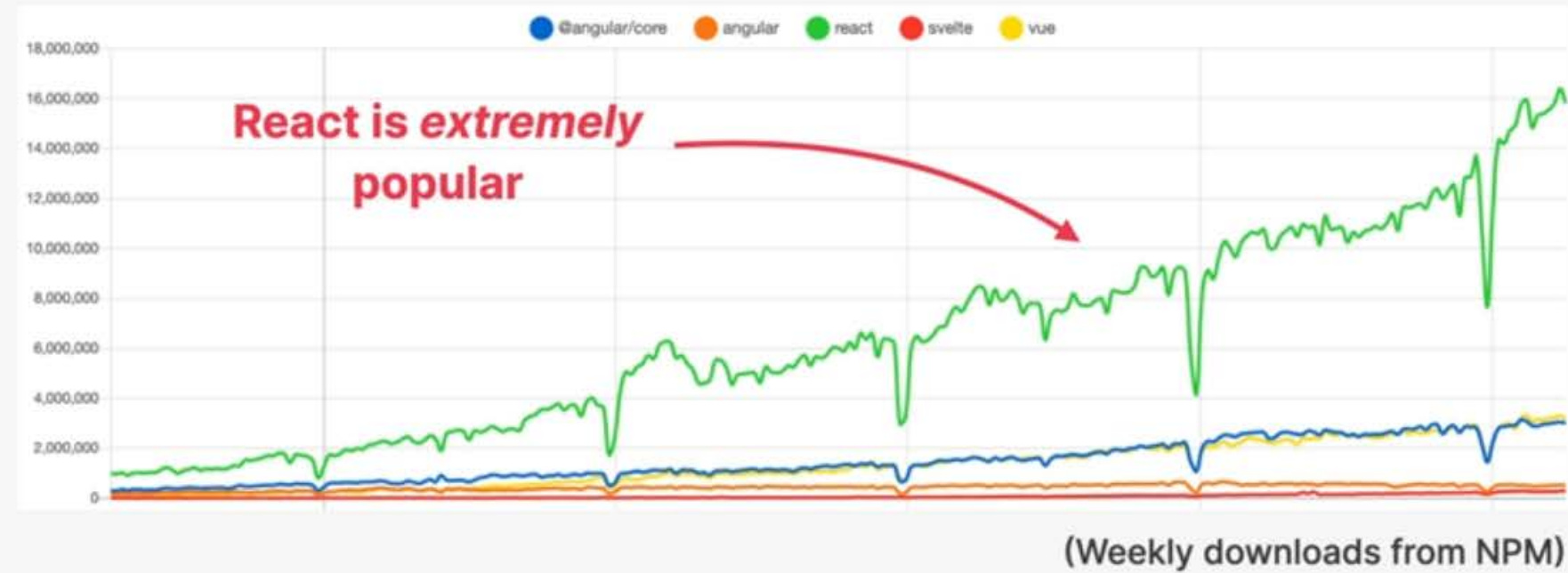
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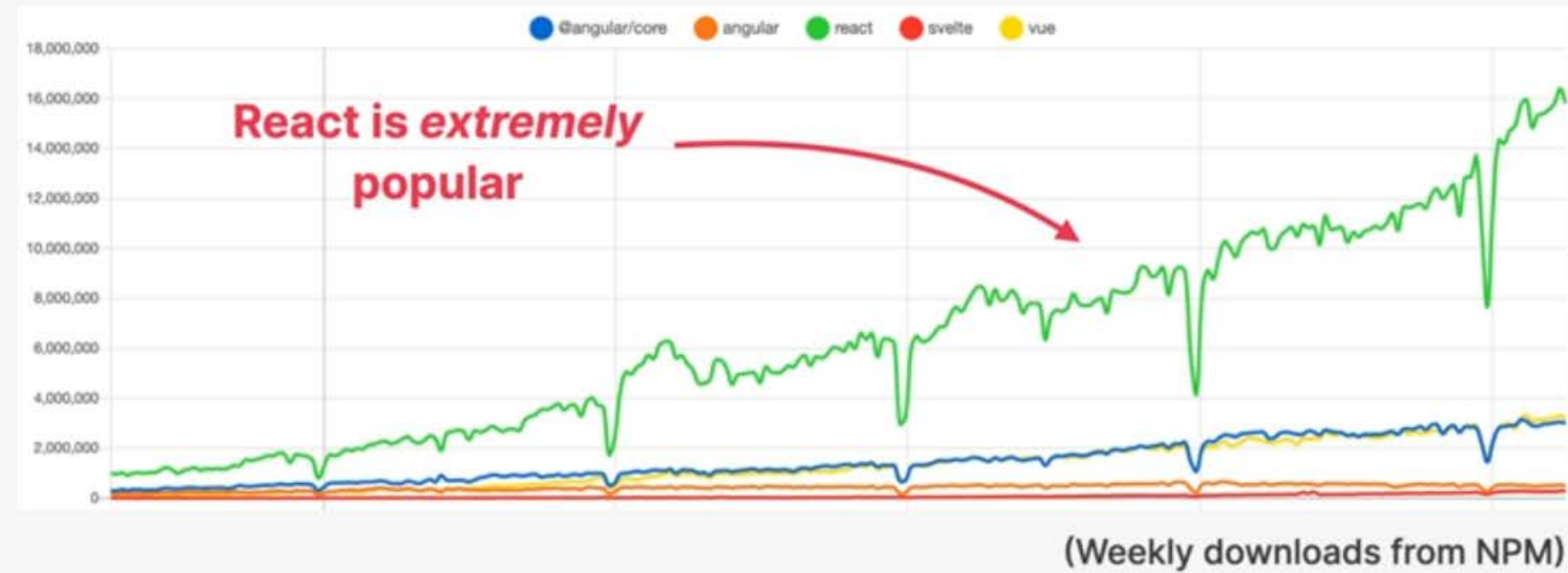
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✓ Many large companies have adopted React



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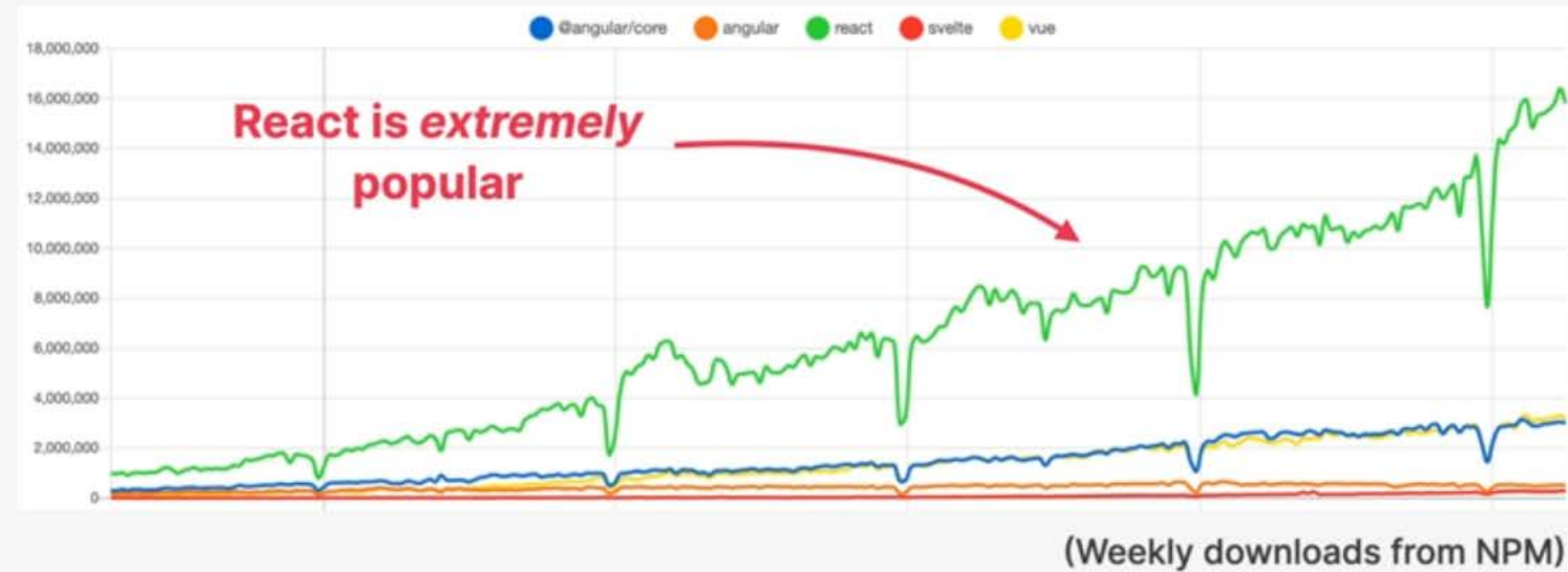
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✓ Many large companies have adopted React



✓ Huge job market with high demand for React developers 🤖

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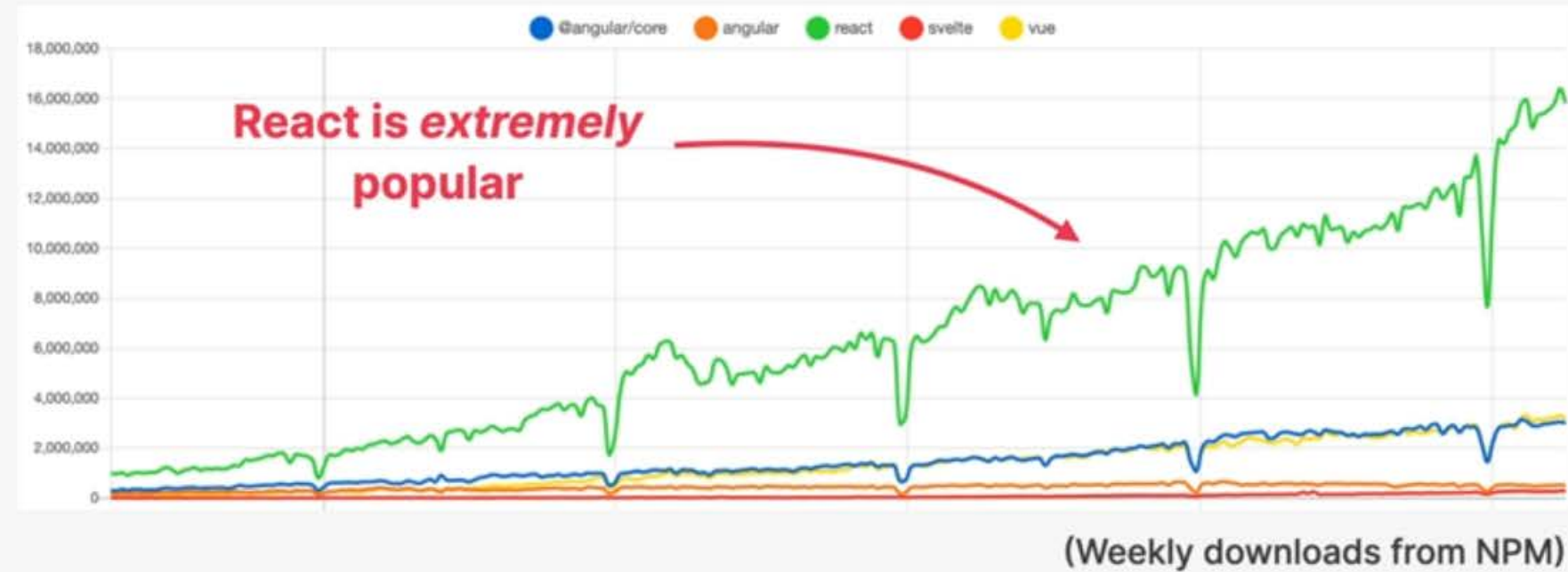
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✓ Large and vibrant React developer community

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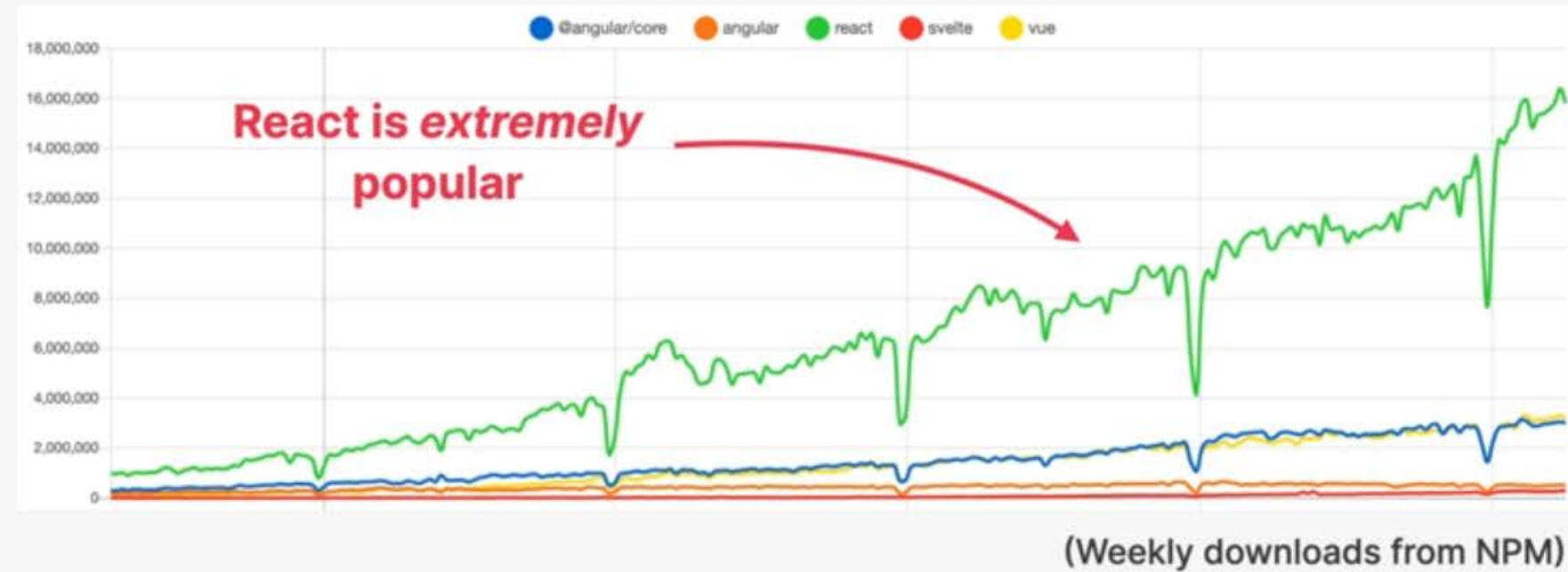
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✓ Many large companies have adopted React



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✓ Large and vibrant React developer community

✓ Gigantic third-party library ecosystem

REACT WAS CREATED BY FACEBOOK

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👉 React was created in **2011** by Jordan Walke, an engineer working at Facebook at the time

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facebook

Meta

REACT WAS CREATED BY FACEBOOK

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JavaScript library

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- 👉 React was created in **2011** by Jordan Walke, an engineer working at Facebook at the time
- 👉 React was open-sourced in **2013**, and has since then completely transformed front-end web development

facebook

∞ Meta



SUMMARY

1

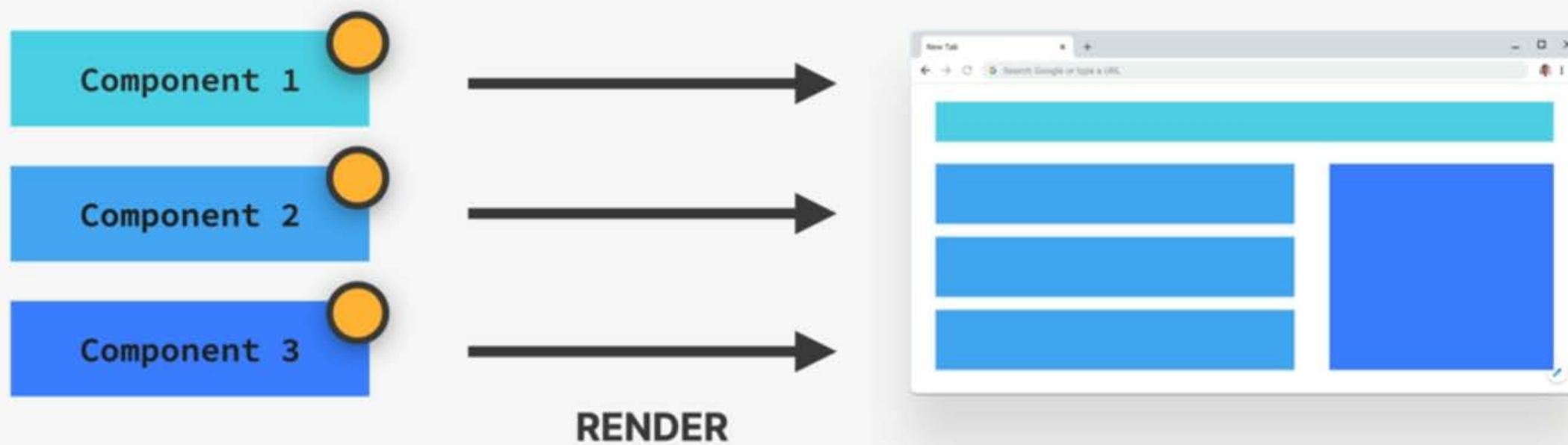
Rendering components on a webpage (UI) based on their current state



SUMMARY

1

Rendering components on a webpage (UI) based on their current state





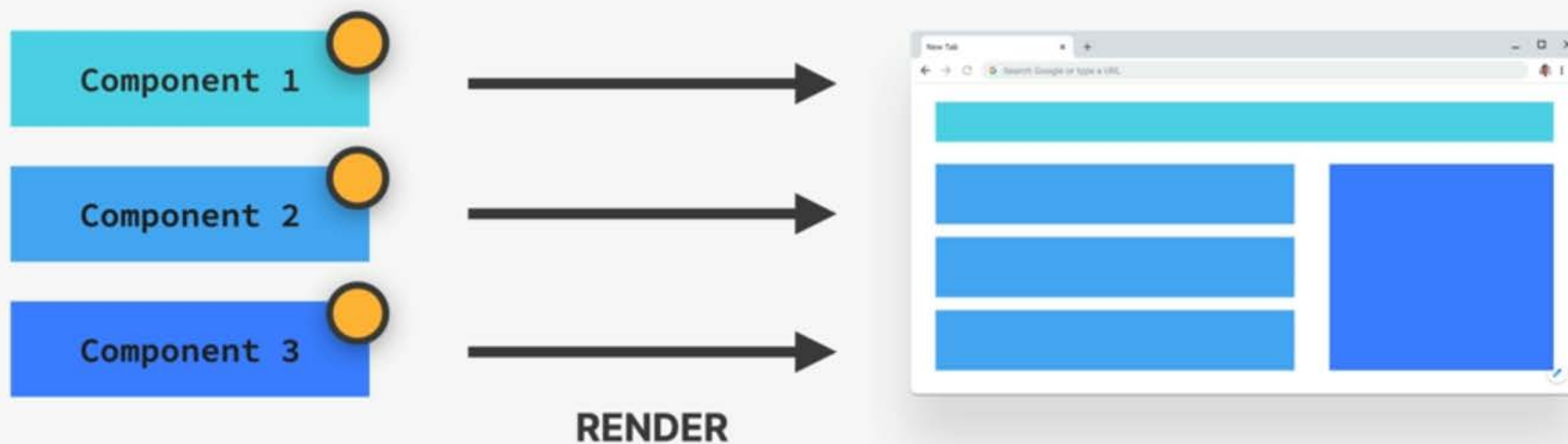
SUMMARY

1

Rendering components on a webpage (UI) based on their current state

2

Keeping the UI in sync with state, by re-rendering (*reacting*) when state changes





SUMMARY

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Rendering components on a webpage (UI) based on their current state

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