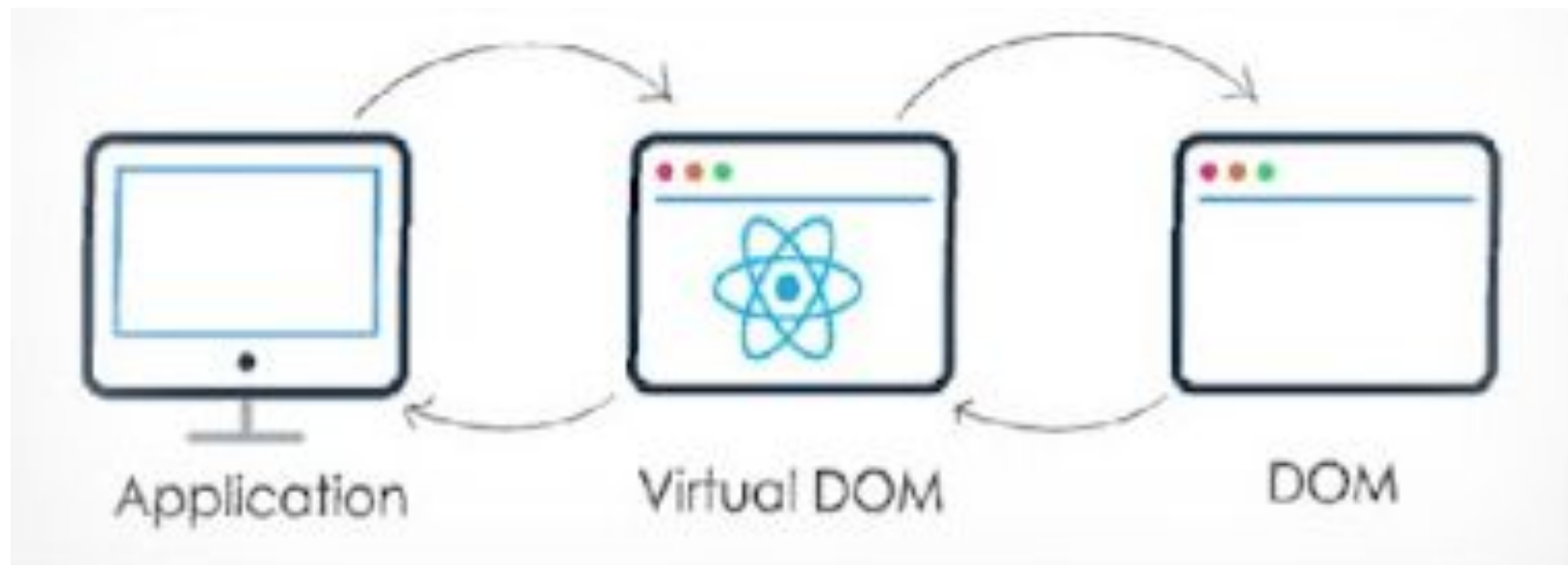


React



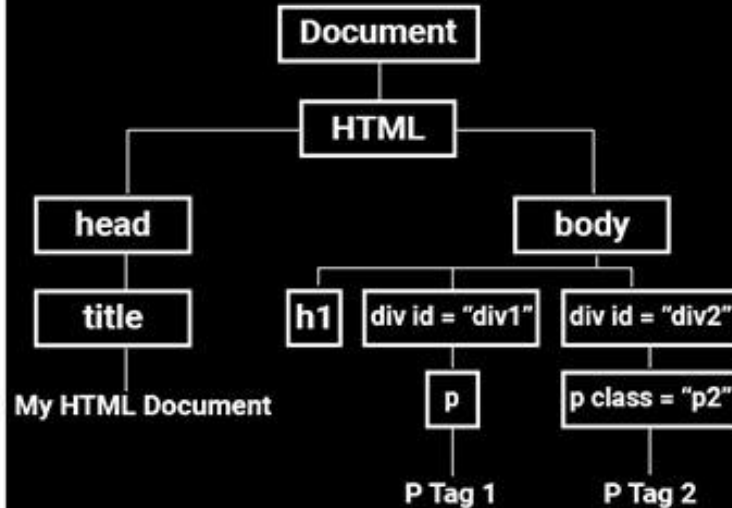
DOM do Navegador

What is Document Object Model ?

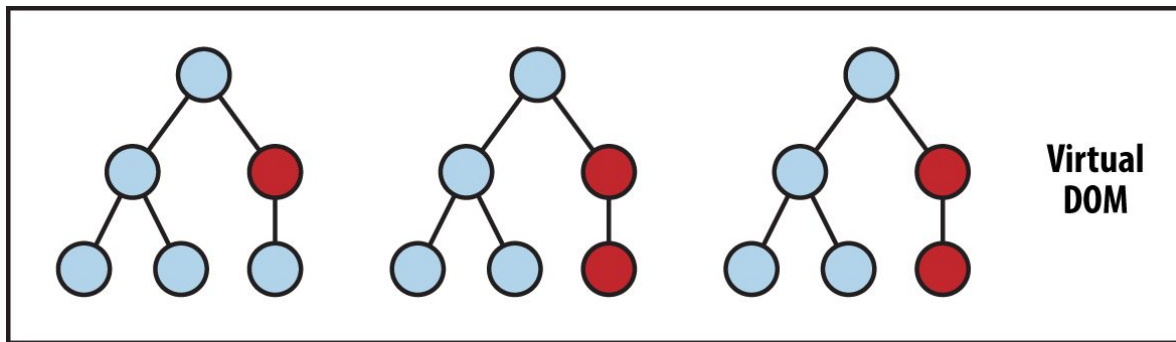
HTML Document

```
index.html x
1 <html>
2   <head>
3     <title>My HTML Document</title>
4   </head>
5
6   <body>
7     <h1>Heading</h1>
8     <div id="div1">
9       <p>P Tag 1</p>
10    </div>
11    <div id="div2">
12      <p class="p2">P Tag 2</p>
13    </div>
14  </body>
15 </html>
```

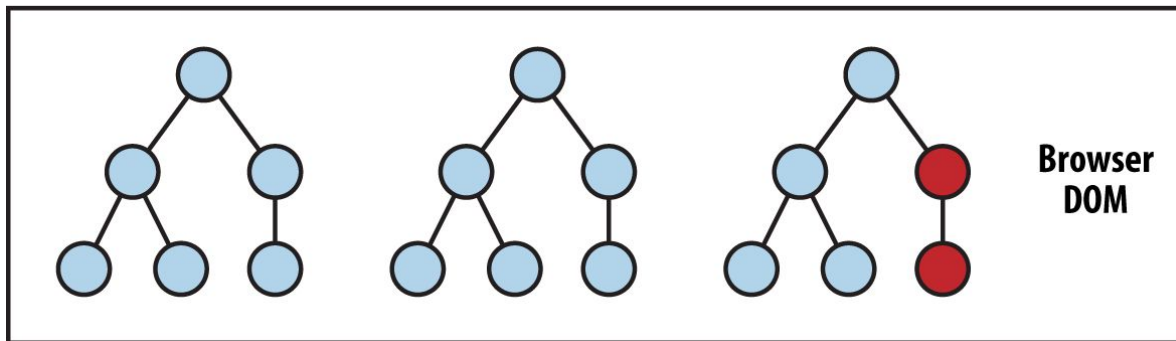
Document Object Model (DOM)



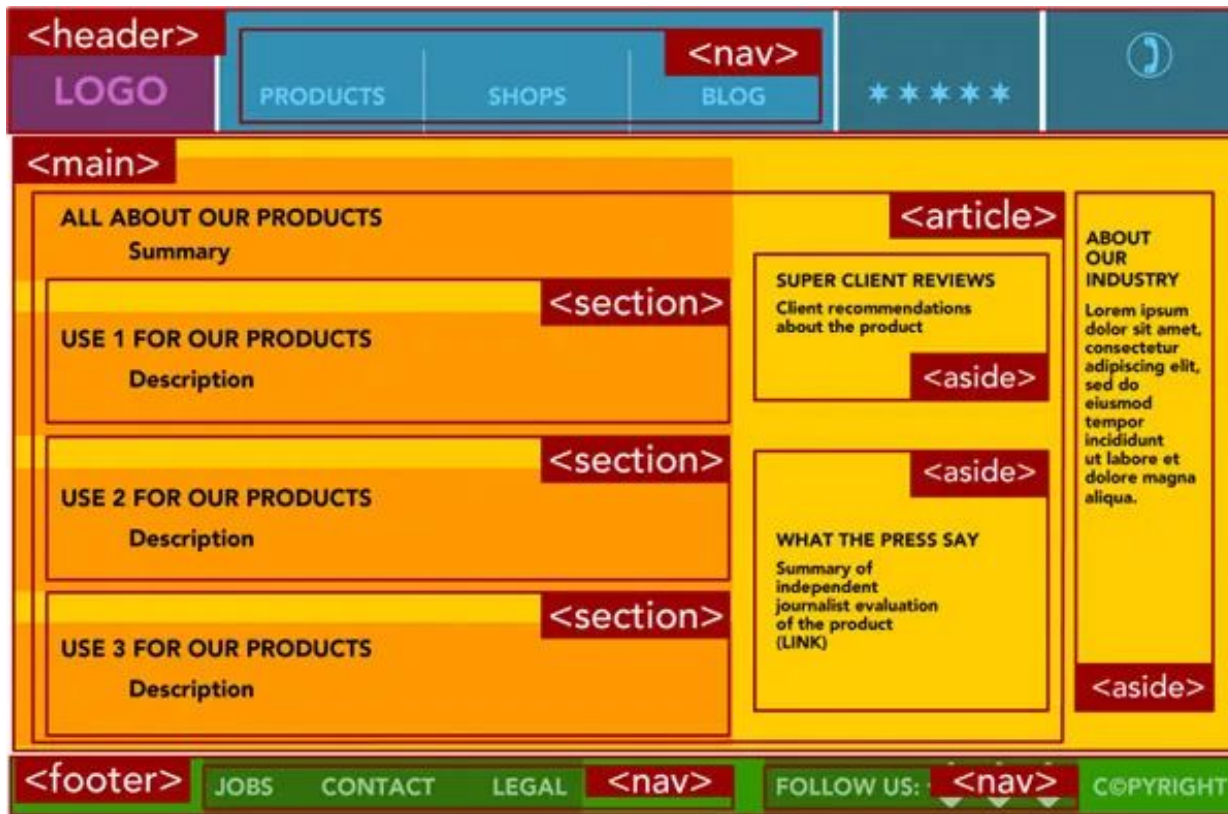
DOM Virtual React



State Change → Compute Diff → Re-render



Estrutura HTML5



JSX



JavaScript e HTML *no mesmo arquivo*

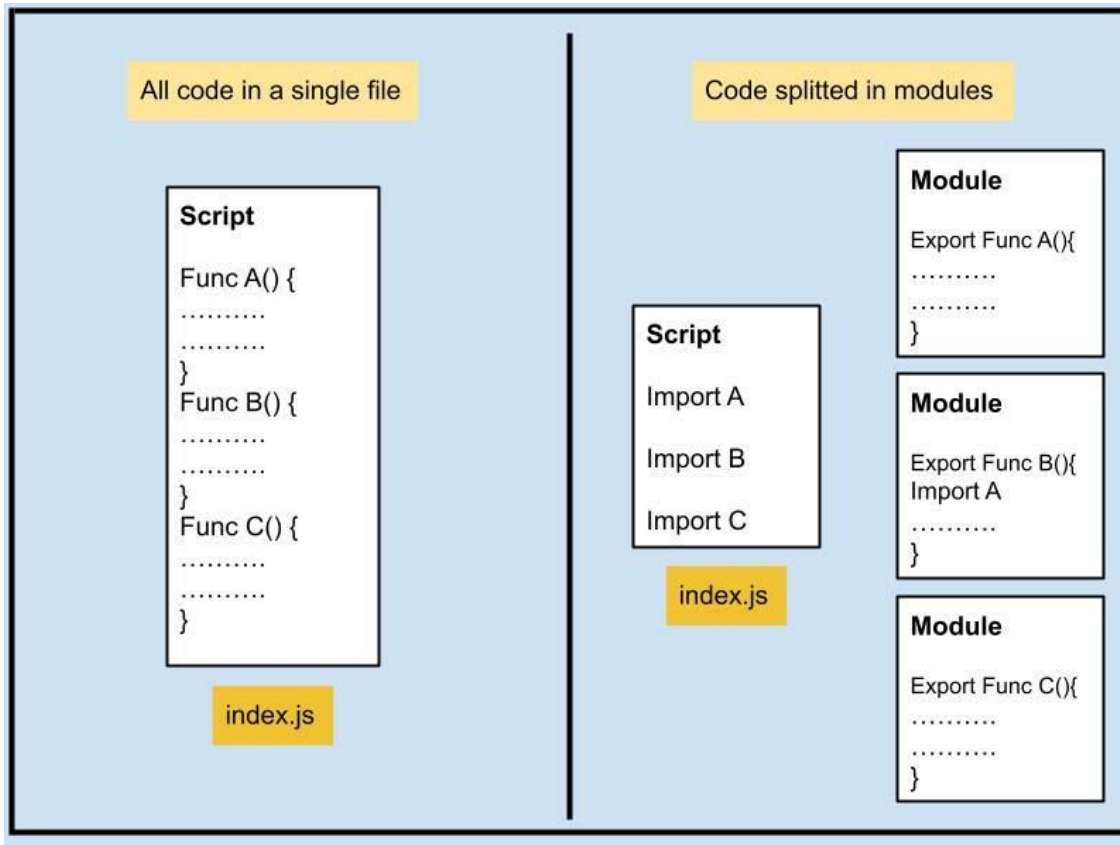


Abordagem
Traditional

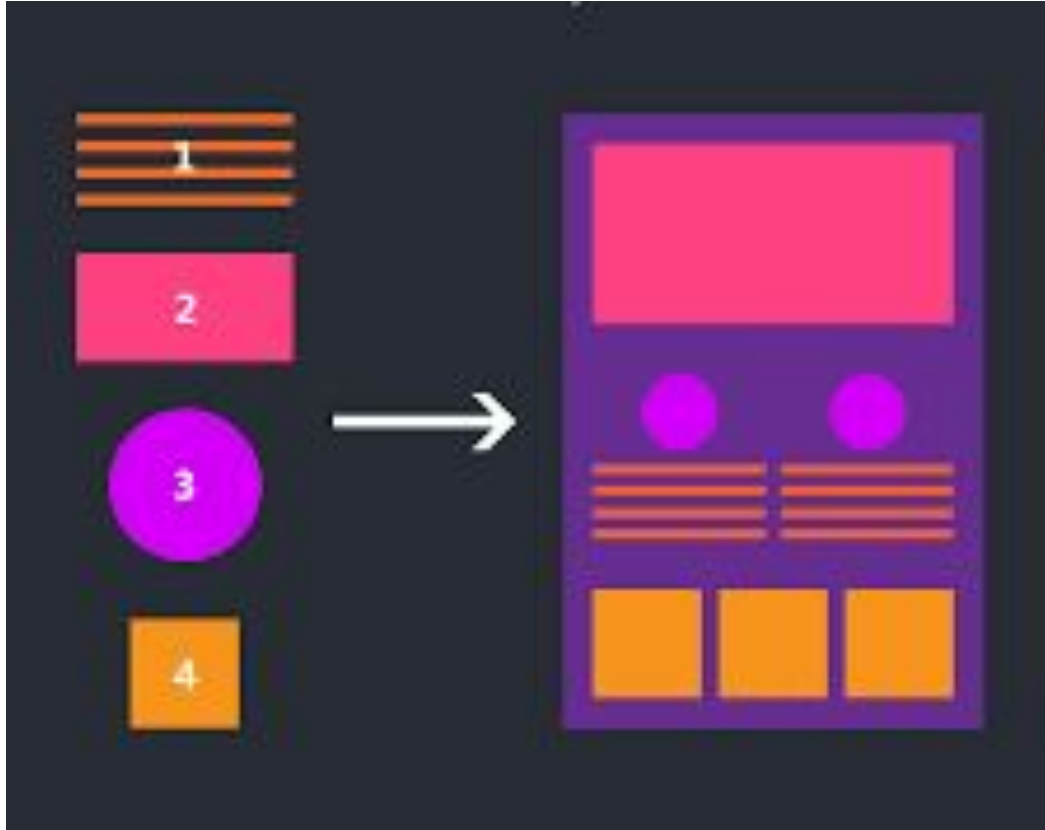


Abordagem
do React

Módulos no React



Componentes React



Componentes React

The screenshot shows the GeeksforGeeks website with several annotations identifying React components:

- Search Bar:** A box around the "Google Custom Search" input field with the label "This is a component".
- Navigation Bar:** A green bar at the top containing links like "Algo", "DS", "Languages", "Interview", "Students", "GATE", "CS Subjects", "Quizzes", "GBlog", "Puzzles", and "What's New?".
- Left Sidebar:** A vertical menu on the left with sections like "How to write an Interview Experience?", "Must Do Coding Questions Company-wise", "Must Do Coding Questions Topic-wise", "Difficulty Levels" (Basic, Easy, Medium, Hard, Expert), "Popular Tags" (Amazon, Microsoft, Dynamic Programming, Samsung), and "Interview Preparation" (Step by Step Preparation, Company Preparation). A box around the "Medium" difficulty level is labeled "This is a component".
- Featured Article:** A box around the first featured article, "10 Essential Python Tips And Tricks For Programmers", with the label "This is a component".
- Second Featured Article:** A box around the second featured article, "Rencontres Number (Counting partial derangements)", with a yellow badge showing the number "3".
- Third Featured Article:** A box around the third featured article, "Undefined Behavior in C and C++", with a green badge showing the number "1.2".
- Right Sidebar:** A large image of a woman sitting on a couch using a laptop, with the text "WHEREVER YOU SHOP, WE'VE GOT YOUR BACK." overlaid.

React Props

JSX

```
<MyComponent  
  prop="My Value"  
/>
```

The diagram illustrates the flow of props in React. It starts with a JSX element on the left, which is a `<MyComponent>` tag with a `prop` attribute set to `"My Value"`. A red arrow points from this JSX element to a component definition on the right. The component is a function named `MyComponent` that takes an object `{ prop }` as an argument and returns a `{prop}` element. A red arrow points from the component definition to the final output on the right, which is the rendered HTML `My Value`. Red circles highlight the `prop` attribute in the JSX, the `prop` parameter in the component function, and the `My Value` string in the output, showing how the data flows from the JSX through the component to the final rendered output.

Component

```
function MyComponent({ prop }) {  
  return <span>{prop}</span>;  
}
```

Output

```
<span>My Value</span>
```

