

**Co možná nevíte o  
React Dev Tools**





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# Agenda

1. (Ne)zábávná teorie
2. Live demo



A large, stylized warning sign is centered on a dark blue background. The sign is a yellow triangle with a dark blue border and a dark blue exclamation mark in the center. The word "čenglish" is written across the middle of the sign in a bold, yellow, sans-serif font.

**čenglish**



*Bůh dal lidem kód, ďáběl  
debugger.*

**– ChatGPT 3.5**





```
function MyButton() {  
    return <button>I'm a button</button>;  
}  
debugger;
```





**efektivní debugování = profit**

```
function somethingCrazy() {
  let result = "";

  for (let i = 0; i < 5; i++) {
    if (i === 0 || i === 1) {
      for (let j = 0; j < 2; j++) {
        console.log("tady jsem");
        result += i === 1 ? "e" : "r";
      }
    } else if (i === 2) {
      result += "a";
    } else if (i === 3) {
      result += "c";
    } else if (i === 4) {
      result += "t";
    }
  }

  return result;
}
```





**Někdy je třeba trochu  
těžko tonážnější  
technika**





# React Developer Tools

 **Featured**

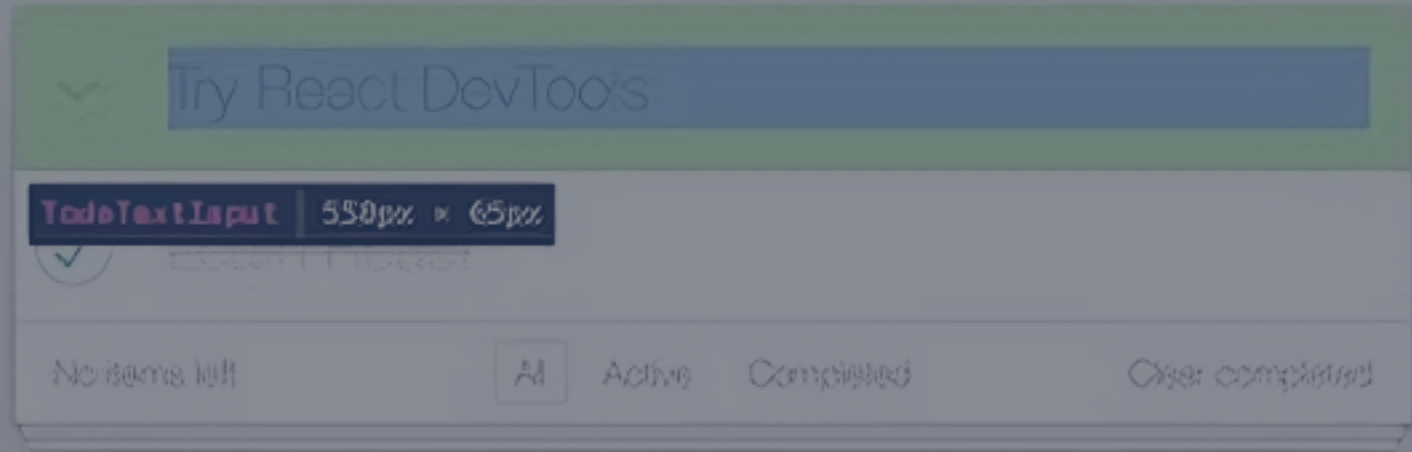
★★★★★ 1,434 ⓘ | [Developer Tools](#) | 4,000,000+ users

# Co pro to potřebujeme?

- Bežet aplikaci v **Dev mode** 🏃
- Defaultní podpora v Create React App, Next.js,...
- ESBuild (jsxDev)
- Babel (@babel/preset-react)



LOGOS



# React Dev Tools

Elements Sources Console Components Profiler Performance Network

Search (text only)

- App
  - Header
  - TodoTextInput**
  - MainSection
    - TodoList
      - TodoItem key="0"
  - Footer
    - Link
    - Link
    - Link

props

- newTodo:
- onSave: onSave()
- placeholder: What needs to be done?

hooks

- State: Try React DevTools

rendered by

- Header
- App

# Trochu *React* teorie

# Úvod do JSX

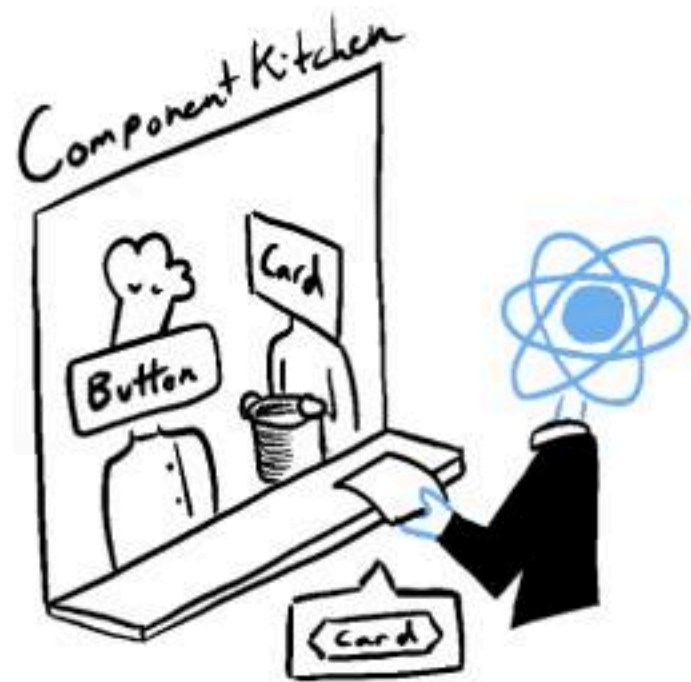
```
function App() {  
  return <h1>Hello World</h1>;  
}
```



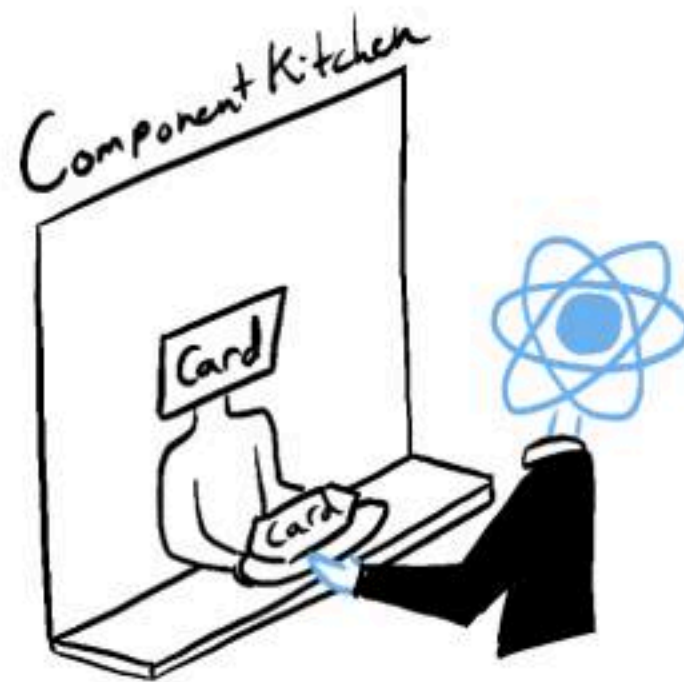
```
import { jsxDev as _jsxDev } from "react/jsx-runtime";

function App() {
  return _jsxDev(
    "button",
    { children: "I'm a button" },
    void 0,
    false,
    {
      fileName: _jsxFileName,
      lineNumber: 1,
      columnNumber: 1,
    },
    this
  );
}
```

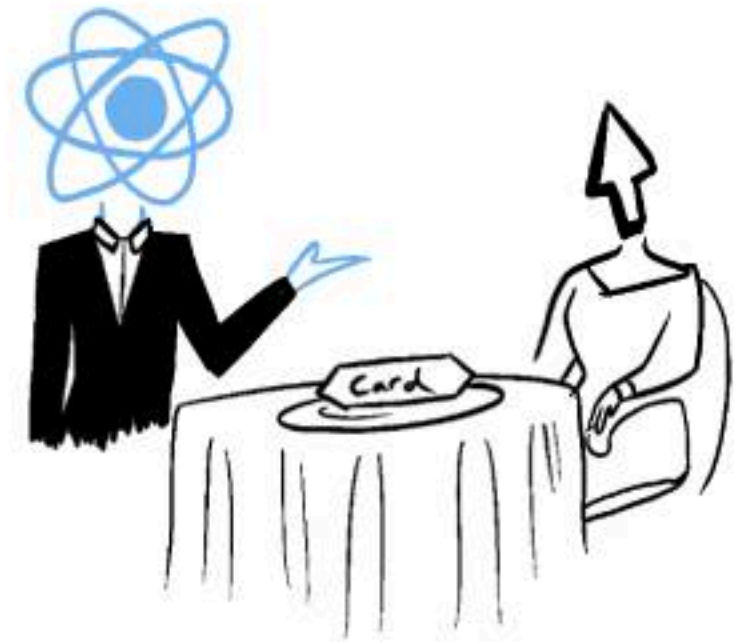
**Render a Commit**



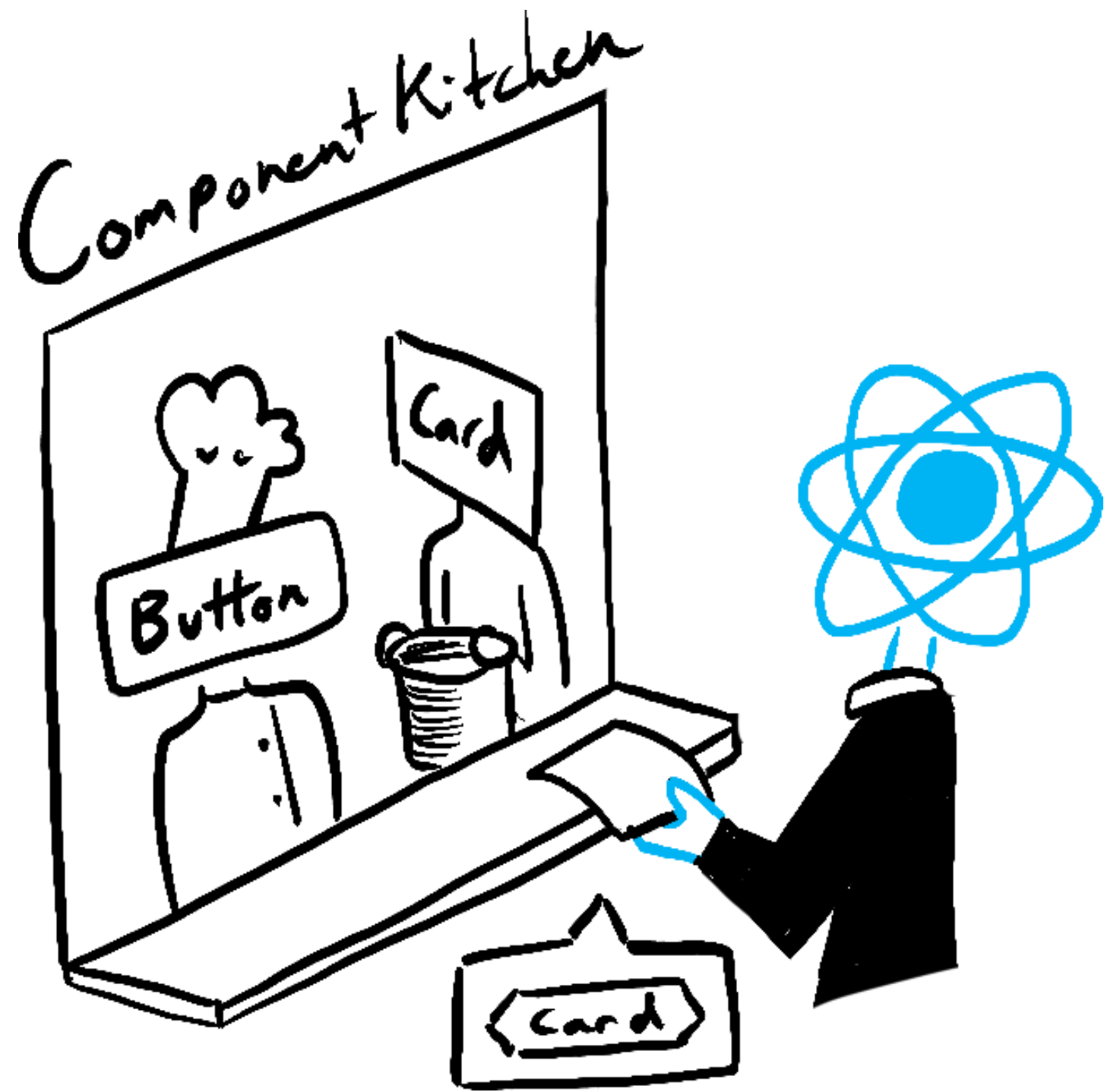
Trigger



Render

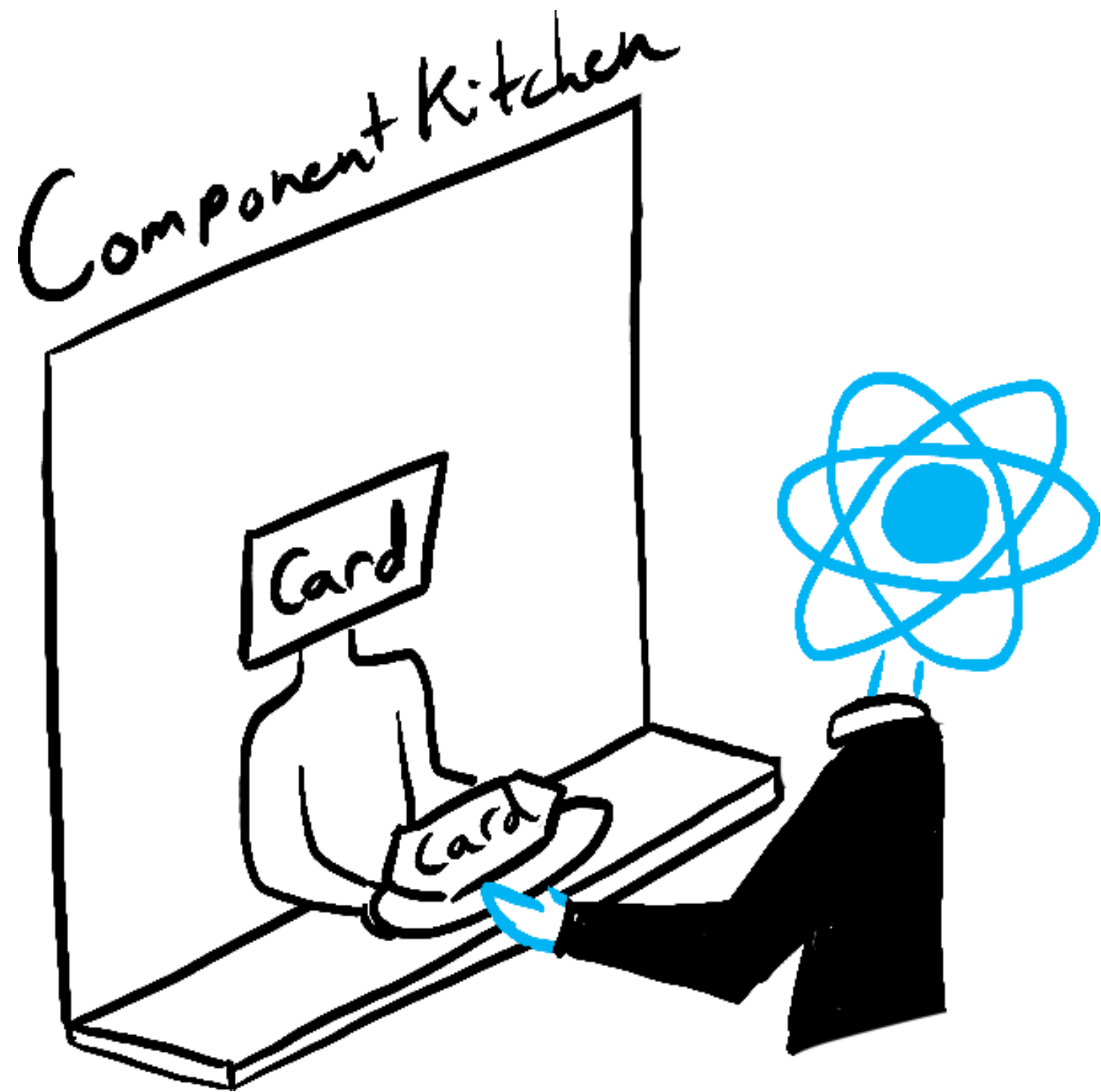


Commit

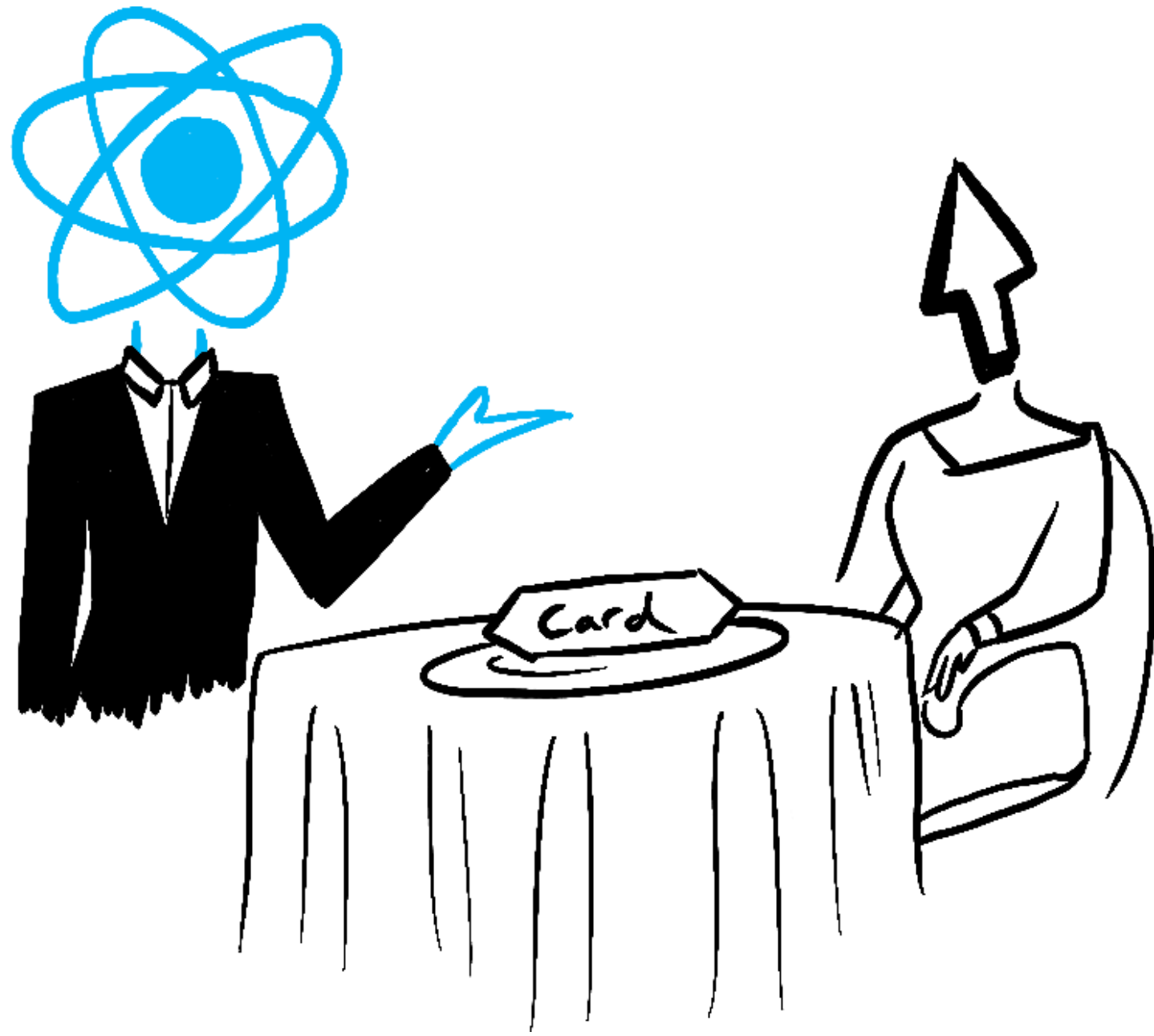


- **Triggering** a render (delivering the guest's order to the kitchen)
- It's the component's initial render.
- The component's (or one of its ancestors') state has been updated. Re-renders when state updates





- **Rendering** the component (preparing the order in the kitchen)
- On initial render, React will call the root component.
- For subsequent renders, React will call the function component whose state update triggered the render.



- **Committing** to the DOM  
(placing the order on the table)
- For the initial render, React will use the `appendChild()` DOM API to put all the DOM nodes it has created on screen.
- For re-renders, React will apply the minimal necessary operations (calculated while rendering!) to make the DOM match the latest rendering output.





**(React) Dev Tools to  
nekončí**



**Díky!** 🙌

**Q&A**

# Resources

- [React Developer Tools](#)
- [Chrome DevTools](#)
- [LocatorJS](#)
- [Create React App](#)
- <https://react.dev/learn/render-and-commit>
- <https://react.dev/learn/react-developer-tools>
- <https://github.com/jukben/todo-react>