

## Practice Problem 1

There are several ways to handle events in React. Write the code that handles when a button is clicked and alerts the user ( `alert("Ouch!")` ) **3 different ways**.

**Label the name of the JavaScript method you're using for each answer** (e.g. "A. Declared Function").

### A. Declared Function

```
export default function OuchieButton() {  
  function ouch() { alert("Ouch!") }  
  
  return (  
    <button onClick={ouch} >  
      Ouchie Button  
    </button>  
  )  
}
```

### B. Arrow Function

```
export default function OuchieButton() {  
  
  return (  
    <button onClick={() => alert("Ouch!")} >  
      Ouchie Button  
    </button>  
  )  
}
```

### C. Function Expression

```
export default function OuchieButton() {  
  const ouch = () => alert("Ouch!")  
  
  return (  
    <button onClick={ouch} >  
      Ouchie Button  
    </button>  
  )  
}
```

## Practice Problem 2

Walk Dog

Dishes

Laundry

Code a simple To-Do SPA. Each `ToDoItem` component has a "check-off" button that, when clicked, marks the to-do as completed. (If clicked again, marks as incomplete.)

The component should remember whether the to-do is completed and render the icon for the button accordingly (square-empty.svg or square-check.svg). The prop `initial` determines whether the to-do is initially completed or not.

**ToDoItem:**

```
import { useState } from "react"
export default function ToDoItem({ text, initial = false }) {
  const [isCompleted, setIsCompleted] = useState(initial)

  return (
    <button onClick={
      () => setIsCompleted((prev) => !prev) } >
      <img src = { isCompleted ? "square-check.svg"
        : "square-empty.svg" }
        alt="" />
    </button> )
}
```

**App:**

```
import ToDoItem from "../components/ToDoItem"
export default function App() {
  return (
    <div>
      <ToDoItem text="Walk the dog" initial={true} />
      <ToDoItem text="Wash the dishes" />
      <ToDoItem text="Do the laundry" />
    </div>
  )
}
```