

Expressions as props

You've already learned a bit about using expressions as props. These can be, among other things, ternary operators, function calls, or some arithmetic operations.

However, you can pass almost any kind of expression as a prop.

For example:

```
1  const bool = false;
2
3  function Example(props) {
4    return (
5      <h2>The value of the toggleBoolean prop is: {props.toggleBoolean.toString()}</h2>
6    );
7  };
8
9  export default function App() {
10   return (
11     <div className="App">
12       <Example toggleBoolean={!bool} />
13     </div>
14   );
15 };
```

In the example above, you're using the `!bool`, that is, the NOT operator, which evaluates to `true`, since `!false` is true.

Also, for the `toggleBoolean` prop to be rendered on the page, you're converting its boolean value to a string using the JavaScript's built-in `toString` method.

Here's an extension of the above code which shows more ways to work with expressions as props in React.

What is happening here is several props are being passed to the `Example` component, and rendering each of these props' values to the screen.

```
1  const bool = false;
2  const str1 = "just";
3
4  function Example(props) {
5    return (
6      <div>
7        <h2>
8          The value of the toggleBoolean prop is:{props.toggleBoolean.toString()}
9        </h2>
10       <p>The value of the math prop is: <em>{props.math}</em></p>
11       <p>The value of the str prop is: <em>{props.str}</em></p>
12     </div>
13   );
14 };
15
16 export default function App() {
```

```
17     return (  
18         <div className="App">  
19             <Example  
20                 toggleBoolean={!bool}  
21                 math={(10 + 20) / 3}  
22                 str={str1 + ' another ' + 'string'}  
23             />  
24         </div>  
25     );  
26 };
```

In this improvement to the **Example** component, three props are being passed to it: **toggleBoolean**, **math**, and **str**. The **toggleBoolean** is unchanged, and the **math** prop and the **str** prop have been added.

The **math** prop is there to show that you can add arithmetic operators and numbers inside JSX, and it will be evaluated just like it does in plain JavaScript.

The **str** prop is there to show that you can concatenate strings, as well as strings and variables – which is shown by adding string literals of “ another ” and “string” to the **str1** variable.

In summary, just like you can use expressions inside function components, you can also use them as prop values inside JSX elements, when rendering those function components.