ES6 const and let

This lesson explains the difference between var and const and let declarations.

Notice that we declared the variable `helloWorld` with a `var` statement. JavaScript ES6 comes with two more ways to declare variables: `const` and `let`. In JavaScript ES6, you will rarely find `var` anymore.

const

A variable declared with `const` cannot be re-assigned or re-declared, and cannot be changed or modified. Once the variable is assigned, you cannot change it:

```
// not allowed
const helloWorld = 'Welcome to the Road to learn React';
helloWorld = 'Bye Bye React';
```

let

Conversely, a variable declared with `let` can be modified:

```
// allowed
let helloWorld = 'Welcome to the Road to learn React';
helloWorld = 'Bye Bye React';
```

TIP: Declare variables with `let` if you think you'll want to re-assign it later on.

Note that a variable declared directly with `const` cannot be modified. However, when the variable is an array or object, the values it holds can get updated through indirect means:

```
// allowed
const helloWorld = {
  text: 'Welcome to the Road to learn React'
};
```
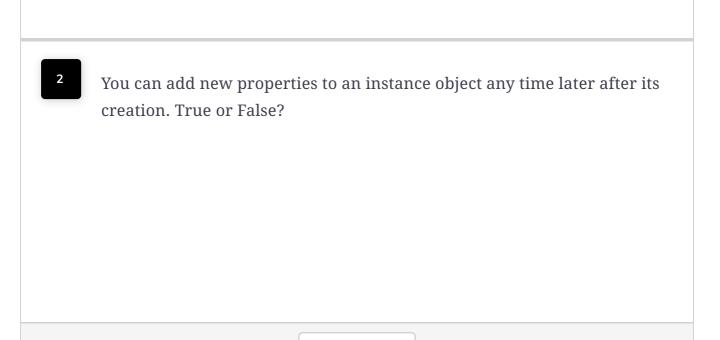
```
helloWorld.text = 'Bye Bye React';
```

There are varying opinions about when to use *const* and when to use *let*. I would recommend using `const` whenever possible to show the intent of keeping your data structures immutable, so you only have to worry about the values contained in objects and arrays. Immutability is embraced in the React ecosystem, so `const` should be your default choice when you define a variable, though it's not really about immutability, but about assigning variables only once. It shows the intent of not changing (re-assigning) the variable even though its content can be changed.

```
import React, { Component } from 'react';
import './App.css';

class App extends Component {
  render() {
    const helloWorld = 'Welcome to the Road to learn React';
    return (
      <div className="App">
        <h2>{helloWorld}</h2>
      </div>
    );
  }
}

export default App;
```

In this course, we will use `const` and `let` over `var` for the rest of the course.

<div>
1

The most recommended way of declaring a variable is using:
</div>

2 You can add new properties to an instance object any time later after its creation. True or False?

Check Answers

Exercises:

- Gain an understanding of immutable data structures:
  - Why do they make sense in programming?
  - Why are they embraced in React and its ecosystem?

Further Readings:

- Read about ES6 const
- Read about ES6 let