

React Fundamentals

JavaScript Review

 **Develop**Intelligence

A PLURALSIGHT COMPANY



Let's talk about...

- Types
- Variables
- Functions
- Objects
- Classes
- Events

- TypeScript

JavaScript Review

Types



Primitive Types

String

Number

Boolean

Null

Undefined

BigInt

Symbol

JavaScript Review

Variables



Variables

const

let

var

```
const string = 'apple'
```

```
const number = 4
```

```
let var = false
```

Variables

| | const | let | var |
|----------------------|--------------|------------|------------|
| Re-assignable | no | yes | yes |
| Re-declarable | no | no | yes |



JavaScript Review

Functions

Functions

- Reusable blocks of code
- Can accept a list of arguments
- Invoked by calling function name with parenthesis ()

```
function sayHello(name) {  
  return `Hello, ${name}`  
}  
  
console.log(sayHello())
```



JavaScript Review

Objects

Objects

- Containers for collections of properties
- Properties can be of any type
- Can access properties via "Dot" or "Bracket" notation

```
const car = {  
  make: 'Honda',  
  model: 'Civic',  
  yearBuilt: 2017,  
  spinningRims: false,  
  selfDriving: false  
}  
  
// Bracket Notation  
console.log(car.model)  
  
// Bracket Notation  
console.log(car['selfDriving'])
```



JavaScript Review

Classes

Classes

- Classes were introduced to JavaScript as a part of ES6
- Constructor automatically called when a new object is initialized
- Intended to be familiar to developers with object-oriented experience.

```
class Person {  
  constructor(firstName, lastName, age) {  
    this.firstName = firstName  
    this.lastName = lastName  
    this.age = age  
  }  
  
  greetings() {  
    return `Hello! My name is ${this.firstName}`  
  }  
}
```



JavaScript Review

Events

Events

- Events drive interaction between JS code and an HTML page
- There are a lot of types of events but common ones are:
 - onclick
 - onchange
 - onload
 - onkeydown

HTML

```
<div>
  <button onclick="handleButtonClick()">
    Click me!
  </button>
</div>
```

JS

```
function handleButtonClick() {
  alert('button clicked!')
}
```



JavaScript Review

TypeScript

TypeScript

- A superset of JavaScript, created by Microsoft
- Adds syntax for specifying types function parameters and variables
- TypeScript code is “transpiled” back to JavaScript before it runs

```
const car: { make: string, model: string,  
yearBuilt: number, selfDriving: boolean } =  
{  
  make: 'Honda',  
  model: 'Civic',  
  yearBuilt: 2017,  
  selfDriving: false  
};  
  
car.yearBuilt = '2022' // error!
```



Let's try it!

