React Fundamentals JavaScript Review

DevelopIntelligence

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

```
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 <u>a lot</u> of types of events but common ones are:
 - onclick
 - onchange
 - onload
 - onkeydown

HTML

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 JavasScript 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!