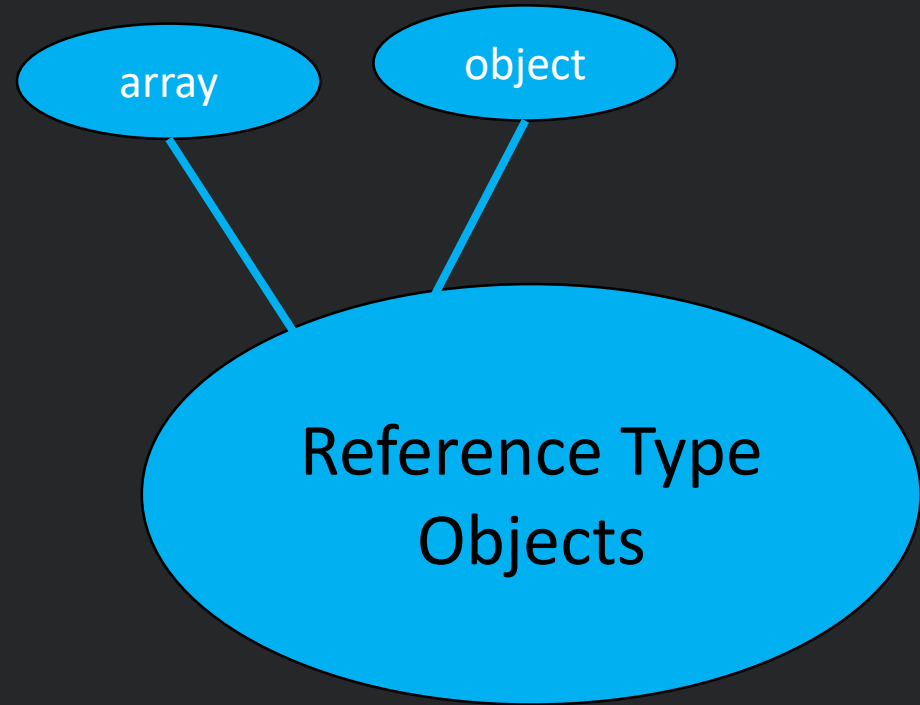
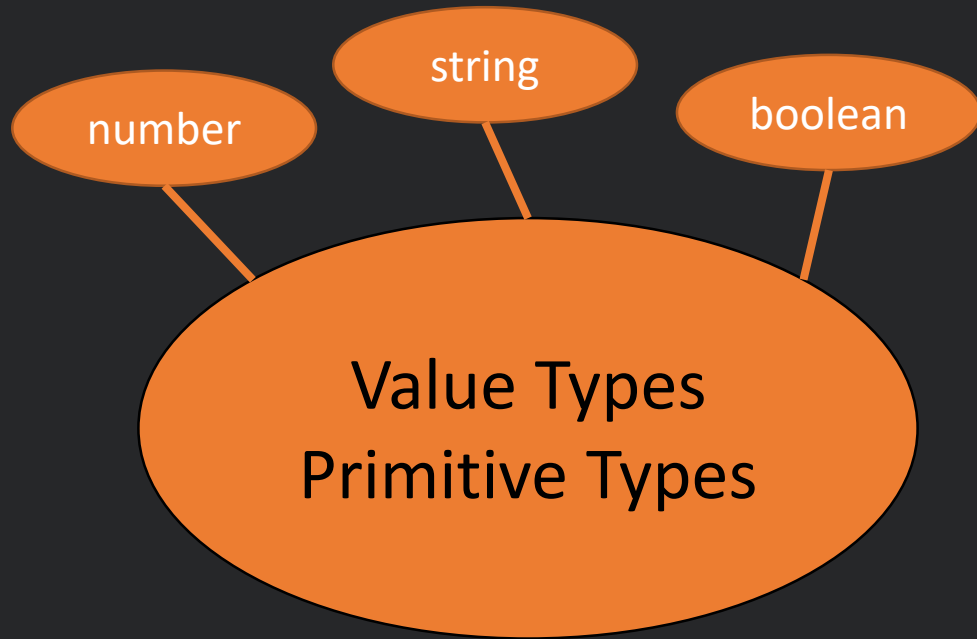


# JavaScript for Developers

## *Data Types*

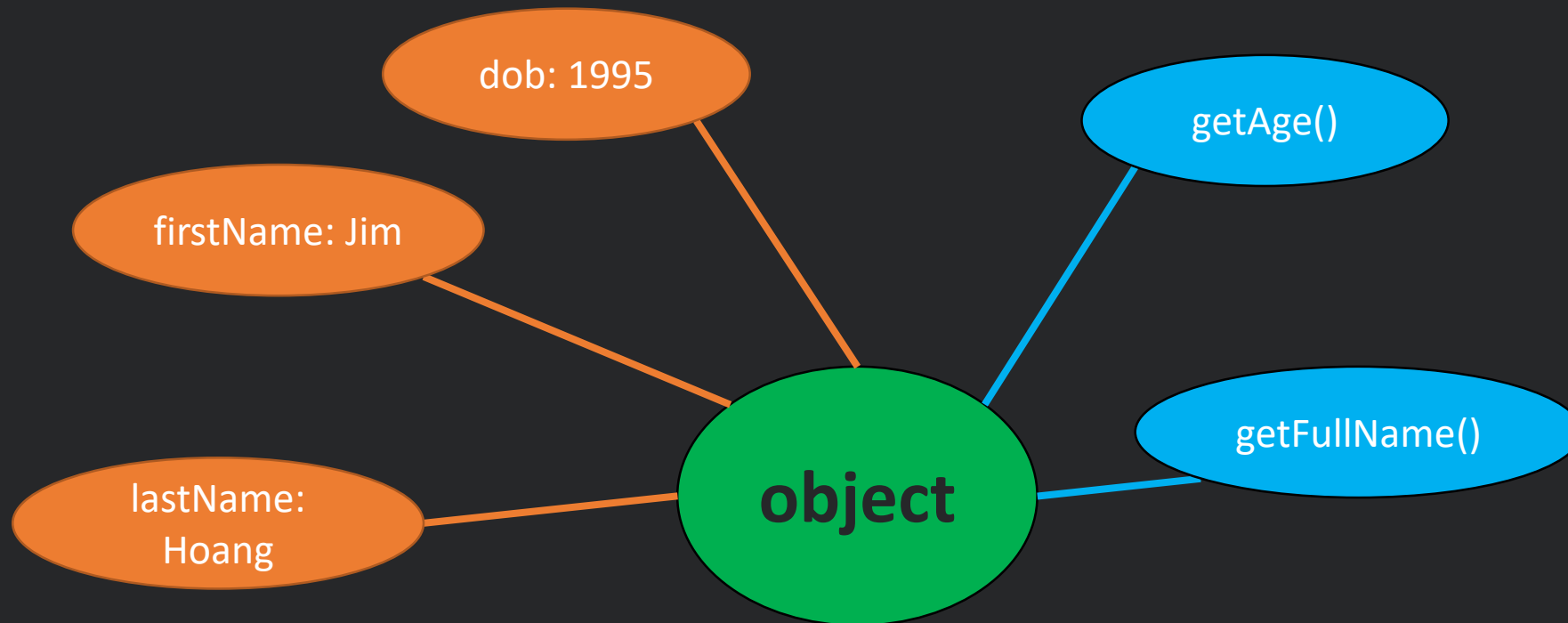
*(part 3: object)* <sup>(2)</sup>

# Data Types



# 1. object

object is collection of properties and methods



# 1. object

## object literal

```
const thisIsJSObject = {  
  firstName: "Jim",  
  lastName: "Hoang",  
  dob: 1990,  
  
  getAge() {  
    return 2021 - this.dob;  
  },  
  
  getFullName() {  
    return this.firstName + " " + this.lastName;  
  },  
};
```

# 1. object

object is collection of properties and methods

→ We can attach properties or methods to it.

```
const another = {};  
another.name = "Jack";  
  
another.getFullName = function () {  
    return this.name + " Alan";  
};  
  
console.log(another);
```

## 2. Object Constructor Function

→ Create Objects of primitive types:

```
const myNumber = 10;  
const myNumberObj = new Number(10);  
console.log(typeof myNumber, typeof myNumberObj);  
//! => number object
```

```
const myString = "aloha";  
const myStringObj = new String("aloha");  
console.log(typeof myString, typeof myStringObj);  
//! => string object
```

```
// const a = {}  
const a = new Object();  
// const b = []  
const b = new Array();  
// const c = true  
const c = new Boolean(true);
```

## Constructor Function

## 2. Object Constructor Function

→ You can CREATE AN OBJECT from a FUNCTION



```
function Person(name, age) {  
    this.name = name;  
    this.age = age;  
}
```

```
const a = new Person("Jack", 10);  
const b = new Person("Bob", 20);
```



## Constructor Function

# 3. Prototype Inheritance

→ Another way to adding properties and method to a constructor function

```
function Person(name, age) {  
    this.name = name;  
    this.age = age;  
}
```

```
Person.prototype.dob = 1990;  
Person.prototype.show = function () {  
    return this.name + " - " + this.age;  
};
```

```
const b = new Person("Bob", 20);  
console.log(b);  
console.log(b.dob);  
console.log(b.show());
```



# Refs

- [https://www.w3schools.com/js/js\\_object\\_constructors.asp](https://www.w3schools.com/js/js_object_constructors.asp)
- [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/Object/constructor](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Object/constructor)