Additions in Constructor Functions
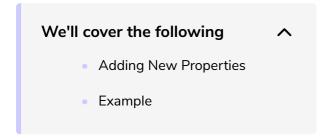
This lesson teaches us how to add new properties to constructor functions.

> **We'll cover the following** ∧
>
> - Adding New Properties
> - Example

Adding New Properties

We learned how to add additional properties in objects in the previous chapter. Now, let's see how new properties can be added to *constructor functions*. The method to do so is different from that of object literals.

For *object literals*, we used the following approach to add properties:

```javascript
1  //creating an object named empl
2  var employee = {
3    //defining properties of the
4    //setting data values
5    name : 'Joe',
6    age : 20
7  }
8
9  //creating a new property calle
10 employee.designation = 'Develop
11 console.log("Designation is:",e
```

However, doing the same when using constructor functions will give `undefined` as a result:

```javascript
1  //function constructor called Employee
2  function Employee(_name, _age, _designation){
3    this.name = _name
4    this.age = _age
```

```
  5      this.designation = _designation
  6    }
  7    //creating an object called employeeObj
  8    var employeeObj = new Employee('Joe', 22, 'Developer')
  9
 10    //adding property using the method used for object literals
 11    Employee.sex = 'male'
 12    //displaying this property for employeeObj
 13    console.log("Sex is:",employeeObj.sex)
```

Creating Object Instances

Example

In order to add properties to constructor functions, the new property needs to be defined inside the constructor function.

Let's take a look at an example demonstrating how to add *new properties* to constructor functions:

```
//function constructor called Employee
function Employee(_name, _age, _designation){
  this.name = _name
  this.age = _age
  this.designation = _designation
  //adding a new property named "company" inside constructor function directly
  //it's not passed as a parameter into the constructor function
  this.company = 'Google' //this will act as a default value for all objects created
}

//creating an object called employeeObj
var employeeObj = new Employee('Joe', 22, 'Developer')

//displaying properties of employeeObj
console.log("Name of employee:",employeeObj.name)
console.log("Age of employee:",employeeObj.age)
console.log("Designation of employee:",employeeObj.designation)
console.log("Employee works in:", employeeObj.company)
```

Creating Object Instances

As shown, a new property, `company`, is added to the constructor function with its value set to `Google`.

What about *methods*?

If you recall, there was also a `displayName` function present in our `Employee` object literal. So, how are methods defined in *constructor functions*? Let's find out in the next lesson.