

# 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:

```
//creating an object named employee
var employee = {
  //defining properties of the object
  //setting data values
  name : 'Joe',
  age : 20
}

//creating a new property called designation and setting its value
employee.designation = 'Developer'
console.log("Designation is:",employee.designation)
```



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

```
//function constructor called Employee
function Employee(_name, _age, _designation){
  this.name = _name
  this.age = _age
```



```
this.designation= _designation
}
//creating an object called employeeObj

var employeeObj = new Employee('Joe', 22, 'Developer')

//adding property using the method used for object literals
Employee.sex = 'male'
//displaying this property for employeeObj
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.