JavaScript Prototype Object

JavaScript is a prototype-based language that facilitates the objects to acquire properties and features from one another. Here, each object contains a prototype object.

In JavaScript, whenever a function is created the prototype property is added to that function automatically. This property is a prototype object that holds a constructor property.

Syntax:

```
ClassName.prototype.methodName
```

What is the requirement of a prototype object?

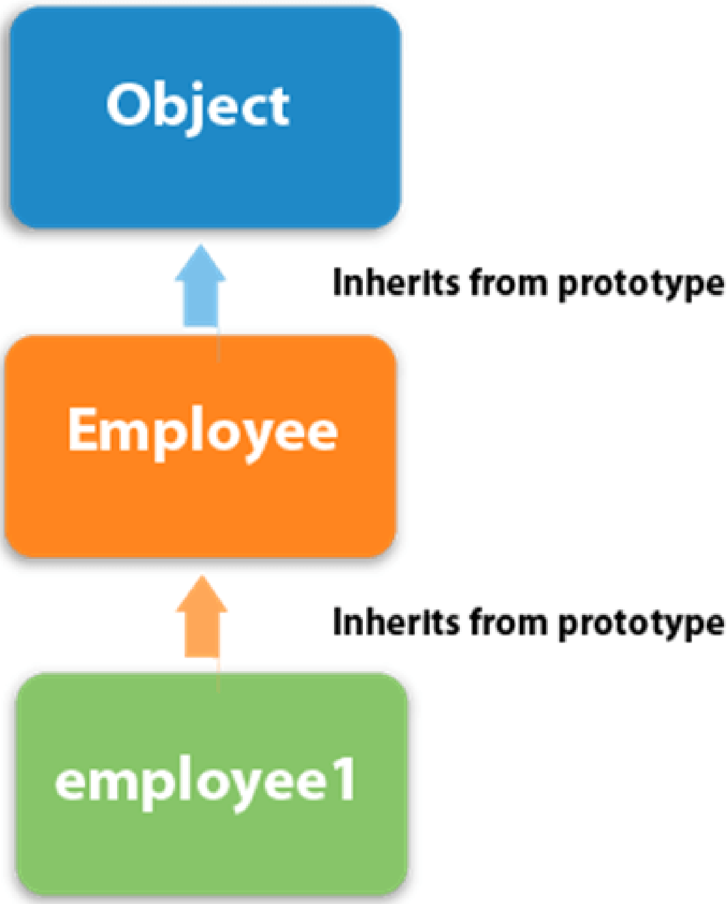
Whenever an object is created in JavaScript, its corresponding functions are loaded into memory. So, a new copy of the function is created on each object creation.

In a prototype-based approach, all the objects share the same function. This ignores the requirement of creating a new copy of function for each object. Thus, the functions are loaded once into the memory.

Prototype Chaining

In JavaScript, each object contains a prototype object that acquires properties and methods from it. Again an object's prototype object may contain a prototype object that also acquires properties and methods, and so on. It can be seen as prototype chaining.

⇧ SCROLL TO TOP



JavaScript Prototype Object Example 1

Let's see an example to add a new method to the constructor function.

```
<script>
function Employee(firstName,lastName)
{
  this.firstName=firstName;
  this.lastName=lastName;
}

Employee.prototype.fullName=function()
  {
    return this.firstName+" "+this.lastName;
  }

var employee1=new Employee("Martin","Roy");
[illegible]w Employee("Duke", "William");
```

⇧ SCROLL TO TOP

```
document.writeln(employee1.fullName()+"<br>");
document.writeln(employee2.fullName());
</script>
```

Test it Now

Output:

```
Martin Roy
Duke William
```

Example 2

Let's see an example to add a new property to the constructor function.

```
<script>
function Employee(firstName,lastName)
{
  this.firstName=firstName;
  this.lastName=lastName;
}

Employee.prototype.company="Javatpoint"

var employee1=new Employee("Martin","Roy");
var employee2=new Employee("Duke", "William");
document.writeln(employee1.firstName+" "+employee1.lastName+" "+employee1.company+"<br>");
document.writeln(employee2.firstName+" "+employee2.lastName+" "+employee2.company);
</script>
```

Test it Now

Output:

```
Martin Roy Javatpoint
Duke William Javatpoint
```

⇧ SCROLL TO TOP

Next →