

# A Quick Overview of Function Prototypes

In this lesson, we'll cover the function prototyping in JavaScript.  
Let's begin!

## WE'LL COVER THE FOLLOWING

- **Listing 7-14:** Creating functions with the prototype property
- Explanation



## *Function Prototypes*



Functions in JavaScript, including constructor functions, are created with a prototype property, which is an object containing properties and methods that should be available to instances of a particular object type. This object is utilized when creating new object instances, and all of its properties and methods are shared among those object instances.

Take a look at Listing 7-14 below:

**Listing 7-14:** Creating functions with the prototype property #

```

<html>
<head>
  <title>Passing arguments #2</title>
  <script>
    function Car(manuf, type) {
      this.manufacturer = manuf;
      this.type = type;
    }

    Car.prototype.wheels = 4;
    Car.prototype.getWheels =
      function () {
        return this.wheels;
      }
    Car.prototype.name = "Car";

    var car1 = new Car("Honda", "CR-V");
    var car2 = new Car("BMW", "X5");


    console.log("--- Car 1:")
    console.log(car1.getWheels());
    console.log(car1.name);
    console.log(car1.manufacturer);
    console.log(car1.type);
    console.log("--- Car 2:")
    console.log(car2.getWheels());
    console.log(car2.name);
    console.log(car2.manufacturer);
    console.log(car2.type);
  </script>
</head>
<body>
  Listing 7-14: View the console output
</body>
</html>

```

## Explanation #

This code adds two properties (`wheels` and `name`) and a function (`getWheels`) to the prototype property of `Car`. When resolving property names, the JavaScript engine examines not only the object instance, but also the constructor function's prototype. As a result of this behavior, the `car1` and `car2` objects will have all properties added to the prototype.

So, the output of Listing 7-14 is this:


 console

```

--- Car 1:
4
Car
Honda
CR-V
--- Car 2:
4

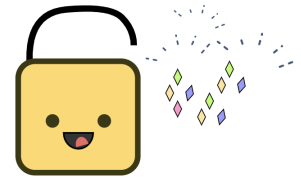
```



 **NOTE:** The prototype property provides great opportunities that many JavaScript design patterns benefit from. You'll learn about them in [Chapter 9](#).

## Achievement unlocked!

Congratulations! You've learned all about function prototypes in JavaScript.



Great work! Give yourself a round of applause! :)

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In the *next lesson*, we'll cover the instance properties and methods in JavaScript.