Javascript Objects

- description : Javascript Object Constructors
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The source of this article

[Javascript Object Constructors](#)

```javascript
// Constructor function for Person Objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
}

// Create a Person object
let myFather = new Person("Anthony", "Young", 50, "green");

// Display age
document.getElementById("demo").innerHTML =
"My father is " + myFather.age + ".";      // My father is 50.
```

(constructor function)   .

Object Types (Blueprints) (Classes)

(JS Object Constructors)   .   .

"type"   "   "   .

"   "   **(object constructor function)**

    .

        function Person()   .

new   .

```javascript
// Constructor function for Person objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
}

// Create two person objects
let myFather = new Person("John", "Doe", 50, "blue");
let myMother = new Person("Sally", "Rally", 48, "green");

// Display age
document.getElementById("demo").innerHTML =
  "My father is " + myFather.age + ". My mother is " + myMother.age + ".";
  // My father is 50. My mother is 48.
```

The this Keyword

JavaScript   this   "   "   .

this   .

               , this   ,   .
this   .

```
''this''                              .                . ''this''                              .
```

Adding a Property to an Object

                                                                  .

Example

```javascript
// Constructor function for Person objects
function Person(first, last, age, eye) {
  this.firstName = first;
```

```javascript
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
}

// Create 2 Person objects
let myFather = new Person("John", "Doe", 50, "blue");
let myMother = new Person("Sally", "Rally", 48, "green");

// Add nationality to first object
myFather.nationality = "English";

// Display nationality
document.getElementById("demo").innerHTML =
  "My father is " + myFather.nationality;    // My father is English
```

myMother   (person   ) myFather   .

Adding a Method to an Object

:

Example

```javascript
// Constructor function for Person Objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
}

// Create 2 Person objects
let myFather = new Person("John", "Doe", 50, "blue");
let myMother = new Person("Sally", "Field", 48, "green");

// Add a name method to first object
myFather.name = function () {
  return this.firstName + " " + this.lastName;
};

// Display full Name
document.getElementById("demo").innerHTML =
  "My father is " + myFather.name();      // My father is John Doe
```

Adding a Property to a Constructor

.

Example

```javascript
// Constructor function for Person objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
}

// You can NOT add a new property to a constructor function
Person.nationality = "English";

// Create 2 Person objects
let myFather = new Person("John", "Doe", 50, "blue");
let myMother = new Person("Sally", "Rally", 48, "green");

// Display nationality
document.getElementById("demo").innerHTML =
  "The nationality of my Father is " + myFather.nationality;
    // The nationality of my Father is undefined
```

,   .

Example

```javascript
// Constructor function for Person objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
  this.nationality = "English";
}

// Create 2 Person objects
let myFather = new Person("John", "Doe", 50, "blue");
let myMother = new Person("Sally", "Rally", 48, "green");

// Display nationality
```

```
document.getElementById("demo").innerHTML =
  "My father is " + myFather.nationality + ". My mother is " +
myMother.nationality;
    // My father is English. My mother is English
```

(default values)   .

Adding a Method to a Constructor

.

Example

```
// Constructor function for Person Objects
function Person(first, last, age, eye) {
  this.firstName = first;
  this.lastName = last;
  this.age = age;
  this.eyeColor = eye;
  this.name = function () {
    return this.firstName + " " + this.lastName
  };
};

// Create a Person object
let myFather = new Person("John", "Doe", 50, "blue");

// Display full name
document.getElementById("demo").innerHTML =
"My father is " + myFather.name();  // My father is John Doe
```

.

.

Example

```
function Person(firstName, lastName, age, eyeColor) {
  this.firstName = firstName;
  this.lastName = lastName;
  this.age = age;
  this.eyeColor = eyeColor;
  this.changeName = function (name) {
    this.lastName = name;
```

```
  };
}
```

changeName()   person   lastName   .

Now You Can Try:

```javascript
// Constructor function for Person objects
function Person(firstName, lastName, age, eyeColor) {
  this.firstName = firstName;
  this.lastName = lastName;
  this.age = age;
  this.eyeColor = eyeColor;
  this.changeName = function (name) {
    this.lastName = name;
  };
}

// Create a Person object
let myMother = new Person("Sally", "Rally", 48, "green");

// Change last name
myMother.changeName("Doe");

// Display last name
document.getElementById("demo").innerHTML =
"My mother's last name is " + myMother.lastName;  // My mother's last name
is Doe
```

JavaScript   **this**   myMother   "   "   person   .

Built-in JavaScript Constructors

JavaScript   (built-in constructor)   .

Example

```javascript
let x1 = new Object();    // A new Object object
let x2 = new String();    // A new String object
let x3 = new Number();    // A new Number object
let x4 = new Boolean();   // A new Boolean object
```

```
let x5 = new Array();      // A new Array object
let x6 = new RegExp();     // A new RegExp object
let x7 = new Function();   // A new Function object
let x8 = new Date();       // A new Date object

// Display the type of all objects
document.getElementById("demo").innerHTML =
  "x1: " + typeof x1 + "<br>" +  // x1: object
  "x2: " + typeof x2 + "<br>" +  // x2: object
  "x3: " + typeof x3 + "<br>" +  // x3: object
  "x4: " + typeof x4 + "<br>" +  // x4: object
  "x5: " + typeof x5 + "<br>" +  // x5: object
  "x6: " + typeof x6 + "<br>" +  // x6: object
  "x7: " + typeof x7 + "<br>" +  // x7: function
  "x8: " + typeof x8 + "<br>";   // x8: object
```

Math() . Math() . new Math
.

Did You Know?

, JavaScript (primitive data types)
String, Number Boolean .
. (primitive values) .

:

new Object() {} .

new String() "" .

new Number() 12345 .

new Boolean() true / false .

new Array() [] .

new RegExp() /()/ .

new Function() () {} .

Example

, Javascript, Objects, Constructors

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