Lesson:

Miscellaneous Operator

Topics

- Ternary Operator
- String Operator (string concatenation +)
- Comma
- Member access operators
- Instance of Operator

JavaScript provides a variety of operators that allow you to perform different operations on values. In this documentation, we will cover miscellaneous operators, including the ternary operator, string operator, comma operator, member access operator, and instanceof. Each operator is explained with its syntax and illustrated with code examples.

Ternary operator

The ternary operator is a shorthand way to write simple conditional statements.

syntax

```JavaScript
condition ? expr1 : expr2
```

condition: A boolean expression that is evaluated.
expr1: The value to return if the condition is true.
expr2: The value to return if the condition is false.

Example

```JavaScript
const age = 18;
const canVote = age >= 18 ? 'Yes' : 'No';

console.log(`Can you vote? ${canVote}`); // Output: Can you vote?
Yes
```

String Operator (string concatenation +)

String operators in JavaScript are used to concatenate strings.

syntax

```JavaScript
str1 + str2
```

str1: The first string to concatenate.
str2: The second string to concatenate.

Example

```javascript
JavaScript
const firstName = 'John';
const lastName = 'Doe';
const fullName = firstName + ' ' + lastName;

console.log(fullName); // Output: John Doe
```

Comma

The comma operator allows you to evaluate multiple expressions (from left to right), returning the result of the last expression.

Syntax

```javascript
JavaScript
expr1, expr2, expr3, ..., exprN
```

expr1, expr2, expr3, ..., exprN: Expressions to evaluate, separated by commas.

Example

```javascript
JavaScript
let x = 1;
(x++, x += 2, x *= 3);

console.log(x); // Output: 12
```

Member Access Operators

Member access operators are used to access properties and methods of objects.

Dot notation:

```javascript
JavaScript
object.property
```

Bracket notation:

```javascript
JavaScript
object['property']
```

object: The object from which you want to access a property or method.
property: The name of the property or method.

Example

```javascript
JavaScript
const person = {
  firstName: 'John',
  lastName: 'Doe',
};


console.log(person.firstName); // Output: John
console.log(person['lastName']); // Output: Doe
```

Instance Of Operator

The instance of operator is used to check if an object is an instance of a particular class or constructor function. We will study about classes and constructor in details in later modules.

Syntax:

```javascript
JavaScript
object instanceof constructor
```

object: The object to test.
constructor: The constructor function to test against.

Example:

```javascript
JavaScript
class Animal {
  constructor(name) {
    this.name = name;
  }
}
```

```javascript
const dog = new Animal('Rex');
const cat = { name: 'Whiskers' };

console.log(dog instanceof Animal); // Output: true
console.log(cat instanceof Animal); // Output: false
```