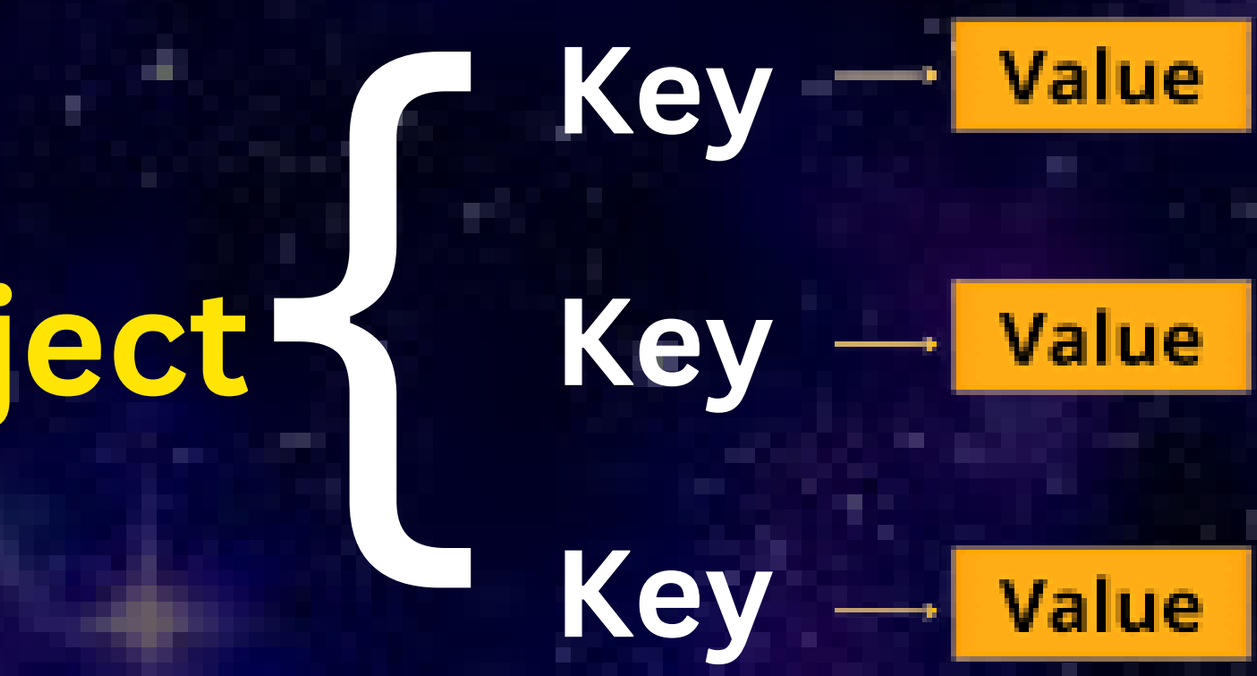
JavaScript

Objects { }

```
let myObject = { }
```



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JS Objects

Object Definition

A pair of curly braces **{ }** containing comma **,** separated **key-value** pairs represent an object. It is a collection of unordered properties.

The key-value pair inside objects is called **property**.

Any property which contains a **function definition** is known as a **method**.

```
const myObj = {
        firstName : 'Aditya',
        lastName : 'Uke'  //  property
        fullName : function () {
            return `My name is ${this.firstName} ${this.lastName}`
        }  // method
}
console.log(myObj.fullName())  //  My name is Aditya Uke
```

The key must either be a string or a valid identifier.
Values can be of any type.

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Creating Objects

- Using object literal { }

```
const myObj = { name: 'Aditya', age: 21 }
```

- Using object constructor with new keyword

```
const myObj = new Object()
myObj.name = 'Aditya'
myObj.age = 21
```

Adding properties

- Dot Notation '.'

```
myObj.colorOne = 'blue'
```

- Bracket Notation '[]'

```
myObj['colorTwo'] = 'red'
```

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Accessing properties

- Dot Notation '.'

```
myObj.colorOne  //  'blue'
```

- Bracket Notation '[]'

```
myObj['colorTwo']  //'red'
```

Always write key inside quotes (' ') while using Bracket notation.

Adding methods

- Dot Notation '.'

```
const myObj = { name: 'Aditya' }
myObj.greet =  function(){  return `Hello, ${this.name} this side` }
```

- Bracket Notation '[]'

```
const myObj = { name: 'Aditya' }
myObj['greet'] = function(){return `Hello, ${this.name} this side`}
```

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Accessing Methods

- Dot Notation '.'

```
const myObj = {
name: 'Aditya',
greet: function(){ return `HI, I am ${this.name}`}
// ES6 shorthand syntax for defining methods inside an object
job(){ return 'HI, I am a Developer' }
}

console.log(myObj.greet())  //  HI, I am Aditya
console.log(myObj.job())  //  HI, I am Developer
```

In ES6, shorthand syntax was introduced for defining methods inside an object. In this syntax colon(:) and function keyword are omitted.

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Accessing Methods

- Dot Notation '.'

```
const myObj = {
name: 'Aditya',
greet: function(){ return `HI, I am ${this.name}`}
// ES6 shorthand syntax for defining methods inside an object
job(){ return 'HI, I am a Developer' }
}

console.log(myObj.greet())  //  HI, I am Aditya
console.log(myObj.job())  //  HI, I am Developer
```

In ES6, shorthand syntax was introduced for defining methods inside an object. In this syntax colon(:) and function keyword are omitted.

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Getters and Setters

Getters => It is used to get the value of a property.
get keyword is used to define a getter method.

```
let user = {
name: "Aditya",
surname: "Uke",

get fullName() {
    return `${this.name} ${this.surname}`;
  }
};

console.log(user.fullName);  //  Aditya Uke
```

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Getters and Setters

Setters => It is used to set the value of a property.
set keyword is used to define a setter method.

```
let user = {
name: "Aditya",
surname: "Uke",

get fullName() {
    return `${this.name} ${this.surname}`;
  },

set fullName(value) {
    [this.name, this.surname] = value.split(" ");
  }
};

user.fullname = "Virat Kohli"
console.log(user.fullname)  //  Virat Kohli
```

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