**Objects and its internal representation in JavaScript**

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Objects are the building blocks of the JavaScript. It is a very important data type in JavaScript as most of the other data types are formed around objects. Objects are nothing but a key-value pair in curly braces. This concept is existing in other programming languages like Dictionary in python, but the concept of the key-value pair is only taken to the dictionary in python and in java it is called as Map. But in JavaScript, it’s everywhere. The datatype of arrays, null, and functions are also objects. JavaScript functions are called first-class objects because of functions having properties and methods just like any other objects in JavaScript.

Example of Objects:

var emptyObject = {}; // Empty Object

Here “emptyObject” is an empty object where it has nothing inside the curly braces.

var person = {

"firstname": "Arun",

"lastname": "Arvindh",

age":"22"

};

var car = {

“name”:”BMW”

"modal": "X3",

"color": "white",

“engine”: ”BS-6”

}

Where the person and car objects having data in the form of “KEY : VALUE ” pairs inside the curly braces. Usually, the key (name) will be a string. But the value can be of any datatype like strings, numbers, booleans, arrays, functions, and other objects.

**Objects in JavaScript are created in two ways:**

1) using Object Literal/Initializer Syntax

2) using the Object() Constructor function with the new keyword. Any of these methods will create the same object.

var a1 = { name:"Arun " }; // object literal syntax

var a2 = new Object(); // Object() constructor function

p2.name = "Arun"; // property

**Accessing objects:**

The accessing the object can be done in many methods. An object's properties are accessed by its dot notation obj.property-name or by its square brackets obj["property-name"]. A method can only be invoked using the dot notation with the parenthesis, obj.method-name().

var person = {

firstName: "Arun",

lastName: "Arvindh",

age: 22,

getFullName: function () {

return this.firstName + ' ' + this.lastName

}

};

person.firstName; // returns Arun

person.lastName; // returns Arvindh

person["firstName"];// returns Arun

person["lastName"];// returns Arvindh

person.getFullName(); // calling getFullName function