***Objects and its internal representation in JavaScript***

Objects are important data types in JavaScript. Objects are different than primitive data types. Primitive data types can only hold one value per variable. But objects can hold multiple values in the form of key: value pair. These keys are variables or functions and they are called properties and methods respectively, in the context of an object.

Every object has some property associated with some value. These values can be accessed using these properties associated with them.

**Example:**

**Syntax for creating object**:

var objectName = new object();

**Syntax for adding properties to object**:

objectName.objectProperty = new propertyValue;

**Creating objects using the new keyword**:

var myCar = new object();

myCar.make = “Ford”;

myCar.model = “Mustang”;

myCar.year = “1969”;

After creating objects we can call the value inside the object using keys.

myCar.year;

output: 1969

We can also use square brackets instead of calling the value using the dot notation.

myCar[year];

output: 1969

**Syntax to access the property from an object**:

* objectName.property
* objectName[property]
* objectName[expression]

**Syntax to delete a property from object**:

delete objectName.objectProperty;

**Object Methods:**

An object method is an object property containing a object definition.

For Example:

Assume there is an function to start the car.

function(){return ignition.on}

Methods are action that can be performed on objects.

**Creating object with object literal**:

One of easiest way to create a JavaScript object is object literal, We can simply define the property and values inside curly braces.

**Example**:

let bike = {category: ‘sport’, make: ‘KTM’, model: ‘Duke200’};

**Creating JavaScript object with constructors:**

Constructor is nothing but a function and with help of new keyword, constructor function allows to create multiple objects of same flavor.

**Example**:

function vehicle(name, make)

{

this.name = name;

this.make = make;

}

let car1 = new vehicle(‘Mustang’, ‘Ford’);

let cat2 = new vehicle(‘skyline’, ‘nissan’);

console.log(car1.name);

console.log(car2.name);

**Output:**

Mustang

Skyline

**Creating objects with new keyword**:

**Syntax:**

var person = new object();

person.firstName = ‘Johny’;

person.lastName = ‘depp’;

person.age = 50;

person.occupation = ‘Actor’;

**Creating object using object.create() method**:

The JavaScript objects can also be created with object.create() method. This method is very useful because it allows us to choose the prototype object for the object for the object we want to create.

**Example:**

var Animal = {type: ‘Invertebrates’, displayType: function(){console.log(this.type)}};

var animal1 = Object.create(Animal);

animal1.displayType();

var fish = Object.create(Animal);

fish.type = ‘Fish’;

fish.displayType();

**OUTPUT:**

Invertibrates

Fish