**Brief intro on available datatypes in JavaScript?**

**The String Data Type**

The *string* data type is used to represent textual data (i.e. sequences of characters)

var a = 'Hi there!'; // using single quotes

var b = "Hi there!"; // using double quotes

**The Number Data Type**

The *number* data type is used to represent positive or negative numbers with or without decimal place, or numbers written using exponential notation e.g. 1.5e-4 (equivalent to 1.5x10-4).

var a = 25; // integer

var b = 80.5; // floating-point number

var c = 4.25e+6; // exponential notation, same as 4.25e6 or 4250000

var d = 4.25e-6; // exponential notation, same as 0.00000425

**The Boolean Data Type**

The Boolean data type can hold only two values: true or false

var isReading = true; // yes, I'm reading

var isSleeping = false; // no, I'm not sleeping

**The Undefined Data Type**

The undefined data type can only have one value-the special value undefined.

var a; var b = "Hello World!"

**The Null Data Type**

This is another special data type that can have only one value-the null value. A null value means that there is no value. It is not equivalent to an empty string ("") or 0, it is simply nothing.

**The Object Data Type**

The object is a complex data type that allows you to store collections of data.

An object contains properties, defined as a key-value pair. A property key (name) is always a string, but the value can be any data type, like strings, numbers, booleans, or complex data types like arrays, function and other objects. You'll learn more about objects in upcoming chapters.

var emptyObject = {};

var person = {"name": "Clark", "surname": "Kent", "age": "36"};

// For better reading

var car = { "modal": "BMW X3", "color": "white", "doors": 5 }

**The Array Data Type**

An array is a type of object used for storing multiple values in single variable. Each value (also called an element) in an array has a numeric position, known as its index, and it may contain data of any data type-numbers, strings, booleans, functions, objects, and even other arrays. The array index starts from 0, so that the first array element is arr[0] not arr[1].

var colors = ["Red", "Yellow", "Green", "Orange"];

var cities = ["London", "Paris", "New York"];

alert(colors[0]); alert(cities[2]);

**The Function Data Type**

The function is callable object that executes a block of code.

var greeting = function()

{

return "Hello World!";

} // Check the type of greeting variable

alert(typeof greeting) // Output: function

alert(greeting()); // Output: Hello World!