JAVASCRIPT

- is an interpreted programming language for web developers and is characterized to be dynamic and is multi-paradigm. It is used alongside HTML  and CSS to make web pages dynamic and interactive. JavaScript has API which enables it to work with text, arrays, dates, regular expressions and some manipulation of DOM. A scripting language, ECMAScript, standardizes JavaScript for many different implementations.

HISTORY

JavaScript was developed by Brendan Eich in 1995 while he was working at Netscape Communications. It was at first named as Mocha but was changed to LiveScript when its beta version was first released.  On September 1995, it was renamed to Javascript when deployed in December.

JavaScript API

ECMAScript - is a scripting language specification by ECMA International  created for standardizing JavaScript. Its common use is for client-side scripting.

Browser Object Model(BOM) API- a browser convention that deals not just with the documents(which includes the history, navigator, location, window. etc) of the browser but also with the components of the browser. Implementation for BOM has no standards and does not have a strict definition which makes it easy to implement in any way you want.

DOM API

-is a language that is independent from conventions and works in multiple platforms used to represent and interact with the objects from HTML, XHTML, and XML documents. The Objects under the Document Object Model tree can be manipulated and addressed through the use of methods.

Some of the DOM API Interfaces includes:

Node

- an interface which object types inherit from; It may also be used to inherit methods with the same set.

Document

- an interface which represents the web page loaded by the browser and also an entry point into the web page’s content, that is the Document Object Model tree.

EventTarget

- an interface implemented by objects which can receive and listen to events. Its methods includes:

EventTarget.addEventListener()- for registering an event handler for a specific type.

EventTarget.removeEventListener() - a method  to remove a listener of an event.

EventTarget.dispatchEvent() - to send off an event

Events - represents an event which takes place in the DOM. Event constructor creates an object and will return it.

Variables in JavaScript

-Variables in javascript can store any value type just like in java.

-To declare a variable in javascript, use the keyword var followed by he name of the variable.

-After declaring a variable, you can reference it elsewhere by using the name :

var a = 9352;

a + 100;

Output = 9452

-Variables can be used to declare other variables.

var a = 9352;

var b = a + 100;

b;

Output = 9452

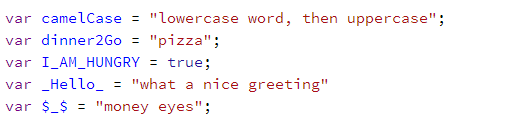
-Variables with existing value can be given another different value after it is declared.

var subject = “ProgApps”;

Subject = “WebTech”;

Output = “WebTech”

-Naming variables in javascript are flexible. You may start it with a letter, \_underscore, or a $dollar sign followed by numbers, underscore and dollar sign.



Constant

Functionalities in JavaScript

A function in JavaScript is used by defining it to where it is called. It can be reused and named. Function has the following syntax:

function nameOfFunction(*parameters*){

/\*code here\*/

}

Function expression -is used to define a function inside an expression and can be used as soon as it was defined. Function expressions can be used for cryptic or shorter codes.

Syntax:

function nameOfFunction(){

return …..

}

\*\*Arrows in Javascript returns a value of functions provided

return function - a statement that ends the execution of a function and returns a specific value to the function caller.

Syntax:

return [[expression]]; //expression whose value to be returned. ‘Undefined’ is returned if omitted.

Strings in JavaScript

Strings in javascript are data holders which can be represented in text form.