



Role of Javascript Function, Method, Event and Object in Website Development

PRADEEP SHARMA, Dr. VISHAL SHRIVASTAVA, Dr. AKHIL PANDEY, Er. ROBIL VARSHNEY

B.TECH. Scholar, Professor, Assistant Professor
Computer Science & Engineering
Arya College of Engineering & I.T. India, Jaipur
pradeep.sharma71121@gmail.com, vishalshrivastava.cs@aryacollege.in, akhil@aryacollege.in,
robilvarshney.cs@aryacollege.in

ABSTRACT

In this essay, the function of JavaScript in website creation will be explained and discussed. The post clearly and concisely illustrates the many contemporary uses of JavaScript, which are crucial for web apps, as well as some older but widely used usage of the language. Specifically, with the use of appropriate examples, this paper addresses the use of JavaScript objects, methods, events, and functions.

Introduction

Because JavaScript creates responsive and dynamic online pages, it is regarded as an essential component of websites. Most websites use it, and every major browser (Netscape, Chrome, Firefox, Safari, Opera, etc.) has a JavaScript engine specifically designed to run it. These days, JavaScript is utilised on practically every website on the internet for more sophisticated and powerful functionality. It is compatible with all current web browsers. JavaScript is one of the three fundamental World Wide Web (WWW) technology, along with HTML and CSS. Over the past few years, using JavaScript has become a common web development skill Without JavaScript, it is currently hard to acquire a job as a web developer.

Brief history of Java Script

In 1995, Brendan Eich was working at Netscape Communications Corporation when he created JavaScript. JavaScript was originally known as Live Script, and it debuted in Netscape 2.0. Later, Netscape Communications Corporation replaced Live Script with Java Script. JavaScript 1.1 was presented to the European Computer Manufacturers Association (ECMA) in 1997. The fundamental JavaScript language was specified in a standard version by the ECMA-262 guidelines.

Several prominent JavaScript developers include:

1. Netscape Communications Corporation
2. ECMA International
3. Mozilla Foundation

Among the key terms used in web development are a description that lists all of a scripting language's attributes, functions, and objects is referred to as an ECMA script ----- The ECMA script website offers the JavaScript.

Webpage

A webpage's appearance in a browser is mostly made up of HTML, CSS, and JavaScript for interactivity and structure. Three distinct technologies HTML, CSS, and JavaScript—that the browser is capable of interpreting handle these tasks.

Web pages that use HTML, CSS, and JavaScript all operate together, but their code needs to be stored and handled independently.

The term "website" describes a group of linked, publicly accessible webpages with the same domain name.

A desktop computer or workstation that can access data and programs from a server connected to a computer network is referred to as a client.

A computer that transfers data over LAN and WAN to other computers is referred to as a server.

An interpreter is a program that can decipher and run code written in high.

A programmer known as a compiler converts source code written in a high-level programming language into a lower-level language or machine language.

Just-in-time compilation takes place at run-time by JavaScript compilers.

JavaScript Algorithm Monkey with Spiders The standard method of code representation utilized by the JavaScript engine is bytecodes.

The term "virtual machine" describes an emulated computer system that is driven by software.

The term "www" (world wide web) describes a collection of formats and protocols that enable browsers to view web pages.

The term "JavaScript engine" describes an application or interpreter that runs JavaScript code.

The three main/core technologies used to create web pages are: HTML, CSS and JavaScript

HTML

- HTML is an acronym for Hypertext Markup Language.
- Regardless of a website's complexity or the number of technologies used.
- HTML is the foundation of every web page.
- A website's basic structure and content are defined using HTML.
- Various structural types, including paragraphs, blocks, lists, images, tables, forms, and comments, are defined and explained.
- HTML instructs the browser on what content to show.

CSS

- The acronym for Cascade Stylesheet is CSS.
- CSS aids in styling a website's content.
- A website's web pages can be formatted, presented, and laid out precisely with the help of CSS.
- CSS provides instructions to the browser on how to display HTML content and different element types, which may differ depending on the media (such as a screen, print, or handheld device).

JAVASCRIPT

- The acronym for JavaScript is JS.
- JavaScript is utilized for programming and supplying the majority of the dynamic functionality on a webpage.
- JavaScript enables the webpage to carry out certain functions.
- JavaScript facilitates user interaction with client-side scripting.
- JavaScript, also known as client-side mechanism, is used, for instance, to determine whether the user has entered a valid email address in a form field.
- A programming language called JavaScript is used to give websites some interactive features. It enables communication between the user and the browser.
- An interpreted language, JavaScript is integrated into a number of practical and widely used browsers.

Advantages of Java Script

- Reduction of server interaction.
- Instantaneous response to the guests.
- A rise in interaction.
- More sophisticated UIs (drag and drop).

JavaScript limitations

- JavaScript is insufficient to be regarded as a complete programming language.
- JavaScript client side does not allow reading or writing of files.
- It is not possible for networking applications to be supported by JavaScript.

Conclusion:

Using JavaScript on the web is an amazing technology.

It interacts well with plugins like Flash and plays well with other web technologies like HTML and CSS.

JavaScript enables the creation of incredibly responsive user interfaces, eliminates annoying page reloads, and even resolves CSS support issues.

With the correct browser addons (like Google Gears or Yahoo browser plus), JavaScript can be used to make online systems available offline and sync automatically once the computer goes online.

Additionally, JavaScript is not limited to web browsers. JavaScript has an increasing number of applications due to its speed and small memory footprint compared to other languages.

Acknowledgment

I would want to extend my sincere gratitude to the global intellectual community for using the internet to share their cutting-edge and scientific theories, new technologies, and rising trends, as well as to describe new discoveries and inventions in a variety of academic fields. These are excellent information sources that substantially aid in research endeavors. In addition to helping and motivating students to explore, seek for, and find new ideas, classroom instruction and situation-based learning also simplify and enhance current technology to a greater level. Lastly, I would want to express my gratitude to the Almighty for bestowing upon me knowledge, strength, wisdom, and an amazing mind that allows me to envision, analyses, and investigate things at their most basic level and record them for the good of all people.

References:

- Herman, David (2013). Effective JavaScript. AddisonWesley. p. 83. ISBN 978-0-321-81218-6.
JavaScript Tutorial - W3Schools
- Haverbeke, Marijn (2011). Eloquent JavaScript. No Starch Press. pp. 95–97. ISBN 978-1-59327-282-1.
- Katz, Yehuda. "Understanding "Prototype"
"Brendan Eich: An Introduction to JavaScript, JSConf 2010". p. 22m. Retrieved November 25, 2019. Eich: "function", eight letters, I was influenced by AWK

