

Course
&
Test Series

Introduction to 'JavaScript' Language

Introduction to JavaScript Programming

Module 1 - Introduction to JavaScript



CBSE

Introduction

JavaScript is most commonly used as a client side scripting language. This means that JavaScript code is written into an HTML page. When a user requests an HTML page with JavaScript in it, the script is sent to the browser and it's up to the browser to do something with it.



ICSE

- JavaScript has nothing to do with Java.
- JavaScript and Java are completely different languages, both in concept and design.



NTSE

- JavaScript programs are run by an interpreter built into the user's web browser (not on the server).
- It is lightweight interpreted programming language and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages.
- JavaScript is a very free-form language compared to Java.



Banking &
Insurance

Definition:

Java Script is a dynamic scripting computer programming language used to make web pages interactive in HTML pages.



Central Govt.
Service

History

JavaScript was developed by Brendan Eich in 1995 at Netscape Corporation (LiveScript), when Eich was working for Netscape Communications Corporation and became an ECMA (European Computer Manufacturers Association) standard in 1997.



State Govt.
Services

- The technology was first called Mocha, then Live Script. Eventually it was named JavaScript to follow the marketing of another programming language called Java.



LAW
Entrance

- Java was developed by Sun Microsystems and is a completely different programming language and technology.



MBA
Entrance

- JavaScript was a competitive technology to VBScript, a Microsoft product. While VBScript worked only on the Internet Explorer browser, JavaScript was supported on other browsers, too.



Railways & Metro
Services

- This made JavaScript a preferred language for global applications. ECMA-262 is the official name. ECMA Script 6 (released in June 2015) is the latest JavaScript version.

...many more

Why Study JavaScript?

abhyasonline.in



JavaScript is one of the 3 languages all web developers must learn:

1. HTML to define the content of web pages.
2. CSS to specify the layout of web pages.
3. JavaScript to program the behavior of web pages.

What can JavaScript Do?

- JavaScript can dynamically modify an HTML page.
- JavaScript can react to user input.
- JavaScript can validate user input.
- JavaScript can be used to create cookies
- JavaScript is a full-featured programming language
- JavaScript user interaction does not require any communication with the server

Advantages of JavaScript.

- The advantages of using JavaScript are:
- Less server interaction: You can validate user input before sending the page off to the server. This saves server traffic, which means fewer loads on your server.
- Immediate feedback to the visitors: They don't have to wait for a page reload to see if they have forgotten to enter something.
- Increased interactivity: You can create interfaces that react when the user hovers over them with a mouse or activates them via the keyboard.
- Richer interfaces: You can use JavaScript to include such items as drag-and-drop components and sliders to give a Rich Interface to your site visitors.

Browser Compatibility

JavaScript is widely supported. It is available in the following browsers:

- Netscape Navigator (beginning with version 2.0)
- Microsoft Internet Explorer (beginning with version 3.0)
- Firefox
- Safari
- Opera
- Google Chrome

Why do we use Java Script?

1. Front-End Web Development

JavaScript is primarily used to make websites interactive and dynamic. It allows developers to:

- Create dynamic content (e.g., interactive forms and dropdown menus).
- Respond to user actions (e.g., clicks, hover effects, and keyboard inputs).

2. High Performance and Real-Time Applications



CBSE



ICSE



NTSE



Banking &
Insurance



Central Govt.
Service



State Govt.
Services



LAW
Entrance



MBA
Entrance



Railways & Metro
Services

...many more

abhyasonline.in



**Course
&
Test Series**

Introduction to 'JavaScript' Language

JavaScript enables the creation of high-performance, real-time applications such as:

- Chat applications.
- Live tracking systems (e.g., food delivery, cab booking).

3. Browser Compatibility

JavaScript is natively supported by all modern web browsers, making it universally compatible for creating client-side web applications.

4. Easy to Learn and Use

JavaScript has a simple syntax that is easy for beginners to pick up, yet it is powerful enough for complex applications.

Tabular comparison of JavaScript (JS), CSS, and HTML:

Aspect	HTML	CSS	JavaScript
Full Form	HyperText Markup Language	Cascading Style Sheets	JavaScript
Purpose	Defines the structure and content of a webpage	Styles the appearance and layout of a webpage	Adds interactivity and dynamic behavior
Role	Skeleton of the webpage	Skin and design of the webpage	Brain of the webpage
Functionality	Creates elements like headings, paragraphs, links, buttons, etc.	Styles elements (e.g., colors, fonts, spacing)	Adds functionality (e.g., form validation, animations)
Example	<code><h1>Hello World</h1></code>	<code>h1 { color: blue; font-size: 20px; }</code>	<code>document.getElementById("id").innerHTML = "Hello!";</code>
Static/Dynamic	Static	Static	Dynamic

 **CBSE**

 **ICSE**

 **NTSE**

 **Banking & Insurance**

 **Central Govt. Service**

 **State Govt. Services**

 **LAW Entrance**

 **MBA Entrance**

 **Railways & Metro Services**

...many more

abhyasonline.in