



# Java Script

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**19CSE100 - Problem Solving and Algorithmic Thinking  
PROGRAMMING LANGUAGE SURVEY ASSIGNMENT**

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# History

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**JavaScript** was invented by **Brendan Eich** in 1995.



**JavaScript** was just created in just 10 days.



**JavaScript's** original name was Mocha.

# About

For creating interactive front-end web development and for server-side programming with technologies such as Node.js

It's syntax and control structures are heavily influenced by C, Java, Perl, Scheme and Self (OOPs and Prototype-based inheritance).

# Paradigm



JavaScript is a multi-paradigm language.



Paradigms in JavaScript are Imperative and Declarative.



JavaScript supports both object-oriented, & functional programming.

# Object Oriented Programming

- Object-oriented programming *programming* by the name implies it's a pattern of programming using objects,
- It consists of classes *objects* and prototypes.
- The main advantage of using this type of approach is because it eliminates redundancy in code.

# Functional Programming

- Functional programming is a programming pattern centered around functions is involves closures and lambdas to execute some certain task.
- It generally leads to less code, because JavaScript already has a lot of the in-built functions.
- It can be simply explained by following these 2 laws,
  - 1) **You architect your software out of pure, isolated functions**
  - 2) **You avoid mutability and side-effects**

# Application



**Internet of Things (IoT)**



**Streaming Apps**



**Online Payment Services**



**Real-time Chat Application**



Used as a client-side programming language by **97.0% of all websites.**

# Hello World

1

`console.log()`

2

`alert()`

3

`document.write()`



# Using console.log()

- console.log() method, will just display the string entered within the string

```
console.log("Hello, World!");
```

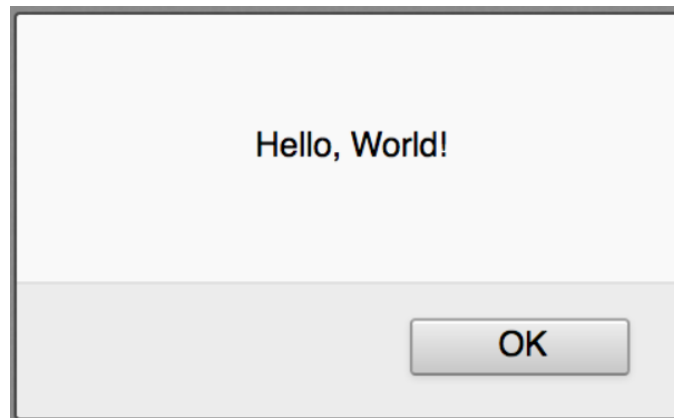
Output

Hello, World!

# Using alert()

- `alert()` method, will display an alert box
- An OK button that will allow the user to close the alert.

```
alert("Hello, world!");
```



# Using document.write()

Write some text directly to the HTML output:

```
document.write("Hello World!");
```

Write some HTML elements directly to the HTML output:

```
document.write("<h2>Hello World!</h2><p>Have a nice day!</p>");
```

# Resources

- [https://www.w3schools.com/jsref/met\\_doc\\_write.asp](https://www.w3schools.com/jsref/met_doc_write.asp)
- <https://www.programiz.com/javascript/examples/hello-world>
- <https://javascript.plainenglish.io/types-of-real-time-web-applications-you-can-build-with-node-js-technology-ba2af2af888a>
- <https://javascript.plainenglish.io/what-are-javascript-programming-paradigms-3ef0f576dfdb?gi=65669448b7ac>
- [https://www.w3schools.com/js/js\\_history.asp#:~:text=JavaScript%20was%20invented%20by%20Brendan,Mozilla's%20latest%20version%20was%201.8.](https://www.w3schools.com/js/js_history.asp#:~:text=JavaScript%20was%20invented%20by%20Brendan,Mozilla's%20latest%20version%20was%201.8.)

# Thank You