

## OVERVIEW

JavaScript is one of the most (if not *the* most) popular scripting languages. Supported by all web browsers, it's the standard for client-side scripting. The main purpose is to make websites more dynamic, more hands-on for things like interactive maps, animated graphics, etc. Other uses include creating pop-ups to display warning messages (which is often an exploit used in XSS attacks), or manipulating user input and displaying the results.



It contains a standard library of objects (Array, Math, etc.) and a core set of language elements that can be extended with additional objects.

## JAVASCRIPT AND JAVA

The good news is that JavaScript and Java are somewhat similar. JavaScript mostly follows Java syntax (which is why it was renamed from LiveScript), but there are a few key differences. JavaScript doesn't have as many requirements. This chart from Mozilla touches on some of the most important ones:

JavaScript	Java
Object-oriented. No distinction between types of objects. Inheritance is through the prototype mechanism, and properties and methods can be added to any object dynamically.	Class-based. Objects are divided into classes and instances with all inheritance through the class hierarchy. Classes and instances cannot have properties or methods added dynamically.
Variable data types are not declared (dynamic typing, loosely typed).	Variable data types must be declared (static typing, strongly typed).
Cannot automatically write to hard disk.	Can automatically write to hard disk.

## CODE

We'll be going over some of the very basics for JavaScript, mainly covering the aspects of the code that we discuss in our presentation.

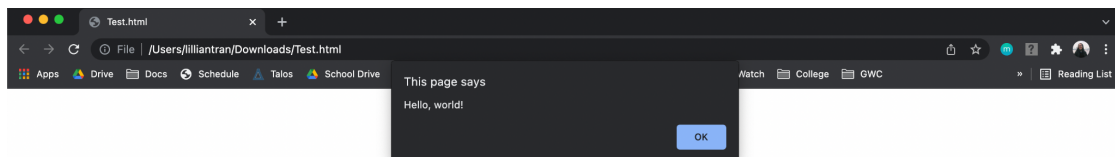
What's helpful about JavaScript is that you can insert a program virtually anywhere in an HTML file using the `<script>` tags.

It's as simple as this:

```
<!DOCTYPE HTML>
<html>
<body>
  <script>
    alert( 'Hello, world!' );
  </script>
</body>
</html>
```

Like we mentioned above, one of the things JavaScript can do is create a popup. In this case, the `alert()` method will be what creates our popup.

If you try to open the HTML file, the code will execute and you'll see a little something that looks like this:



- Link website (href)
- Window.confirm
- 

## CONCLUSION

That's it! Hopefully, you have a bit of a better idea of how to use JavaScript. This guide only covers the absolute basics so you don't come into our presentation blind. There are countless

online resources for further information. Linked are some of the more comprehensive ones, many of which we actually referenced!

<https://www.tutorialrepublic.com/javascript-tutorial/>

[https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Introduction#what\\_is\\_javascript](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Introduction#what_is_javascript)

<https://javascript.info/intro>