Step by Step Guide of Javascript

References: <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Introduction>

**What is JavaScript?**

JavaScript is a cross-platform, object-oriented scripting language used to make webpages interactive (e.g., having complex animations, clickable buttons, popup menus, etc.).

There are also more advanced server side versions of JavaScript such as Node.js.

* Client-side JavaScript integrate with HTML and respond to events. Such as Mouse click, form input.
* Server-side JavaScript allow an application to communicate with a database, provide continuity of information from one invocation to another of the application, or perform file manipulations on.
* JavaScript is not strictly typed language.
* It supports a runtime system based on a small number of data types representing numeric, Boolean and string values.

**Grammer and Types**

* Case-sensitive and uses Unicode character set. For example, the word Früh (which means "early" in German) could be used as a variable name.

let Früh = "foobar"

But, the variable früh is not the same as Früh because JavaScript is case sensitive.

* Statement are separated by semi-colon.
* Comments

// a one line comment

/\* this is a longer,

\* multi-line comment

\*/

/\* You can't, however, /\* nest comments \*/ SyntaxError \*/

Comments behave like whitespace, and are discarded during script execution.

1. HashBang comments :

 #!/usr/bin/env node

This is called HashBang comments syntax, and is a special comments used to specify the path to a particular JavaScript engine that should execute the script.

* Declaration: JavaScript has three kinds of variable declarations.

1. var : Declares a variable, optionally initializing it to a value.

1. let: Declares a block-scoped, local variable, optionally initializing it to a value.
2. const : Declares a block-scoped, read-only named constant.

What to Study Later:

Functions : <https://developer.mozilla.org/en-US/docs/Glossary/IIFE>

Hashbang comments:

<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Lexical_grammar#Hashbang_comments>