Unit 3 Module 1: Introduction to JavaScript

Dylan Lane McDonald

CNM STEMulus Center
Web Development with PHP

August 20, 2014

Outline

History of JavaScript

JavaScript began its life at Netscape in 1995. Originally slated for Netscape 2.0, the language was originally called *LiveScript* and subsequently renamed to *JavaScript* shortly before Netscape 2.0's release. This begs the question: is JavaScript similar to Java?

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ABSOLUTELY NOT!!!!

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JavaScript's similarities to Java are purely superficial. The syntax is derived from a common ancestor, C, and both use C-like syntax. The similarities stop there.

Features of JavaScript

JavaScript is an **interpreted** language run by a JavaScript engine, normally a component of the end user's web browser. Some of the key features of JavaScript are:

- **Imperative**: Functions can be written to perform specific tasks
- **Object Oriented**: Objects can be modeled around what the system is
- **Dynamically Typed**: The variable type (e.g., String, Integer, ...) are decided at run time

JavaScript is enabled on most end user's web browsers and is used in creating responsive, dynamic, and fun sites.

Variables

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A JavaScript variable is assigned like so:

```
var answer = 42; // variable directly assigned
var question; // variable created with no value
    ⋮
question = "What is the answer?"; // variable assigned later
```

if Block

An `if` block is a decision point where JavaScript decides whether to perform one action or another. For instance:

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```
if(answer == 42) {
  console.log("We found the answer.");
} else {
  console.log("404 answer not found");
}
```

Functions

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A good way to think of functions is to imagine yourself commanding a factory worker to go and perform a task for you. You tell the worker what to do and provide what he needs (input), he performs the task, and hands in the results (outputs).

Functions

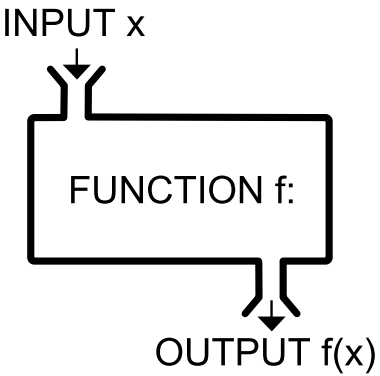

Figure 1: Visual representation of a function

Functions

The syntax for functions are:

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// define function name & inputs
function addTwoNumbers(first, second) {
  var sum = first + second; // perform task
  return(sum); // return the outputs
}
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All functions start with the keyword **function**. Only functions that return an output end with a **return** statement.

Works Cited


Wikipedia.
Variable (computer science).
http://en.wikipedia.org/wiki/Variable_(computer_science).