Programming with JavaScript

CS 102

Apr. 28, 2003

1 Introduction

In this lab, you'll get to examine a short program to see how one looks and what sorts of things a programmer can do with just a few lines of code. This will set the stage and give you some background for our later look at Artificial Intelligence.

2 Lab

1. Look over the following program and try to predict what it will do. First, observe that the program is embedded within a Web page. The lines that begin with // are comments. They aren't a part of the program, just documentation for it.

```
<html>
<head>
</head>
<body>
<script><!--
// This is a comment. You don't need to type-in any of these, except
// for the one at the end.
// Variable declarations.
var name;
var age;
var i;
var currentYear = 2003;
var birthYear;
var response;
// Some straight-line execution.
name = prompt("What is your name?", "");
document.write("Hello " + name + "!<br>>");
age = prompt(name + ", how old are you?", "");
// A conditional.
if (age >= 30)
   document.write("We can't trust you!<br>>");
```

```
else
   document.write("I wish I were young again!<br>>");
birthYear = currentYear - age - 1;
response = prompt("Were your born in " + birthYear + "? (y or n)", "");
if (response == "y")
   document.write("I'm smart, aren't I?<br>");
else
   document.write("You were born too early in the year!<br>>");
// A loop.
for (i = 1; i \le age; i = i + 1)
    document.write(i + "<br>");
document.write("<br>Goodbye " + name + "!<br>");
// You need the following comment in your program.
//-->
</script>
</body>
</html>
```

- 2. Using notepad, type the program in (you needn't type-in the comments, except for the final one). **OR** just copy & paste the code into notepad from the HTML version of the lab on the class Web page. This will save you time.
- 3. Save the program onto your G: drive folder with the name jscript.htm.
- 4. Open your G: drive folder and double-click on jscript.htm to run the program.
- 5. Did it do what you expected it to? Try to reconcile your predicted behavior of the program with what it actually did.
- 6. Challenge: Can you modify the **for** loop so that it counts by two rather than counting by one?