Announcements

- Reading:
  - For today
    - Chapters 18, 19, and 21 of Fluency
  - Chapter 1 of QuickStart to JavaScript
  - For Wednesday
    - Chapter 21 of Fluency

- Project 1B was due before Noon today

Announcements

- Grading
  - TA’s are students, too, and they are behind on grading
  - We’ll get caught up as soon as we can

- New approach to grading labs
  - You answer questions and give the URL for your Web page in a Catalyst WebQ quiz
    - Open all week
    - Return to it again and again
    - “Open book” like all labs
    - It’s due on Monday at noon
    - No Collect It
    - No separate Word document

- New approach starts with today’s lab!
  1. Work on the lab for a while
  2. Go to Catalyst WebQ
  3. Enter your Web page’s URL
  4. Answer some questions
  5. Repeat Steps 1 and 2 until done with the lab and the questions in WebQ.
  6. Upload your lab to your Web space with sftp.
  7. TA’s check your Web page and assign more points.

- Advantages
  - You get some feedback while you’re working on the labs
  - The questions in WebQ
    - Point you toward tricky parts of the lab.
    - Make sure you understand the materials.
  - Because Catalyst does most of the grading, TA’s can grade the rest of your work faster.
Announcement

• Lab 5/6 counts as two labs
  * It takes longer than an hour
  * Work on it all week

Announcements

• Weekly Quick Writes
  * Cover anything in lecture or reading
  * From the previous week or this week up to the day of the Quick Write
  * Can take place in any lecture
  * We drop your lowest two scores for the quarter

Announcements

• Quizzes cover the last week’s reading and lectures
• Pop quizzes can take place during any lab session
• We drop your lowest two scores for the quarter

Announcements

• This week’s pop quiz will cover
  * Chapter 10
  * Chapter 18 (pages 519-526 only)
• Next week’s pop quiz will cover
  * The rest of chapter 18
  * Chapters 19, 20, and 21
  * Chapter 1 in QuickStart

Keepin’ on with the Program:

Fundamental Programming Concepts Expressed in JavaScript (continued)

Comments

• HTML
  <!- HTML comments -->
• JavaScript
  //Single-line JavaScript comment
  /*Multi-line JavaScript comment continues for more than one line*/
Comments

- Annotate your code
  - Notes to yourself and that programmer six months down the road who has to change or add something to your program

Exercise

- Part 1: Variable names
  - A name is a name is a name

Three Basic Date Types of JavaScript

- Numbers: 1345345
- Strings: “Americano”
- Booleans: true and false
  - These kind of values are called data types or just types

Numbers

- Rules for Writing Numbers
  - There are no “units” or commas
  - Can have about 10 significant digits
  - Can range from $10^{-324}$ to $10^{308}$

Strings

- Strings are sequences of keyboard characters
- Strings are always surrounded by single (‘’) or double quotes (“”)
- Strings can initialize a declaration
  - var hairColor = "black";
- Quotes can nest
  - firstLine = "Johnson called, ‘Dude!’"

Literals

- How string literals are stored
  - Quotes are removed (they are only used to delimit the string literal)
    - Delimit means that the quotes set the starting and stopping points of the literal
  - Any character can be stored in memory
    - Even a character that cannot be typed can be stored, using escape mechanism – in JavaScript, the backslash (\)
Assignment Statement

- Flow moves from right to left.
- Results of the expression replace the value stored in the variable.

D.A. Clements, Instructor

Assigning Values to Variables and Variables to Variables

We can assign one variable to another:

```
Line Assignment Statement      Value in myAge
1 var yourName = "Sarah";      Sarah
2 var myName = "Andrea";        Andrea
3 var yourName = myName;        Andrea
4 var yourName = "myName";      myName
```

D.A. Clements, Instructor

Other Assignment Operators

<table>
<thead>
<tr>
<th>Line</th>
<th>Assignment Statement</th>
<th>Value in myAge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>var myage = 32;</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>myAge = myAge + 2;</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>myAge += 2;</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>myAge ++;</td>
<td>37</td>
</tr>
<tr>
<td>5</td>
<td>myAge = 3;</td>
<td>34</td>
</tr>
<tr>
<td>6</td>
<td>myAge -=;</td>
<td>33</td>
</tr>
</tbody>
</table>

D.A. Clements, Instructor

Assignment

- Three Key Points
  - <variable><operator><expression or value>
  - All three of the components must be given
    - if anything is missing, the statement is meaningless
  - Flow of value to identifier is always right to left
  - Values of any variables used in the expression are always their values before the start of the execution of the assignment

Exercises

- Parts 2 and 3
  - What's the value of Dude?
  - Scissor, Rock, paper