



Announcements

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



Announcements

- Project 1B was due before Noon today



Announcements

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



Announcements

- 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



Announcements

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



Announcements

- 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)*

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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 and 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!'"`

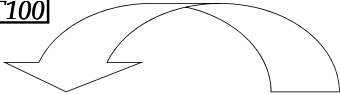


Literals

- 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



<Variable> <assignment><expression>

- 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 also assign one variable to another:

Line	Assignment Statement	myName	yourName
1	var yourName = "Sarah";		Sarah
2	var myName = "Andrea";	Andrea	Sarah
3	var yourName = myName;	Andrea	Andrea
4	var yourName = "myName";	Andrea	myName


D.A. Clements, Instructor



Other Assignment Operators


Line	Assignment Statement	Value in myAge
1	var myage = 32;	32
2	myAge = myAge + 2;	34
3	myAge += 2;	36
4	myAge ++;	37
5	myAge -= 3;	34
6	myAge -;	33

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