Announcements

- Due date changes
  - Labs 7/8 due before noon this Wed. (May 14)
  - Project 2B due before noon next Wed. (May 21)

Announcements

- Check your email for common problems and solutions for the final pages of Labs 7/8

Announcement

- Lecture Friday is canceled
  - MGH is venue for Undergraduate Research Symposium
  - Noon - 5pm throughout Mary Gates
  - You're excused from lecture to attend!
  - 4th floor labs are still available

Announcement

- Reminder
  - At end of quarter, we will drop your
    - Lowest two Quiz scores
    - Lowest two Lab scores
    - Lowest two Quick Write scores

Announcement

- This class has…

No:	***Yes:***
• Midterms	• Labs
• Final	• Quizzes
	• Projects
	• Quick Writes

Project 2B

- Project 2B and its "quiz" are linked on our online calendar
  - "Quiz" is
    - Open book
    - Save and resume
    - Retake as often as you want to improve your score
    - Be sure to submit it before the quiz closes!

Quiz and Quick Write

- Next week
  - Review the questions at the end of these chapters:
    - *Fluency* chapters 18 and 20
    - *QuickStart* chapters 1 and 2
- All JavaScript!
- Topics will include:
  - Variables
  - Values & data types
  - Assignment statements
  - Rules for identifiers
  - Conditionals
  - Loops
  - Arrays
  - Functions
  - Curly brackets

Quick Write

- Put everything on the floor except a pen or pencil
- No laptops, pda's, cell phones, etc.
- No notes, textbooks, etc.
- No discussions with your neighbors
- No wandering eyes
- Write for five minutes

Browser Object Model and Document Object Model

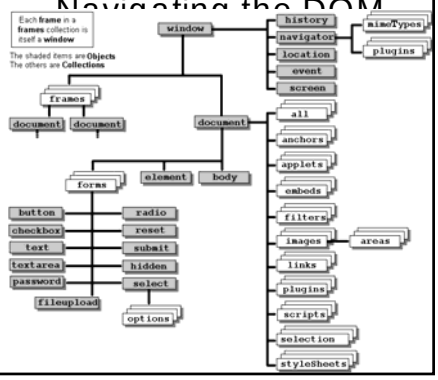
Understanding the document tree

Browser Object Model

- All the images on the page are part of an array
  - **document.images[]**
- Recall an image tag:

- Attributes can be reached—and changed—with dot notation:
  - **document.images[1].src**
  - Another way to do an image rollover

Navigating the DOM

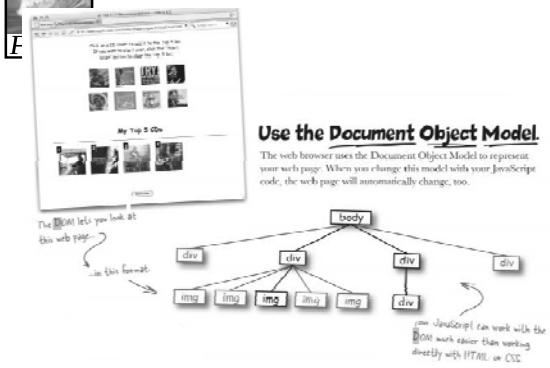


11-27-2007

Video

Essentials of the DOM and JavaScript

http://www.youtube.com/watch?v=URF2sVQWuxU



FIT100

DOM

- The Document object gives you access to the browser's DOM tree
- You've used it for several labs now:

```
document.getElementById("zone1").value
```

FIT100

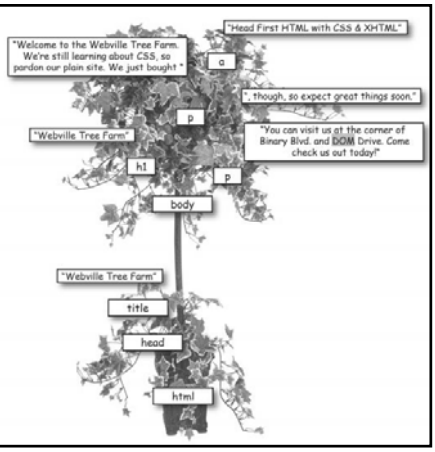
DOM

- Here's the HTML

```
<html>
 <head>
  <title>Webville Tree Farm</title>
 </head>
 <body>
  <h1>Webville Tree Farm</h1>
  <p>Welcome to the Webville Tree Farm. We're still learning
     about CSS, so pardon our plain site. We just bought
     <a href="http://www.headfirstlabs.com/books/hfhtml/">Head
     First HTML with CSS &amp; XHTML</a>, though, so expect
     great things soon.</p>
  <p>You can visit us at the corner of Binary Blvd. and
     DOM Drive. Come check us out today!</p>
 </body>
</html>
```

FIT100

- As the browser sees it!



FIT100

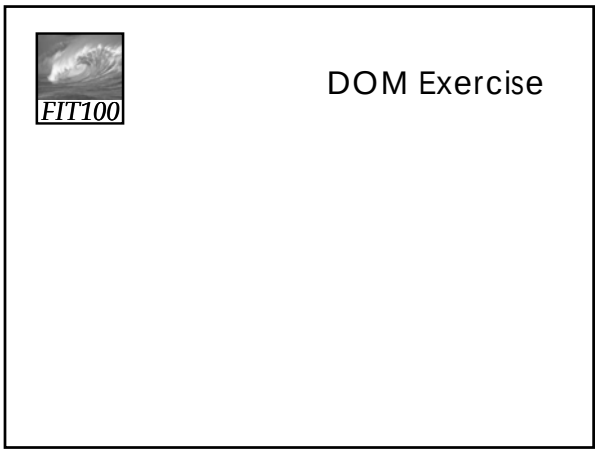
DOM

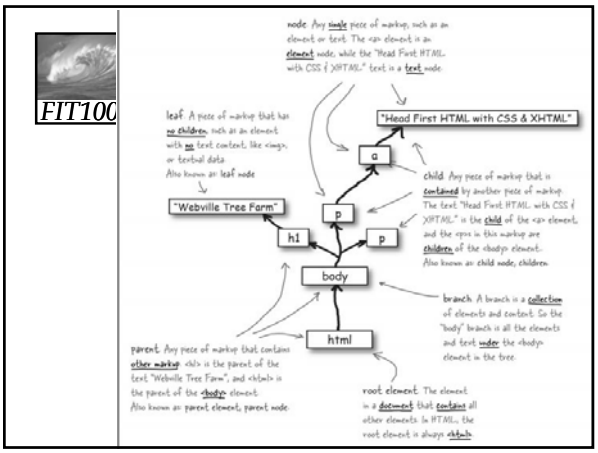
- getElementByID("id")
  - attach ID-attributes to HTML tags and access page elements by this notation, instead of having to wade through the hierarchy.
- appendChild()
  - Use appendChild() and .text or .innerHTML instead of += concatenation

FIT100

DOM

- getElementByTagName("div")
  - Search through all the <id> tags.


FIT100
DOM Exercise


FIT100
node. Any single piece of markup, such as an element or text. The <a> element is an element node, while the "Head First HTML with CSS & XHTML." text is a text node.
leaf. A piece of markup that has no children, such as an element with no text content, like <img>, or textual data.
Also known as: leaf node
"Head First HTML with CSS & XHTML."
a
child. Any piece of markup that is contained by another piece of markup. The text "Head First HTML with CSS & XHTML." is the child of the <a> element, and the <p>s in this markup are children of the <body> element.
Also known as: child node, children.
"Webville Tree Farm"
p
h1
p
body
branch. A branch is a collection of elements and content. So the "body" branch is all the elements and text under the <body> element in the tree.
html
parent. Any piece of markup that contains other markup. <h1> is the parent of the text "Webville Tree Farm", and <html> is the parent of the <body> element.
Also known as: parent element, parent node.
root element. The element in a document that contains all other elements. In HTML, the root element is always <html>.