Announcements

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

• 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

• 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: Midterms, Final
  - Yes: Labs, 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:
  `<img src="puppy.jpg" alt="description" />`
- Attributes can be reached—and changed—with dot notation:
  - `document.images[1].src`
  - Another way to do an image rollover

Navigating the DOM

- Essentials of the DOM and JavaScript
  - http://www.youtube.com/watch?v=URF2zQWuxU
DOM

- The Document object gives you access to the browser's DOM tree
- You've used it for several labs now:
  \code{document.getElementById("zone1").value}

DOM

- Here's the HTML

\begin{verbatim}
<head>
  \title{Webville Tree Farm}
</head>
<body>
  \textit{Welcome to the Webville Tree Farm. We're still learning about CSS, so pardon our sloppy style. We just started.}
  \url{http://www.headfirstlabs.com/books/html4.html}
  First HTML with CSS amp; HTML, though, so expect great things soon.\end{verbatim}
  \textsuperscript{8}

- As the browser sees it!

DOM

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

DOM

- \texttt{getElementsByTagName("div")}
  - Search through all the <id> tags.
DOM Exercise