THE BROWSER OBJECT MODEL (BOM)

BOM vs. DOM

Web browser "controlled" through BOM.

Web page controlled through DOM.
BOM Object Hierarchy

Root of the Document Object Model

JavaScript Window Object

Assumed unless another object specifically named. Programmer-defined functions, variables, etc. attached to window by default.

Window Object Reference:
http://www.javascriptkit.com/jsref/window.shtml
Cross-browser problems and curbed techniques

Window dimensions:
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-1.htm

Window opening:
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-2.htm
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-3.htm

Window Events

Window event handlers
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-4.htm
Opening a new browser window

window.open (p1, [p2, p3, p4])

p1: URL
p2: target. Blank (or new name) opens new window. Existing window or frame, opened there.
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-5.htm
p3: controls window attributes using attribute/value pairs in a single string.
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-6.htm
p4: replace current page in browsing history (true/false)

Setting timeouts

setTimeout(p1, p2)

p1: string specifying function or a function definition
p2: milliseconds until p1 is executed
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-7.htm

Returns timeoutID
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-8.htm

clearTimeout(timeoutID)
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-9.htm
Browser dialogs

Modal:
- alert
- confirm—returns true or false
- Prompt—returns user input

Non-modal:
- print
- find

http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-10.htm

Window.navigator

Browser detection and information

http://www.javascriptkit.com/jsref/navigator.shtml

Textbook page 126
Window.location

Shared property of both window and document, allowing reading/manipulating elements of current document.

Textbook p. 122
http://www.javascriptkit.com/jsref/location.shtml
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-11.htm

Location manipulation

window.location or location.href
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-12.htm

location.replace(URL)
http://einstein.etsu.edu/~pittares/CSCI3110/examples/7-13.htm

location.reload() or location.reload(true)

Window.history

Allows moving through URLs in browser history

Textbook p. 122
http://www.javascriptkit.com/jsref/history.shtml
Window.screen

Allows detection of information related to the user's screen.

http://www.javascriptkit.com/jsref/screen.shtml

Recommended BOM Resource

http://javascript.about.com/od/browserobjectmodel/Browser_Object_Model.htm
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