

# Introduction to JavaScript

DMS 102: Programming Digital Media

Lecture 2

# Why JavaScript

- Interpreted
  - Web browsers
  - Cross-platform
  - Relevant
- *"Object-oriented computer programming language commonly used to create interactive effects within web browsers"*
- JavaScript is NOT Java

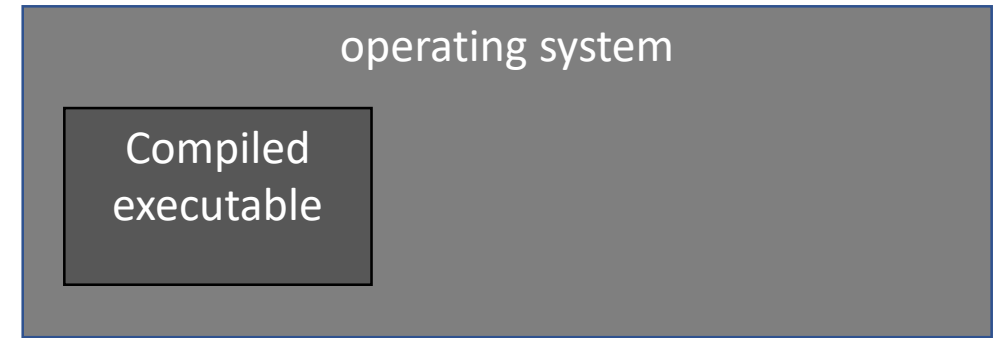
## History

- Netscape
  - ECMAScript (European Computer Manufacturers Association)
  - Mocha → LiveScript → JavaScript
  - Webpages with JavaScript: DHTML (*dynamic* HTML)
- Collaboration
  - Netscape and Sun Microsystems: license agreement → JavaScript
  - Java = popular!
- JavaScript → all major web browsers



## Scripting Languages

- JavaScript, ActionScript, VBScript, PHP, others
- JavaScript (language), inside:
- Web browser (interpreter), inside:
- Operating system, inside:
- Platform (machine code, CPU)



## Full-featured Languages

- C++, Java, Objective-C, others



- Compiled code, optimized for the Platform (machine code, CPU)

# JavaScript is...

- "C" -based language
- Is case sensitive
- Is white space agnostic
- Uses semi-colons to define statements (lines)
- Uses "blocks" of code
- Uses "dot notation"

```
// show and hide sections of a form
function preparePage() {
    document.getElementById("brochures").onclick = function() {
        if (document.getElementById("brochures").checked) {
            // use CSS style to show it
            document.getElementById("first").style.display = "block";
        } else {
            // hide the div
            document.getElementById("first").style.display = "none";
        }
    };
    // now hide it on the initial page load.
    document.getElementById("first").style.display = "none";
}

window.onload = function() {
    preparePage();
};
```

# JavaScript Comments

- Comment for messages/reminders
- Comment-out code
- Comment for formal documentation

```
// this is a single-line comment
```

```
/* this is a multi-line comment where you can  
   write several lines that will be ignored by  
   the interpreter */
```

# JavaScript Development Process

- Source code → embedded (or attached) to a web "document"
- Source code gets interpreted in a Web browser
- Web browser: software managed by the operating system
- Web browser: executes the source code on the computer's CPU

1. Create a web document (webpage)
2. Embed (or attach) JavaScript source code
3. Run (open) the document in a web browser

# Embedding/Attaching JavaScript to a Webpage

*To embed:*

```
<script>  
</script>
```

*To attach (external):*

```
<script src="scripts.js"></script>
```

# JavaScript Pop-up Boxes

- `alert ( ) ;`
- `prompt ( ) ;`
- `confirm ( ) ;`





# For next time:

1. Complete the In-class Lab: JavaScript Container
2. Read: JavaScript - General Introduction (Quirksmode website)  
[www.quirksmode.org/js/intro.html](http://www.quirksmode.org/js/intro.html)