**Javascrip**

Segment 5

CS 638 Web Programming

---

**Important concepts**

- Scripting languages
  - Interpreted, not compiled
  - Lax typing
  - Objects as associative arrays (dictionaries)
  - Prototype-based inheritance
- Client-side event handlers
- Client-side validation of user input
- The document object model
  - Code can read and change document dynamically

---

**Specific technologies (1)**

- JavaScript – the language
  - Arrays
  - Functions are just another type of object
  - Variable scoping
- JavaScript and the browser
  - Adding JavaScript: `<script>`, event handlers, and `javascript: links`
  - Important objects linked to browser: document, location, navigator, etc.
- Direct user interaction: `alert()`, `confirm()`, `prompt()`
- Timers: `setTimeout()`, `clearTimeout()`, `setInterval()`, and `clearInterval()`
Specific technologies (2)

- Accessing forms
  - `document.forms[0].elements`
  - `document.forms[0].elements[2]`
  - `document.forms[0].xyz`
  - Important element properties: `type`, `name`, `value`

- Accessing the entire document with W3C DOM
  - Tree structure for the document
  - Methods for manipulating DOM
  - Standard properties of DOM nodes
  - Various events we can define handlers for: `onchange`, `onsubmit`, etc.
  - Most HTML elements can have their own event handlers