MAHARISHI INTERNATIONAL UNIVERSITY

HIGHER EDUCATION • FOR HIGHER CONSCIOUSNESS

CS472 WAP

jQuery Intro

DOM, JQuery

Problems with DOM

- “The *DOM*. It is what most people hate when they say they hate JavaScript” (Douglas Crockford)
- the DOM can be clunky to use
- the same code doesn't always work the same way in every browser
  - code that works great in Chrome, Firefox, Safari, ... may fail in IE and vice versa
- Many improvements in recent years

jQuery framework

- the jQuery JavaScript library adds many useful features to JavaScript:
  - many useful extensions to the DOM
  - adds utility functions for built-in types String, Array, Object, Function
  - improves event-driven programming
  - many cross-browser compatibility fixes
  - makes Ajax programming easier (seen later)

```
<script  src="https://code.jquery.com/jquery-3.4.1.min.js"
 integrity="sha256-CSXorXvZcTkaix6Yvo6HppcZGetbYMGWSFlBw8HfCJo="
   crossorigin="anonymous">  </script>
```

jQuery Design Principles

- jQuery is powerful because of these design principles
  - an expressive method for defining a set of elements, a superset of CSS selectors
  - useful and commonly needed methods for navigating the DOM tree
  - heavily overloaded APIs
  - functional programming techniques that apply operations to sets of elements at a time
  - method chaining for succinct operations

jQuery boilerplate

```
/* select the id=square, and give it
 event handler with an alert for click */

$('#square').click(function()
  { alert("Boink.");
});
```

window.onload

- We cannot use the DOM before the page has been constructed. jQuery gives us a more convenient way to do this.

- The DOM way

```
window.onload = function() {
  // do stuff with the DOM – when everything (images, etc) is ready
}
```

- The direct jQuery translation

```
$(document).ready(function() {
  // do stuff with the DOM – as soon as html loaded
});
```

- The jQuery way

```
$(function() {
  // do stuff with the DOM
});
```

MAHARISHI INTERNATIONAL UNIVERSITY

HIGHER EDUCATION FOR HIGHER CONSCIOUSNESS