LESSON 11: LOADING DATA WITH AJAX

OVERVIEW

AJAX used to stand for _____ JavaScript and
_____ but now is just the term for loading _____ scripts or
_____ in a _____-_____ way.

Non-blocking, or _____, means...

> that a request can be sent and other scripts can be processed while we
_____ _____ __ _____ from the request.

> when the response is received it then obtains the processing focus and
is processed.

AJAX allows us to...

> run complex applications from a _____ page by loading
additional data on _____.

> improve the _____ of our scripts and page load by loading
what the user needs as they _____ it.

> the data can come in a variety of forms from plain text to HTML, JSON,
or other formats.

A LITTLE XML

XML stands for _____ markup language

» Extensible meaning it is simply a framework or set of rules for markup; the tags and content are up to the _____.

» HTML is actually one _____ of markup based on the rules of XML.   HTML : XML :: Square : _____

» Four rules:

  - Same three from Web 1: element rule; nesting rule; attribute rule.

  - New one that also applies:

XML USES

» Treat HTML as XML

» Create your own tags

» Mix and match

[Scripting]

JSON

JavaScript _____ _____ — a syntax for coding data independent from a JavaScript script.

» Used for storing and sharing data between pages, scripts, servers, and even applications.

» Truly just plain text that follows rules for formatting similar to JavaScript objects.

» JavaScript and jQuery have functions that help parse and convert JSON to native objects such as `$.getJSON()`

```json
{
  "books": [
    {
      "id": "book-001",
      "title": "The Hobbit",
      "author": "J.R.R. Tolkien",
      "yearPublished": 1937
    },
    {
      "id": "book-002",
      "title": "Monster",
      "author": "Frank Peretti",
      "yearPublished": 2006
    }
  ]
}
```

```xml
<books>
    <book id="book-001">
        <title>The Hobbit</title>
        <author>J.R.R. Tolkien</author>
        <yearPublished>1937</yearPublished>
    </book>
    <book id="book-002">
        <title>Monster</title>
        <author>Frank Peretti</author>
        <yearPublished>2006</yearPublished>
    </book>
</books>
```

AJAX SHORTHANDS THANKS TO JQUERY

`.load()` – Loads an HTML _____ into an element.

`$(__1__).load("__2__ __3__");`

1. _____ for the element into which the content will be loaded

2. (Inside the string) the _____ to the desired HTML file.

3. (Inside the same string) optionally, the selector for an element _____ the target HTML file to filter to and load.

» Loads content "as-is"

» Assumes you have content in separate HTML pages that you want to load into certain elements.

» Filter to a selected element provides some additional flexibility.

`$.get()` – Shorthand AJAX method for _____ content.

`$.get(__1__, __2__);`

1. The _____ for the content to load.

2. _____ to be called when the response is _____. Accepts a parameter that represents the _____ _____.

» Assumes some URL endpoint is set up that will deliver relevant content.

» Format of the content is broader than with `.load()`

» What you do with the content when it is loaded is up to you.