**Project #9 - Ajax Protocols**

**Purpose:**

Ajax is a set of protocols that allow Javascript in a browser to make requests for processing on a web server that returns strings rather than pages. The strings may be in one of several formats, e.g., a plain old string (POS), an XML string, or serialized Javascript Object Notation (JSON). This allows Javascript in a browser to update some small part of its rendered display by changing one or more HTML DOM elements without reloading a page. The result is fast updates without a lot of graphical flashing.

In the tiny web server project we want to use HTML5 rendered by Chrome as a GUI for cross platform applications. The intent is to have user inputs trigger Ajax requests and react to the corresponding responses. The issue for this project is that we have to figure out how browsers make Ajax requests of web servers and how the servers return the results. We’ll use a couple of techniques to do that:

**Requirements:**

In this project you will:

1. Build an Asp.net MVC application that accepts Ajax requests and returns results in various formats, e.g., strings, XML, and Json[[1]](#footnote-1).
2. Examine the Request and Response objects to see what the browser sends in an Ajax request and what the server sends back in reply.
3. Set up a packet sniffer (WireShark or Fiddler) to look at the details.
4. Run trials with Chrome, IE, and FireFox.
5. Document the results with a report and code examples.

**Here are some references:**

<http://www.ecs.syr.edu/faculty/fawcett/handouts/SummerProjects/>

<http://lcs-vc-fawcett.syr.edu/jQueryAjaxIntroduction>

<http://www.ecs.syr.edu/faculty/fawcett/handouts/CSE686/code/jQueryAjax-Introduction/>

<http://lcs-vc-fawcett.syr.edu/jQueryAjaxPolling>

<http://www.ecs.syr.edu/faculty/fawcett/handouts/CSE686/code/jQueryAjax-Polling/>

<http://www.wireshark.org/>

<http://www.fiddler2.com/fiddler2/>

1. You will find a start on this here:   
   <http://www.lcs.syr.edu/faculty/fawcett/handouts/CSE686/code/jQueryAjax-Introduction/> [↑](#footnote-ref-1)