



## Smart Phone App Design

### *Purpose and Requirements*

The purpose of this module is to create a smarter document for the United States Thoroughfare, Landmark and Postal Address Data Standard (Address Standard), available to both desktop and mobile web browsers. A smarter document is key to adoption of the standard. Requirements previously identified include:

- Search facilities
- Sections that toggle visibility
- An index

Additional requirements suggested by the community include:

- Documentation for the HTML version of the Address Standard so that users could build their own interfaces, linking to particular parts of the document.
- An acronym list/glossary of terms used within the document
- Extensive internal links

The community also suggested that an RDF version of the document could open the document even more, making it embeddable within applications. While there were some comments to the contrary, an extensive catalog of RDF documents at <http://www.data.gov/semantic/data/alpha> suggests active, widespread use.

### *Design Process*

#### Problem

Barriers to making a working prototype arose simply because of the newness of the technology. At the time of this writing, Google Chrome supports the < details > tag, but common iPhone browsers like the iPhone version of Safari do not. Packaging the HTML5 code for smart phones using the RhoHub did not alleviate the situation.

#### Solution

Mathias Bynens has published an opensource “failover” solution <sup>1</sup>for browsers that do not yet support the HTML5 < details > tag, based on the jquery<sup>2</sup> javascript library. It detects browsers that do

1 <http://mathiasbynens.be/notes/html5details-jquery>

2 <http://jquery.com/>

not support the tag, and supplies work-alike functionality with javascript. This solution, of the several published, was the best documented with a heavily commented demo. There is a limitation in that it does not work well with nested details tags.

One section of the Address Standard was successfully adapted to use Bynens' solution ( see [http://meadow.spatialfocus.com/sara/test\\_example\\_failover.html](http://meadow.spatialfocus.com/sara/test_example_failover.html)). It tested well in Firefox on a laptop, and iPhone Safari. Packaging the page in RhoHub tested successfully on an android emulator.

## ***Conclusion***

Now that the details tag hurdle has been cleared, the project can proceed as envisioned. The only design limitation is the inability to accommodate nested details tags. This can be overcome with a hyperlinked table of contents and index, items suggested at the URISA/NENA conference in August. The first goal will be to complete and polish the Address Standard document in HTML5. If time allows, an RDF version with SPARQL Endpoints<sup>1</sup> in the interest of providing a version that is consumable by software.

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1 <http://www.w3.org/TR/void/#sparql>