Bitter JSON (or When Complex Data Happens to Good Developers)

# Description

Most modern Web APIs use JSON because of its interoperability and widespread use. All modern languages have excellent JSON support, but large, complex data sets often require more functionality than simple serialization/de-serialization. This presentation shows how to leverage JSON Search and Transform techniques and utilities to simplify working with large JSON data sets returned from Web APIs.

# Abstract

Sometimes API Consumers need additional functionality when processing an API’s JSON response:

* Access a subset of the data.
* Filter results.
* Transform the JSON data to another format.

Many developers are familiar with serializing/de-serializing JSON data, but end up writing tons of custom code to do more advanced processing. There are excellent JSON Search (e.g., jq) and Transform (e.g., Handlebars, Mustache) utilities that enable Architects and Developers to improve their designs and drastically reduce the amount of effort needed to work with large and/or complex JSON documents.

This talk covers JSON Search and Transform:

* JSON Search makes your job easier:
  + How to search JSON documents with jq, including:
    - Online Testers
    - Command Line
    - Application Code
  + How to write unit tests that search the content of JSON documents returned by a web API.
* Use JSON Transform to:
  + Convert JSON to HTML.
  + Convert a JSON document to a new (JSON) structure.
  + Convert JSON with Online Testers and command line tools.
  + Write unit tests that transform the content of JSON documents returned by a Web API.

This session will show practical JSON-based workflows, and provide techniques to search and transform JSON documents.

Example code will leverage jq, Handlebars, Mustache, JavaScript, and Node.js.