CS\_290\_400\_F2016 API How-To Project Proposal

I plan to do my How-To project on the Yelp Fusion v2 API (specifically, the Search API). The Search API is one of a set of APIs provided by Yelp to add functionality to developer applications; it allows for query by business type and location. I've chosen v2 over recently introduced v3 due to the additional complexity involved for v2; it uses 4 different identifiers to generate its secure authorization signature.

My project would describe:

- Basic background on the Yelp Fusion API set, including distinction between different API types and function. Description of Oauth 1.0a usage in the API construction.
- Fundamental components of authorization data, either provided by Yelp or generated subsequently.
- Composition and submission of the API request; creating JSON objects to be used in the API call based on user input and hashed Oauth signature.
- How the response is parsed and presented.

I will create 2 Javascript versions as a demonstration of different methods that may be applied- one will use JQuery/Ajax to present results and demonstrate a working version of the API on a web page, and another will use Node.js and npm modules from the command line to perform the query.

The final web page will include these sections:

- Introduction
- Getting Access
- Requests
- Response
- API At Work (Demo)