**Project Proposal**

The purpose of our project is to retrieve multiple, previous years of regular season NFL game results to predict the outcomes matchups outside of our dataset. We will be looking at such factors as home team, visiting team, point differential, winning/losing streaks, location, and weather to see if they have an impact on the outcome.

To accomplish this, we will be performing the following actions:

* Retrieve historical data from Wikipedia by using a combination of Pandas and BeautifulSoup.
* Clean the data and export it in csv format using Pandas.
* Consume the cleaned data in a machine learning model (TBD) to train the data for predictive purposes.
* Build a user interface that accepts game parameters (including but not limited to) opponents, location, weather and produces a predicted outcome.

**Assumptions**:

* Different machine learning models will produce different outcomes. So, we expect to test-drive a few to dial-in our model such as Birch, Random Forest, and Neural Network.
* A web user interface will be developed using JavaScript and Flask, but if we run into complexities we can't overcome, we will build a prompt-driven python script.
* The initial data points we obtain will be sufficient for creating an accurate model. If they aren't, we may need to pull in more data/statistics to incorporate in the model.
* Past results will be a contributing factor to future results. NFL teams have many variables year-to-year including roster moves, coaches, and injuries.