FULQRUM

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Problem Statement

Customer Service Analytics (CSA) has become one of the cornerstones for the 21st century corporation. Being able to analyze user trends and customer behavior has made it easier for companies to create better products and please customers. However, these solutions are very costly and require a massive overhead to be able to afford and then subsequently use the software. This has allowed only larger corporations to be able to use the many tools, leaving small businesses to their own. FULQRUM is a free to use, machine learning based solution for small businesses that can't afford more expensive CSA clients. Our system is better because it allows the user to search about their company, or product, and receive real time analysis about the queries likeability and overall image.

Project Objectives

- Grab information from many sources (yelp, techcrunch, twitter, etc.) and be able to process the text from all efficiently
- Scrape titles and bodies of text from a number of readily accessible websites by developing a web scraper.
- Perform analysis over large bodies of text to generate an image of the public opinion of the query by applying NLP (Natural Language Processing) techniques.
- Allow users to search and find businesses within a specific category, and analyze multiple sources efficiently

Stakeholders

- Users: Primarily small business owners, but any person may use the application for their own purposes.
- Developers: Connor Borzello, Thomas Huang, Michael Quade, Omar Raza
- Project Manager: Omar Raza (Team Leader)

Project Deliverables

- A web app that allows users to search a business and certain keywords, select a business category, and instantly retrieve insights on public opinion.
- NLP sentiment analysis applied over text in spaCy and keras in Javascript using two existing open-source github repos: spacy-nlp and keras-js
- Backend system (Heroku) that can store user information and be able to constantly update the queries with new and improved information