Term Project Proposal

CSCI 4300

Group Members:

Komran Ghahremani

Cesar Acosta

Josh Bennett

Kevin McDaniel

Title: Polarize Homepage

Our term project is going to be about using the vast capabilities of the Twitter API to create a homepage that people can set in their browsers to see the content that we have created for them.

What is that content? We will be using the Twitter API to query for various key phrases for popular opinions of the day. Perhaps we will use a serious issue, opinion on an event, or even a political candidate. This is why we are naming it Polarize. We will attempt to construct an algorithm to correctly grab two polarizing opinions regarding a specific topic and then present it in an aesthetic fashion to the user. With almost every opinion there are people on both sides of the argument and our team would like to capture them.

On top of that we will be adding an appealing clock at the top of the page to add to the homepage feel for the website, so that as soon as you open up a new tab you can look at the opinions that we have presented to you and also check what time it is, because everyone on the on the internet is definitely there to be productive.

Our site will also present a feature similar to looking back at previous homepages on Bing.com. You will be able to cycle through past dates and see what the previous days polarizing opinions were for that day. This is where our database will be coming in handy. We will use an array to hold all of the entries for our website, with each entry carrying a date, topic, and a query to a collection of tweets that will be cycled through for its corresponding date. As of right now we are still deciding what type of database to use but we know that we will have to use PHP.

Our contributions will be to provide people with an entertaining homepage to lighten up their day, when they get on their computer. Many browsers already have google search hooked up to their address bar, so many people have been searching for a new homepage that they could set other than Google.com. Our webpage would allow many people to find this webpage and finally be satisfied when they open up a new tab in a more entertaining and productive environment.

Our website will allow people to stay connected on popular opinions and be able to be exposed to both sides of an argument as most people develop their opinions in an environment where only one side is championed. This website application would allow people to stay up to date with current events and people right on their home page rather than manually searching for them on their favorite search engine.

These are just the initial contributions to society. If this homepage picks up a lot of users, then we would be able to invest more into our algorithm to present more meaningful data to all of our users. In addition, to presenting the differing opinions, we would be able to take the tweets that we receive from all of our queries and create a database of opinion data that many statisticians can use to predict things that may become popular or maybe use to better market something that they are selling.

The power of the opinion of the masses is great and if our website could capture that in data form then many people could use the data in numerous ways to benefit whatever they are trying to prove or sell to people. This idea is not only fun and entertaining, but also a potential tool for many people and companies to use to their advantage.

Our system architecture will probably be based on a database system that uses PHP, which will most likely be MySQL. We will most likely have an entry object where each entry carrying a date, topic, and a query to a collection of tweets that will be cycled through for its corresponding date. We will then use HTML and JavaScript to create a nice User Interface and User Experience on the actual website to present each entry object.

Related work would have to be learning how to use the Twitter API, learning how to use the MySQL database, and also figuring out what are the best ways to query for opinions and how to tell if they are negative or positive. After, that all we have to do is select a collection of topics and then the queries should take care of themselves. Selecting the topics will be the only thing that is not automated, but in the future we may decide just to use trending Twitter data to fill the collection since a lot of people are already talking about those topics and they are current to the date.

By the end of this month, we should have learned how to use MySQL and the Twitter API. Starting next month, we will begin testing the Twitter API for query data and by the end of next month we should have a basic version of the website presenting query data. During April we will be able to setup our database in MySQL and be able to keep all of the queries for each day which would create a more autonomous system. By April 23rd, we should be done with the project in its entirety.

Komran and Josh will be in charge of learning PHP and MySQL. This requires learning how to write and retrieve data from the database and also how to query for data in a specific order. Kevin and Cesar will be responsible for mastering the Twitter API. This involves learning how to send query requests to the Twitter servers, and learning how to receive meaningful data from tweets so that we can present the data on the homepage. We will all work on the HTML and JavaScript files for the actual webpage. This requires that we all contribute to choosing aesthetically pleasing colors and fonts to display to the user, and also nice JavaScript animations to provide for the nicest user experience possible. This is because the user experience is the difference between just checking the website out versus actually setting the site as your homepage. Also, we will all come up with various topics for the site. This is basically just all of use brainstorming throughout the day whenever we are anywhere to think about what we want people to see.

We want to focus on controversial topics so that the content is not dry. We do not want to select topics where everyone agrees because then the site would get pretty boring. If we can execute this website properly, then there is potential for many people to use this as entertainment and as a tool to get a better glimpse into what their fellow members of society really think about a certain topic.