

Zack Oates

VBA Final Project

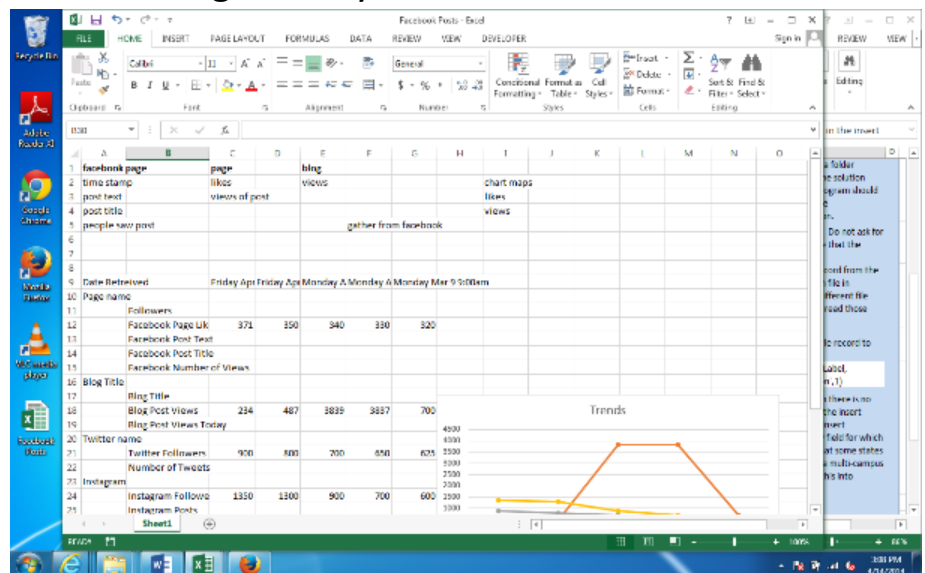
April 2014

Executive Summary

The “Socializer” is a system that scrapes social media data to find trends with Facebook Page Likes, Twitter Followers and Instagram Followers. It allows for the user to place their social media data in one location and see how their numbers are changing and what correlation there is between the different social media. To do this, I created web queries to sign into Facebook, use the agent to open Instagram and the web query to open Twitter and then scraped the appropriate data using the moveTo function and the import data.

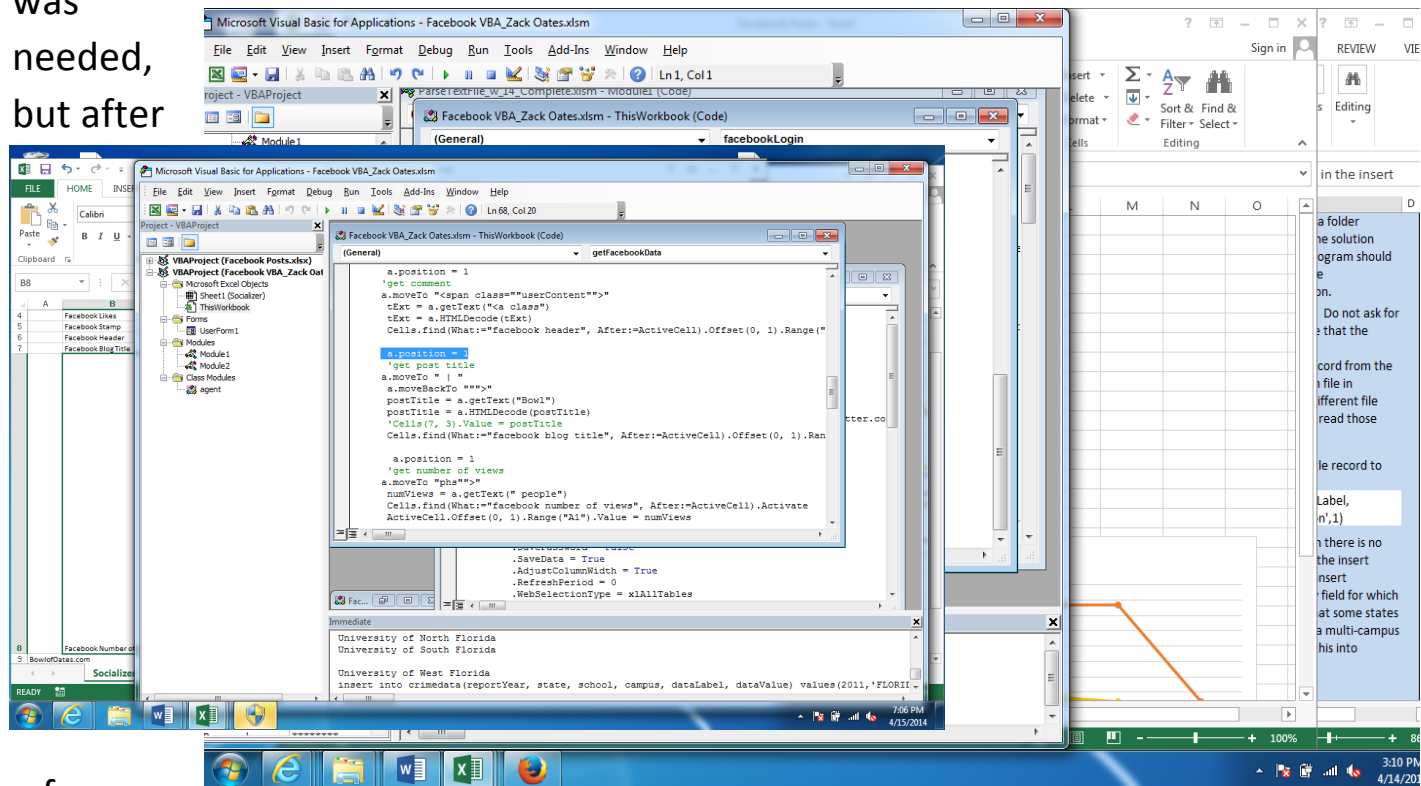
Implementation Documentation

To start, I formed an idea using dummy data of what I would like the project to look like. As the project progressed, I realized that some of the data was not needed for the end result, but I decided to leave the code in the spreadsheet for future interest. I knew it would require



pulling Facebook Likes, Instagram Followers and Twitter Followers.

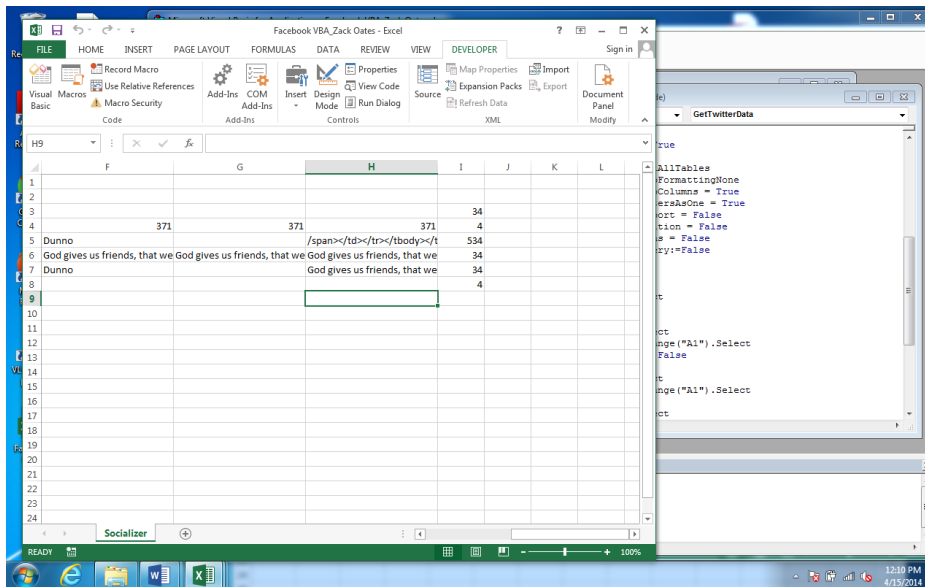
I started with Facebook and started getting much more data than was needed, but after



a few hours, I took a step back and realized the most important thing was the likes. Still, I decided to use the agent login so that I could scrape additional data if needed for the future.

As I was querying the data, I realized that I kept on getting the wrong information. Upon further review, I saw that I needed to go to a.position=1 in order to start from the top otherwise when I was searching through the data, it would start searching where I left off.

I also decided that it would be great to have other data from Facebook to do further analysis if needed. So I pulled the date of when

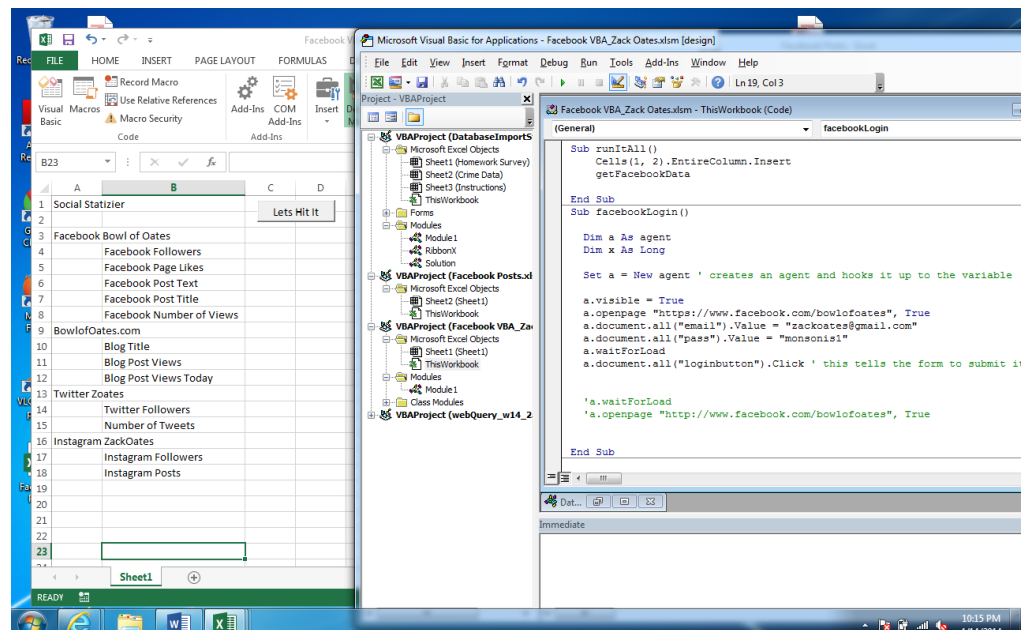


the most recent post was created and the header of that post. This would help to give some context as to what was occurring that day if there were any significant spikes. The data came back all

jumbled up and inconsistent. It was because I had been searching for moveTo strings that were in multiple sections of the page. So I searched through the source code for ways to use moveTo or moveBack and find unique

identifiers. In the end...success!

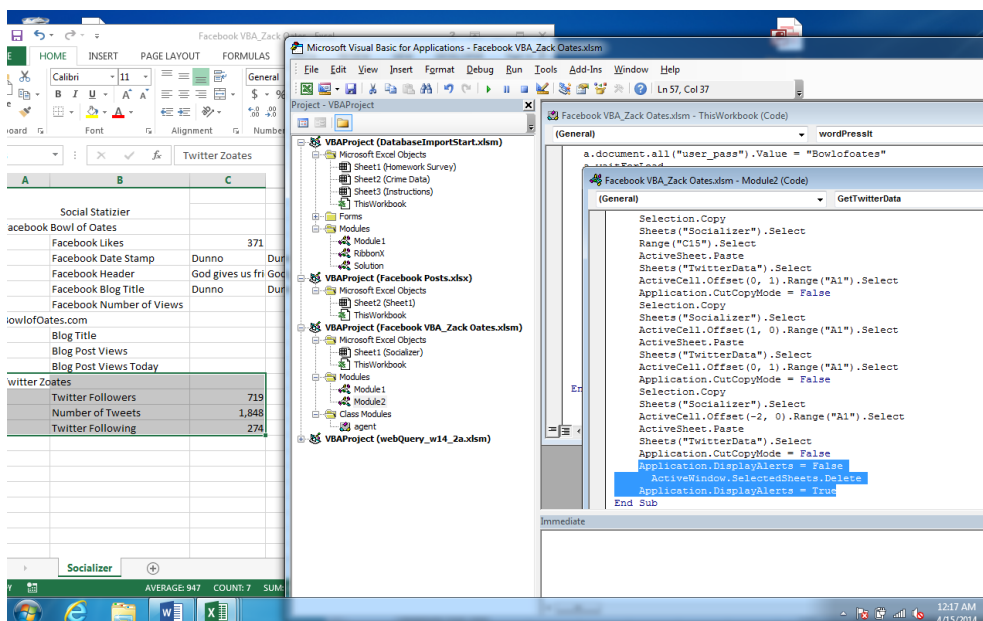
I then began to look into the WordPress backend system. I was able to log in



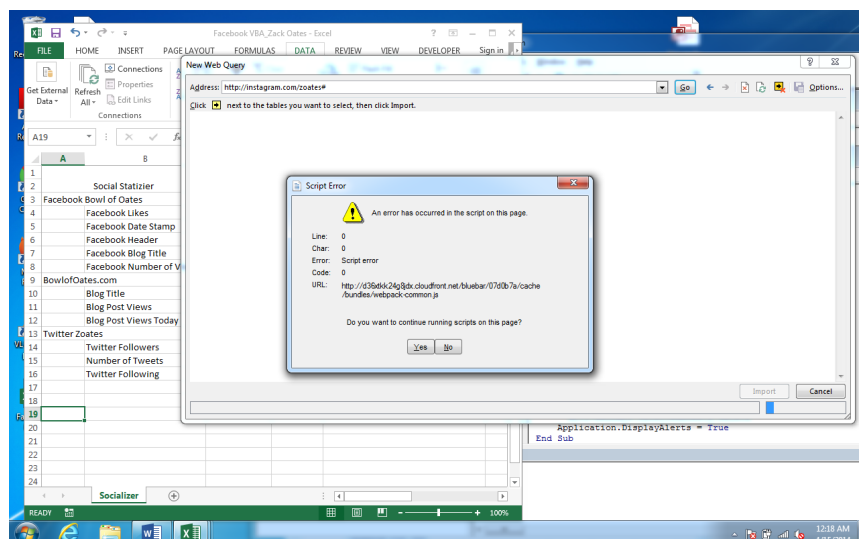
successfully, but after 6 hours of not being able to pull the data and Gove not knowing what to do with that conundrum either, I realized that it was outside of the scope of the project.

The next issue to solve was Twitter. Because Twitter was open, I decided to use the web query and pull the data into a new chart. I had

to give it a unique name so that when I deleted the chart, it was deleting the same chart each time. I used the search and find and relative references to



copy the needed data and paste it into specific cells in the worksheet I was working on before deleting the worksheet with the Twitter data.

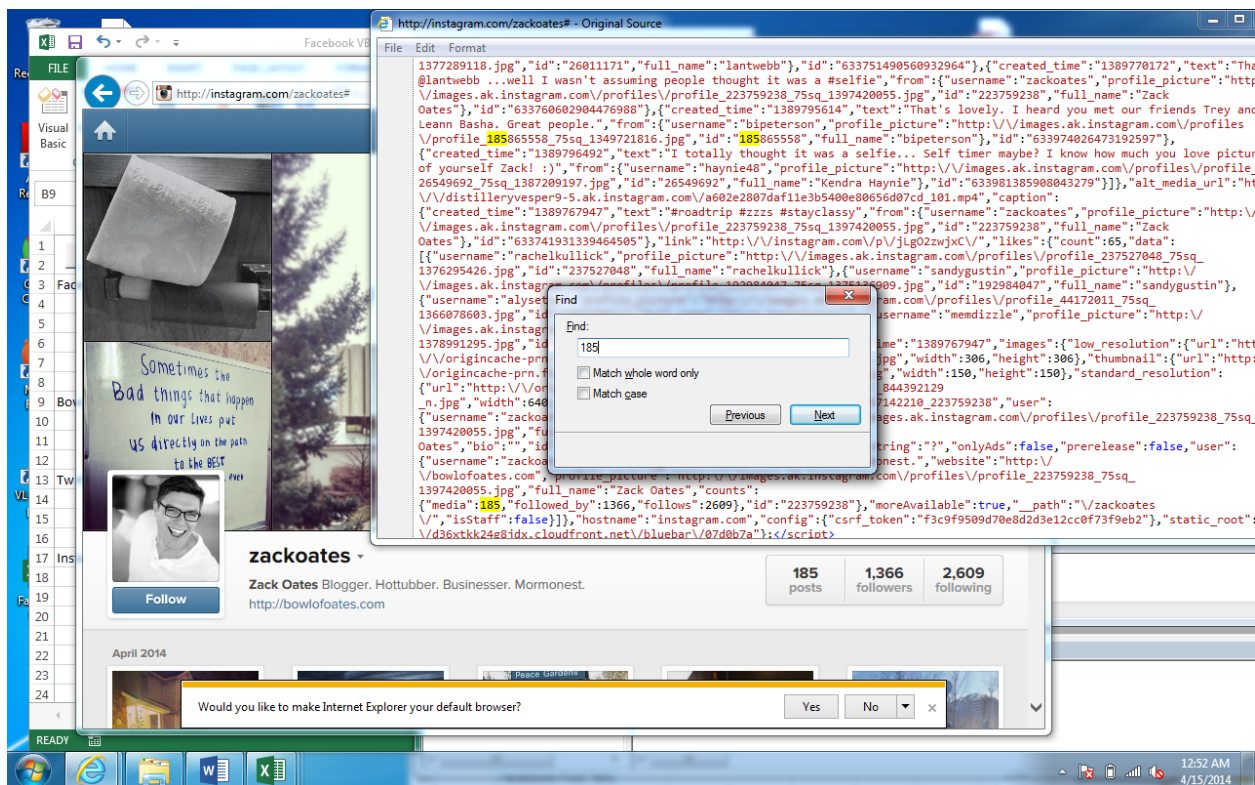


Instagram looked like it was going to be another easy web query feature...but I was mistaken. I was not able to use the webquery to find the right data, so I had to use the agent without a login. But still, I was getting a massive error. I couldn't figure it

out. But after doing some trouble shooting for a few hours, I realized that it was an https and it needed to just be an http access to the

website. So with that simple change, I felt like 3 hours of my life was wasted. But now I know!

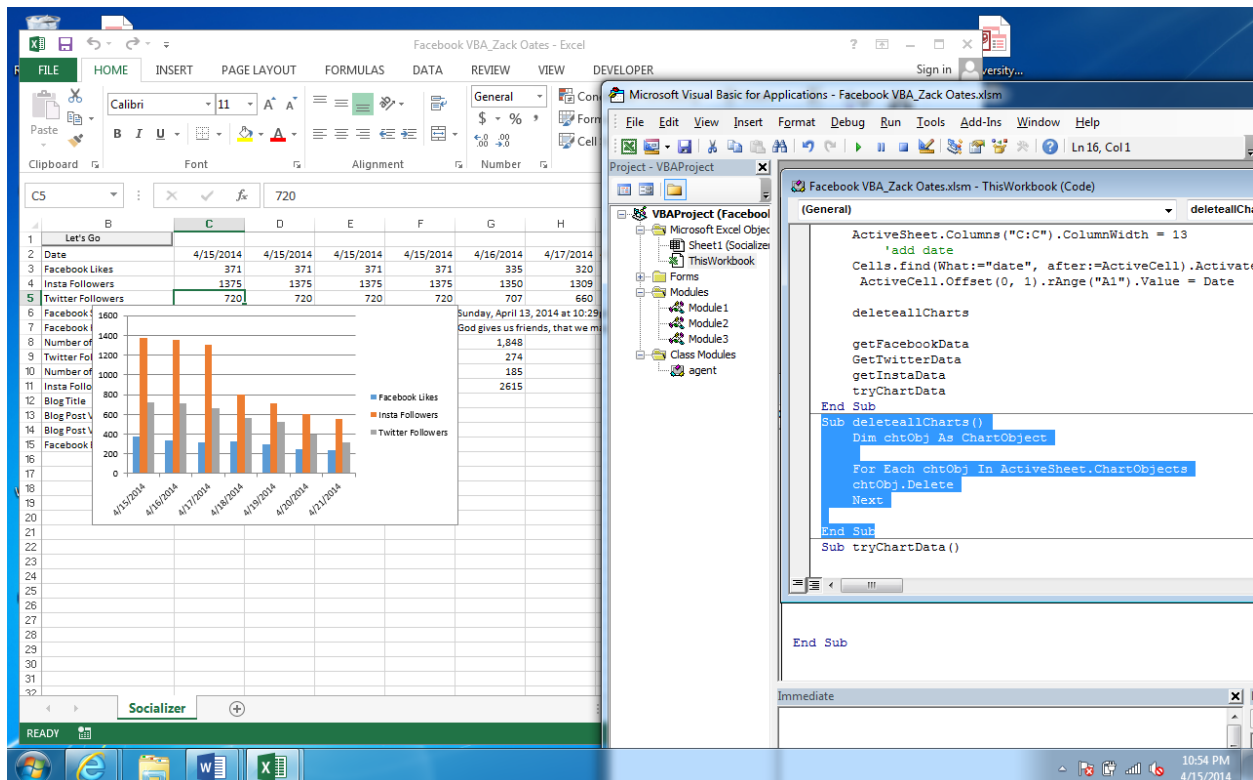
Then, I was having trouble finding the right data to pull from Instagram. Instead of painstakingly looking for data as I did for Twitter that was singular in the data, I searched for the number of posts and started with that number to find unique identifiers. It made the query much faster to find and after that, it was simple to pull the data into the right location on the Socializer.



After pulling in all this data and setting them to certain charts, I thought of how I wanted the data to be organized. So every time the main maco is run, there is a new column added and all the data is pushed to the right. There is also a date stamp placed at the top of the data. I then wanted to switch around the order of the data for purposes of analysis and creating a chart, but I had all the data linked to specific cells. So instead of changing the cells, I used a control find and offset

one cell to the right to place the data. Now I can switch the rows wherever I want and the data will follow.

I also created a function that would pull the data from the Facebook Likes, Instagram Followers and Twitter Followers and create a chart with all of the historical data on file. This chart is deleted every time the macro is run.



It was then time to create and assign the “Let’s Go” button to a macro that incorporated all of the macros together with the preparation and cleaning of the Socializer at every new pull.

It works great! The spreadsheet is prepared, chart deleted, date placed, the data inserted, the chart dynamically created and an analysis ready to go!

I received some help from Gove in putting this assignment together and before I realized the log data was unnecessary, I received

some help to try to pull that data, but to no avail. I could not pull in the data from wordpress site and found that there was so much repetition in the site that it was difficult to pinpoint specific items of data. And when I could, it would simply come back as “ ”. I spent over 10 hours on this problem alone and sought help from Gove and other students in the class, but they couldn’t get it to work either.

I still have extra data for further analysis in the future, including the start of code for the wordpress site, but this project remained in scope and this will help to set me apart as a social media expert in my field of consulting and entrepreneurship.

