Mark Eliseo and Chris Adams

1. Intro
   a. Introduce purpose of program
   b. Mention node.js and javascript
   c. Describe application process for Twitter API
2. Body
   a. Code snippets and explain the function of them
   b. Mention OAuth and how we connect to different APIs
   c. Discuss how nodejs uses the email api to connect to the gmail server and access the inbox
   d. Have a snippet using Nylas Email API and one using the mailparser module
   e. Describe scanning through the email and using the proper datatypes
   f. Discuss how the application can be expanded and remodeled for other purposes on Twitter.
      i. Include community living emails, etc.
      ii. Retweet posts from other Siena affiliated twitter accounts
3. Conclusion
   a. What we learned overall
   b. How nodejs can be used in other situations
   c. Benefits of node.js in comparison to other languages for the same purpose.

Design:
1. Gain access to email inbox
2. Parse through inbox until we find email from student digest
3. Scan email for headlines and proper hyperlinks
   a. Lots of string formatting required
4. Format headlines and hyperlinks into the necessary datatypes for posting through the Twitter API
5. Post headlines throughout the day on a timer.
6. Set process to repeat at 9 am everyday. (Time when student digest is sent into emails is 3:45am)

Current Implementation:
- Currently in the middle of the application process to gain access to the Twitter API
- Have short scripts to test different aspects of the final code such as string formatting, email connection, etc.

Timetable:
- Coding will not take much work as the APIs allow us to do the bulk of the coding with minimal lines. This can get done by November 28, 2019
- The majority of our work will be on the paper and focus on the actual inner workings of Nodejs and highlight different aspects of our program.

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Annotated Bibliography

"Read an Email Inbox With JavaScript / Node.js." *Read an Email Inbox With JavaScript / Node.js*, https://docs.nylas.com/docs/read-an-email-inbox-with-nodejs.
- An informational guide straight from the Nylas website. This guide demonstrates how to use the Nylas Email API and describes how to make use of its functions and variables. This guide is especially useful for us as we will be using this API to directly access our email inboxes and pinpoint the most pertinent information.

Reinman, Andris. "Mailparser." *Nodemailer*, https://nodemailer.com/extras/mailparser/.
- Documentation on the mailparser module from Nodemailer. This particular module will give us just about the same capability as the Nylas Email API. If for some reason we are unable to make the Nylas Email API function correctly, this module will be our backup plan in order to access our email inboxes. This method is better than the Nylas Email API in the fact that we can access it using npm and do not need any authentication keys.

Kiessling, Manuel. "The Node Beginner Book." *The Node Beginner Book*, https://www.nodebeginner.org/.
- A beginners guide to using Node.js. This is a reliable resource in order to understand the basic syntax and utilization of Node.js. Despite not having the full version, the first few chapters of the book are free online and they give us all the information we need from it without having to spend money.

"API Reference Index - Twitter Developers." *Twitter*, Twitter, https://developer.twitter.com/en/docs/api-reference-index.
- The official documentation of the Twitter API. With this, we can fully understand how to connect to the API with proper authentication and how to utilize its methods. We will be using this documentation extensively as it is a large percentage of where our code will be coming from. In addition to using this for posting tweets, we can access a list of our followers, our mutuals, and essentially any data aspect that Twitter employs.

"Npm." *Npm*, https://www.npmjs.com/.
- Needless to say, when working in Node.js the use of npm is paramount. Npmjs.com allows us to find packages that fit our needs and make our lives easier. This website is an entire library of different packages that can fit any number of needs. In our case, if you input the word "Twitter" into their search bar, you received a list of 2,190 packages related to that keyword. In addition to all this, there are no download buttons necessary as all it requires to install is one line entered into the command prompt.