Release Plan
Product Name: Style
Team Name: Style Team
Release Name: Style
Release Date: July 25, 2018
Revision Number: 4
Revision Date: July 25, 2018

High level goals: Our idea for Style is to create a website that, when the user submits a writing sample, it outputs the name of a famous author who has a writing style that the user's writing style resembles the most. There are millions of writers in the word, and being able to see a famous author who creates similar work to the user could be inspiring. Our website is also going to show the user the stats we use to compare their writing sample to famous authors, like the user's average sentence length and word complexity, so the user can use those statistics to improve their writing. If the user's writing sample shows that the user repeats a lot of words, they can take that into consideration when they write and try to expand their vocabulary. If the user isn't a writer, then there is the opportunity for the user to take this quiz for fun. Many popular websites have quizzes that tell a user a specific trait about them based off of a multiple choice quiz they take. Our website is more personal, since each user's answer to our question is unique, which could make our quiz more popular.

Our project goals for Style include creating a fully functioning machine learning algorithm, creating an intuitive website, and providing the user their statistics so that they know what information the algorithm is using. The most important aspect is the machine learning algorithm, since we would not be able to retrieve the statistics of the user or compare the user's statistics with the statistics of other famous authors. After we have created the algorithm, we want to implement it into a website so that it can be shared on the internet with others. After that, we want to be able to show the statistics of the user on the website so that the user knows what information the algorithm used when determining which author the user's writing resembles and so that the user can use that information to their own benefit.

User stories for release:
Sprint 1 User Stories

1. As a user, I want to finish the whole process with one button because it is more user friendly.
2. As a user, I want to be able to locate the information and statistic of the result because it is more user friendly.

3. As a developer, I want to have 60% accuracy because machine learning is our main learning point in this project.
4. As a user, I want to more samples from different authors because I want a accurate result.
5. As a developer, I want to do word frequency, word length, sentence length and punctuation because authors have their unique word choices and style which can increase our accuracy.
6. As a developer, I want to study machine learning and website design because I can use what I learn in this project.
7. As a developer, I want to non-poem and more modern language data because I want to increase the accuracy of the machine.
8. As a developer, I want to use website because users usually do their writing with computer, and it is more convenient to them.
9. As a developer, I want to use machine learning because machine learning will be the technology widely used in the future.

Sprint 2 User Stories

1. As a user, I want to finish the whole process with one button because it is more user friendly.
2. As a developer, I want to use word frequency, word length, sentence length and punctuation because authors have their unique word choices and style which can increase our accuracy.
3. As a developer, I want to study machine learning and website design so that I know what is necessary to make the project work and I am more efficient when I code and debug.
4. As a developer, I want to be able to create a website that can give a string to the preprocessing code and be able to take the results and show them on the website so that the user has access to their results.
5. As a developer, I want to use machine learning because I want to give the user accurate results from their writing sample.

Sprint 3 User Stories

1. As a developer, I want to be able to create a website that can give a string to the preprocessing code and be able to take the results and show them on the website so that the user has access to their results.
2. As a developer, I want to use machine learning so that I can give the user accurate results from their writing sample.
3. As a user, I want to be able to locate the information and statistic of the result because it is more user friendly.
4. As a developer, I want to have 60% accuracy because I want to be able to give the user valid results based on the statistics from their submission and the statistics we collected from the authors

Product backlog: One goal that we are aiming to achieve, but may not if time does not allow us to, is the sentiment of the user's writing style. Every word has some sort of connotation: positive, negative, neutral; and many words have a feeling behind them: happy, sad, hurt. We want to take a library of word's with specific sentiments and connotations behind them and examine the user's writing sample to see if we can pin a feeling to the style of the user. Our sentiment analysis is a part of our plan currently (with the machine learning), but it is not a definite thing that we want to include into our project. While we are going to work on this and try to include it, if time does not permit us to do so, it will not affect the overall project. This would be separate from the authors because we are not doing sentiment analysis on the authors and because we only want to tell the user the sentiment of their writing individually.

Another goal that we had that we did not include in our release plan is to tell whether or not user is using real words. The algorithm would compare the words the user types with words in a dictionary and, like the spell check algorithm, highlight words the user typed that do not seem to be real words. This algorithm would have to, however, be able to distinguish words that look like they have a few spelling errors with words that look like they were typed randomly. Creating an algorithm like this would require a bit of work since there are many steps and many aspects to analyze in order for the algorithm to work.

Project presentation: Done on PowerPoint.