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**We’ve made a short video in which we give a quick overview and demonstration of our project. Click on the following link to watch it:** [**https://www.youtube.com/watch?v=2Bv7qzdd8Ns**](https://www.youtube.com/watch?v=2Bv7qzdd8Ns)

**To run the Flask project:**

**1. Unzip the files and open a cmd in the folder main directory**

**2. Enter “python server.py” on the command line. The server will start running.**

**3. Enter the localhost I.P address on any web-browser** <http://127.0.0.1:5000/> .

The Plotto Based Tweet Generator

1.

Over the course of the semester, and during the research we have done for this final project, we came across many interesting text generators. The one that particularly caught our attention was the Donald Trump [Tweet Generator](https://faketrumptweet.com/). Based on all of Trump’s past tweets, the algorithm calculates certain words and structures that are more likely to be included in his tweets. It also calculates the likelihood of certain words appearing after others. This probability-based algorithm is one of the reasons that some of the tweets are not completely logical (much like the Markov chain). Although their algorithm is more similar to Chomsky Syntactic Structure and to Markov Chain, we were more interested in the parallel between Cook’s “Plotto: The Master Book of All Plots” and the tweet generator.

2.

While Markov and Chomsky deal with quantitative scientific methods to generate text and sentences, William Wallace Cook wrote "The Master Book of All Plots'' to serve as a how-to manual for other authors to use. Or as Paul Collins describes, “for the instruction and illumination of his fellow authors.” In the same manner that Cook uses pre-prepared clauses to create sentences or to inspire ideas, the tweet generator uses a list of words and combinations to offer new ideas and can be used as a “how-to generate tweets' '. The genealogy of this approach mimics the attempts of writers who have often struggled to generate plots. After experimenting with the Tweet generator, we found a common thread between writers whose job is to generate imaginary plots and bots who spread fake news and misinformation as online tweets.

3.

In our project, we intend to recreate a text generator just like Trump’s Tweet Generator by experimenting and utilizing Cook’s model of prepared clauses. It could be interesting to see if Cook’s logic in generating plots could be used to properly generate tweets, in particular - we will draw on the imaginary nature of Plotto’s intended new plots to generate imaginary news reports (i.e- Fake News Generation). We also plan on making a few modifications to allow the user more interaction. A GUI-based application that produces three different kinds of clauses that will consist of a complete sentence. To imitate real news tweet reports, we decided to model our clauses based on actual news tweets from Twitter. After reading many news report tweets, we chose the following clauses to construct our tweets:

A)  **Clause A** - The Descriptor Clause (where and when).

B)  **Clause B** - The Subject Clause (who).

C)  **Clause C -**The Action Clause.

 Each clause will be randomly drawn from its own section’s database and will make up part of the sentence. For example- “In the next few months the President of the United States will pass legislation to limit the press”. To Further integrate the creativity and personal touch of the writer/ user, we provide the user with the opportunity to add his own clauses into the database according to a certain format.

 In today’s age of technology and media, which results in the mass production of fake news, text generators became more accessible than ever, and it became much easier to distribute news all over the world. When Cook came up with "Plotto: The Master Book of All Plots," in 1928 his resources were very limited. By trying to digitally implement Cook’s generator we wanted to adapt his main guidelines and foundations into a modern concept. The combination of the Trump Tweets Generator and Cook’s method to generate plots is naturally related to fake news. Creating a sentence generator that is based both on Cook’s book and on modern predefined sentences demonstrates how Cook’s concepts can be integrated with technology almost one hundred years later. Furthermore, from this new perspective, we will show how to use Cook’s approach as a proof of concept, from which relevant contemporary ideas can be turned into automated fake news.

4.

While we were working on creating a virtual modern version of Cook’s plot generator we realized how important his work was a part of the development of text generators and how relevant it still is when trying to create a basic model that generates sentences. Even though Cook's initial intentions were to inspire plots and not necessarily raw text, the similarities between plot generators and fake news drew our interest to create a fake news generator that is based on Cook’s methods. The virtual user interface allowed us to further expand his initial intention, and by creating a flexible database that is being manipulated by the user, there are an infinite amount of possibilities/ plots/ fake tweets that will continue to inspire other random generations as well.

In the same manner that Cook’s system could inspire writers with new ideas by combining clauses from three different categories, fake new generators could inspire influencers or people whose truth is not in their best interest. Hopefully, this simulation of converting Cook’s plot generator into a fake news generation can shed light on some of the immense power and limitations behind his system and show that even in the limited scope of tweets - a small percentage of the sentences don't make sense (Much like Markov-Chain based generators). However, considering the fact that the vast majority of tweets are believable, and how easily and quickly bots could use this device to generate text- we can see why bots play such a massive role in working with automated text generators on a large scale.