**Fake News detection:**

The current rise of false news has prompted more concentrated study into computer algorithms that can detect genuine and trustworthy information. We analyze and apply machine learning algorithms for automatic false news identification in this project. During the 2016 US presidential election, data includes brief statements from press releases, interviews, campaign speeches, Facebook postings, and tweets.

**Getting started:**

Save the data and the Collab file 'Fake news detection\_LSRG.ipynb' to a folder on your computer. Unzip the data zip file's contents. It made up of three tab-separated values files.  Google collab might launched by inserting the terminal CD into the folder. You could see the results of the code I have already executed in this Collaboratory.  Run, restart, and execute all from the notified to rerun the code.

**Prerequisites:**

If you have not already, install Sklearn, NLTK, and additional libraries like lumpy, pandas, and seaborn. They referred to in the first line of code. It is necessary to download NLTK stop-words, NLTK 'punkt', and NLTK 'maxent treebank pos tagger'. When Sklearn is installed, all of the classifiers are available.

**License:**

All of the python code and libraries are open-source. The creator has made the data freely available; therefore, it does not require a license.

**Dataset:**

The 'LIAR' dataset, a publicly accessible fake news detection corpus, is the source of data for this project. I have attached the data in a zip file. It should be placed in the same folder as the Google Collab 'fake news detection LSRG.ipynb'. Train.tsv, test.tsv, and valid.csv are the three TSV files in the package. The data is also available on the LIAR Dataset website for download.

**References:**

* William Yang Wang. 2017. " LIAR, liar pants on fire": A new benchmark dataset for fake news detection. arXiv preprint arXiv:1705.00648.
* Al-Shammari, Reham & Yousif, Suhad A. (2020). Fake News Classification Using Random Forest and Decision Tree (J48). 23. 8.
* D. Elisabeth, I. Budi and M. O. Ibrohim, "Hate Code Detection in Indonesian Tweets using Machine Learning Approach: A Dataset and Preliminary Study," 2020 8th International Conference on Information and Communication Technology (ICoICT), 2020, pp. 1-6, doi: 10.1109/ICoICT49345.2020.9166251.
* M.Mokhtar, Y.Jusoh, N.Admodisastro, N.Pa,A.Amruddin,"Fakebuster: Fake News Detection System Using Logistic Regression Technique In Machine Learning",2019, <https://doi.org/10.35940/ijeat.a2633.109119>
* K.Stahl., “Fake news detection in social media”, B.S. Candidate, Department of Mathematics and Department of Computer Sciences, California State University Stanislaus,2018. <https://www.csustan.edu/sites/default/files/groups/University\%20Honors\%20Program/Journals/02\_stahl.pdf>