Novelty:-

Fake news has been around for decades and is not a new concept. However, the dawn of the social media age which can be approximated by the start of the 20th century has aggravated the generation and circulation of fake news many folds. Fake news can be simply explained as a piece of article which is usually written for economic, personal or political gains. Detection of such bogus news articles is possible by using various NLP techniques, Machine learning, and Artificial intelligence.

1)Unique Dataset having

- id: unique id for a news article
- title: the title of a news article
- text: the text of the article; could be incomplete
- label: a label that marks the article as potentially unreliable

2)I am using Term Frequency(Tf) — Inverse Document Frequency(Idf) Vectorizer

3)Using Naive Bayes classifier for Multinomial model

4) Applying Passive Aggressive Classifier

The passive-aggressive algorithms are a family of algorithms for large-scale learning. Intuitively, passive signifies that if the classification is correct, we should keep the model, and, aggressive signifies that if the classification is incorrect, update the model to adjust to more misclassified examples. Unlike most others, it does not converge, rather it makes updates to correct the loss.

5) Using Hashing Vectorizer : require less memory and are faster (because they are sparse and use hashes rather than tokens)