Finding Fake News

We've already discussed how Fake News can spread, like a virus. We've discussed the difference between misinformation and disinformation. Now, we're going to discuss what we can **do** about it.

Background:

The internet represents the biggest explosion of data in human history. There's more out there, and more access to it than ever before. The information ecosystem is a bit like a tropical rainforest: luxuriant, dense and fiercely competitive. As such, it contains its fair share of predators and poisonous plants.

Deliberately misleading articles, websites and social media posts can come about for lots of different reasons: they might be trying to influence elections or policies; they might represent a form of cyberwarfare between states; they might be aimed at raising someone's profile and influence, or discrediting their opponents. Or they might simply be about making money, relying on the attention-grabbing nature of outrageous lies to generate ad revenue, as in the case of the "digital gold rush" that saw a small Macedonian town register more than 150 pro-Trump websites during the 2016 presidential race.

We may have to rely on AI to do the heavy lifting for us – and tell us whether telltale linguistic patterns are present

One thing they may have in common, however, is *the language they use.*

Having a reliable way of identifying fake news is important. The whole reason it's a problem is that it mimics reliable reporting – and people can't always tell the difference. That's why, for the past few years, researchers have been trying to work out what the linguistic characteristics of fake news are. Computers that are fed material already classified as misleading are able to identify patterns in the language used. They're then able to apply that knowledge to new material, and flag it as potentially dubious.

The Guardian, Sept 2, 2019

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Computer programs can be used to scan content for problematic words; words that are known to be associated with Fake News. In fact, just this year, a 15-year-old girl was named Time's <u>Kid of the Year</u>, for developing a similar application that scans texts, tweets, and posts for language associated with bullying.

Your Task:

DEVELOP:

Develop an application in Snap, Scratch, or a text-based language of your choice, that scans text that a user inputs against a pre-existing set of words that are associated with 'fake news'.

Your program should be comprised of two components:

- Begin with an existing list of 4-5 words to scan against.
- Prompt users to input text to check against these existing words.
- Check the entered text against user input.
- Advise user of the results of the check.
- Ask user whether to add a word they find problematic to the existing word bank.

Bonus:

- Print out existing word bank for user review.
- Allow user to both add and delete words to the bank.

DOCUMENT:

Document your code as you create it. It should be clear what elements were developed earlier, and which were developed later. Evidence of your development process should be documented and debugging and iterative development should be noted. In addition, create comments that serve as documentation for your code, so that it is clear what each section of code does and how it interacts with other elements of code.