



Exact Fact

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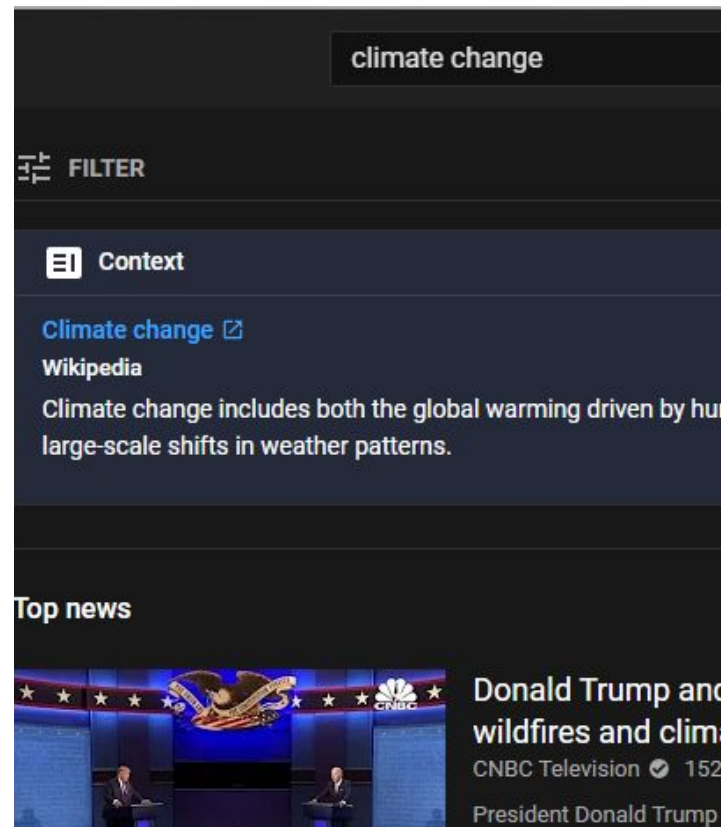
The Problem

- Misinformation is a major problem and a threat to the wellbeing of humanity
- Has never been more evident than under the coronavirus crisis. Misinformation is rampant across the internet
- Social media and blog sites greatly lower the bar necessary to publish information for the world to see. This makes it easier for malicious agents to do great harm
- It takes a great amount of time for a regular person who is browsing the internet to research every single sentence in a website or post.



The Attempts

- Several sites have attempted to combat misinformation.
- **Youtube** embeds wikipedia articles into their websites when searching for controversial topics such as climate change.
- **Twitter** has also taken a more active role by tagging posts containing misinformation.
- They both cannot be generalized across the entire internet as they only work for specific websites and require human oversight.



What is “truth”?

- Current consensus among authorities of a given subject
- Database uses Politifact and Snopes as the source of misinformation
 - We plan to automate the database by using the data from these sites
- The truth can change over time
 - The date of publication gives context and acknowledges that the writer could have been right at the time



The Solution

- Chrome extension that can highlight misinformation and political bias
- Hovering the user's cursor over highlighted text gives...
 - o A reason why the text is incorrect or politically biased
 - o The original article/post's publication date since the truth can change over time
- Clicking on any highlighted text brings the user to a credible article that supports the correct reasoning
- Users can contribute and vote on known misinformation through a website



Which Sources Do We Use?



- A fact-checking website that provides us with false political claims
- Used in misinformation database



- A fact-checking website that provides us with false general claims
- Used in misinformation database



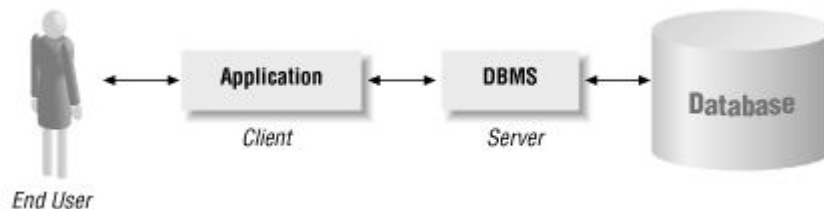
- A website that rates the political bias of numerous media outlets
- Lists the leanings of many journalists



- A website that rates media outlets on their political bias and the accuracy of their reporting
- Lists the leanings of many websites

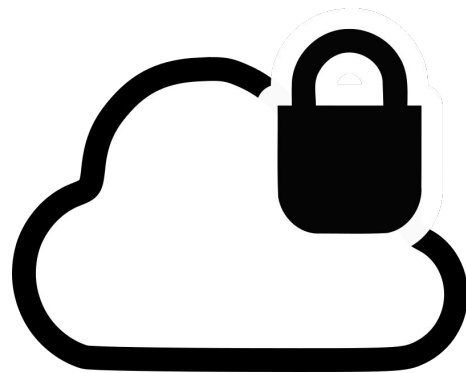
How we do it

- The chrome extension sends the website's text to our server
- Our server is able to determine which sentences in the text are false using our A.I. algorithm, **the misinformation matcher**
- The misinformation matcher checks if each sentence is similar to a sentence in a database of false claims created from sources like PolitiFact and Snopes
- The server gives the extension all the sentences that are similar in meaning to false claims in the database

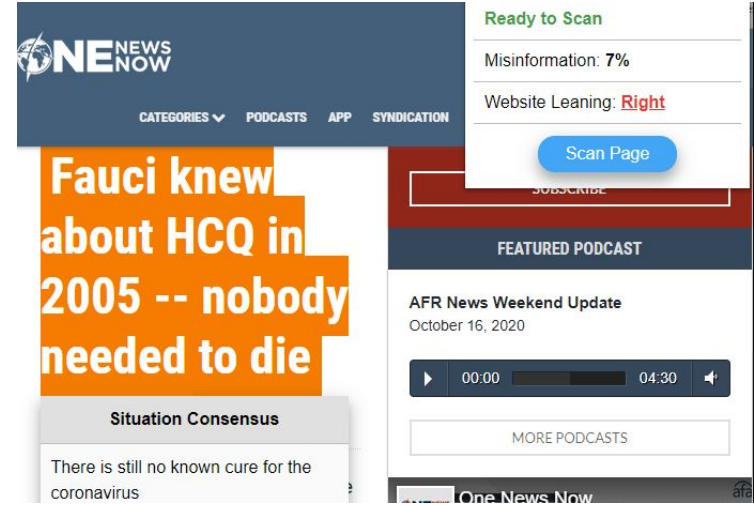


Privacy

- Despite taking the text of a webpage, Google protects any passwords from being sent to the backend
- Google will automatically hide elements that are set as passwords when looking at the HTML of a page
- Website text is only sent when users scan
- No data is stored or saved on the server



Examples



OPINION

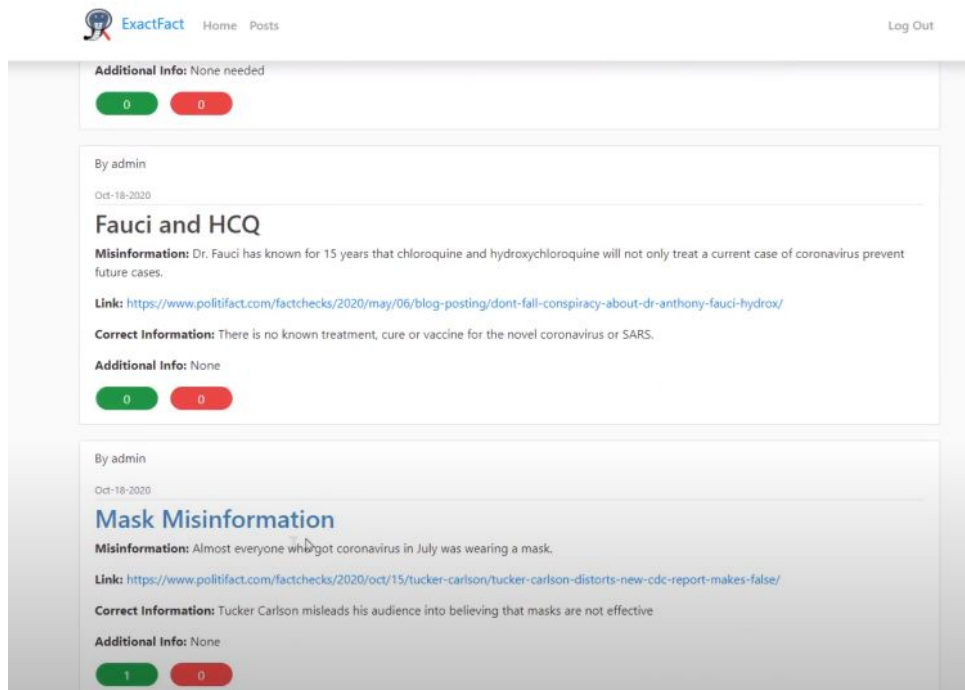
Blue and Red America differences could hurt Democrats

by **Michael Barone**, Senior Political Analyst | August 19, 2020 12:26 PM



The Website

- Misinformation matcher works best with many false statements in the database
- People can submit misinformation they have seen, and users can vote on whether something is actually misinformation



Future Goals

1. **Implementing the KDA Score** - A metric for quantifying how true a sentence is. We plan to calculate this number by averaging the truth scores of all the articles it matches to.
2. **More advanced fact-checking methods** - In addition to the misinformation matcher, we plan to have truth seeker. When we are fact-checking a sentence, we would first rephrase it in the form of a question. We would then search for the answer to this question through a search engine and check if the results match the sentence.
3. **List Publication Years** - As new information is introduced, facts can change. Some articles can be outdated. We plan to rank articles in our database by their recency.
4. Make application downloadable