ANTI-VAX CONSPIRACY DEBUNKER (AI CHATBOT)

Using **Hazlo** and **Snatchbot** to identify and answer misconceptions about the Covid-19 vaccine

August 2021

IDENTIFYING THE QUESTION

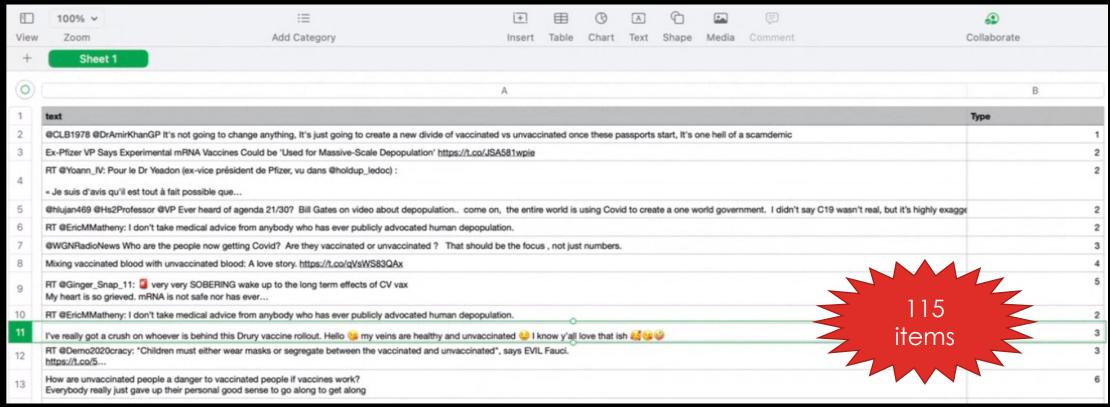
- Various conspiracy theories and rumors about vaccines have led to low vaccination rates in many countries
- Impact on the global fight against the new coronavirus
- False information everywhere, and it is difficult to analyze it all
- It is necessary to use AI to identify false information and answer questions

Sub-themes	Operational definitions
Vaccine development, availability, and access	Reports of rumors and conspiracy theories related to the policy, progress, and challenges of COVID-19 vaccine trial, phases of trials, trial participants and development were included under this category. This also includes past and ongoing availability of COVID-19 vaccines, it's delivery and public access to them [34].
Safety, efficacy, and acceptance	Claims related to the safety and efficacy of COVID-19 vaccine and its acceptance
Political and economic motives	The political and economic interest of COVID-10 vaccines and its development [34].
Conspiracy theory	Claims and discussion of various theories related to the COVID-19 vaccine and its malicious goals
Mandatory vaccine and ethics	Claims related to concerns about mandatory vaccine and ethics.
Vaccine reagents	Claims pertaining to concerns about what materials have been used in vaccine
Morbidity and mortality	Posts containing claims about morbidity and mortality due to participation in vaccine trials or receiving vaccine in future
Vaccine alternatives	Content related to the alternative options to vaccine
Susceptibility due to other vaccine exposure	State or claims related to exposures to other vaccine and vulnerability to COVID-19
Miscellaneous	Statements, claims and discussion that did not fit to the above sub-themes

DEFINING THE QUESTION

- This project aims to allow users to check the authenticity of rumors regarding the new vaccine, identifying the 7 different types of rumor being queried:
 - 1. The coronavirus does not exist, and the infection and fatality rate are low;
 - 2. Vaccines aim to reduce earth's population;
 - 3. The vaccine is not effective;
 - 4. The mRNA vaccine will be harmful to the human body and change its gene;
 - 5. The long-term adverse effects of vaccine;
 - 6. Infections are prone to occur after successive vaccinations;
 - 7. Herd Immunity is more effective than vaccines.
- The system will then attach the corresponding answers and information

- Correspond social media messages (and some self-generated) messages to seven types of rumors, and attach labels;
- Using Hazlo as machine learning tools。

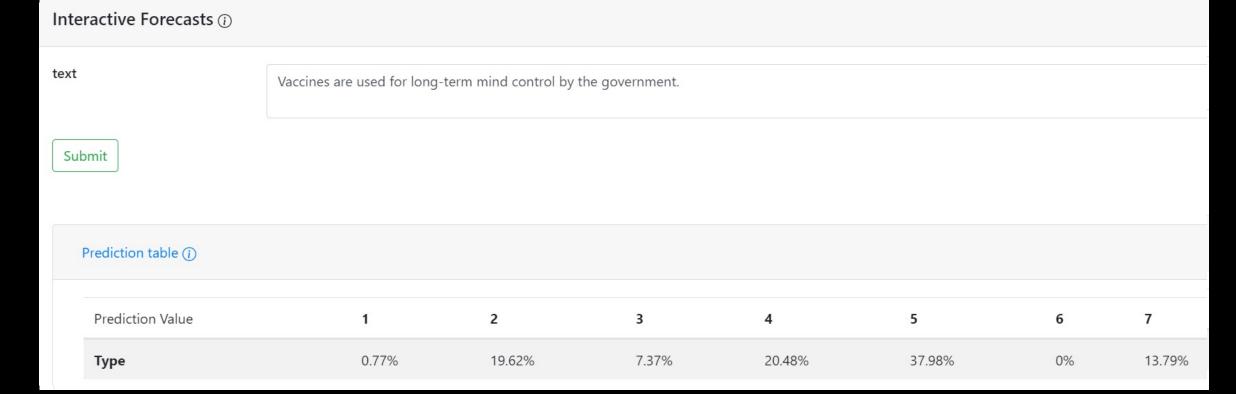


100 messages from social media such as Twitter, from different groups, nationalities, and different dates.

An additional 15 items are created to provide more training for unpopular areas such as 4 and 6

RESULTS

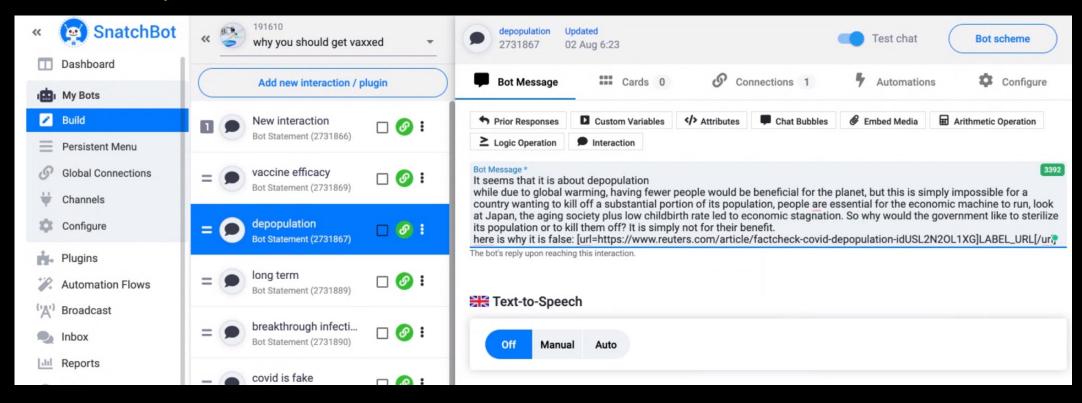
- hazlo.ai/e/2SE2W1Kf
- Hazlo system



https://webchat.snatchbot.me/521e7
 c99260d9c9f3740639ce015197925e90
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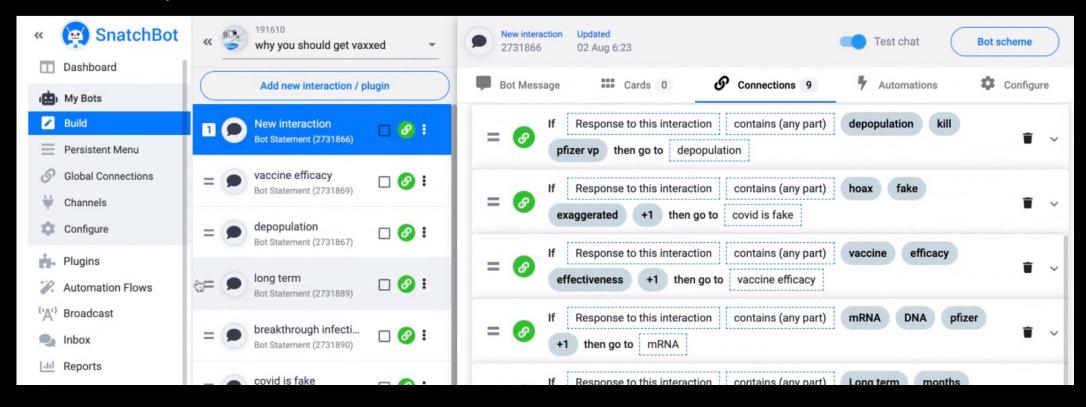
Snatchbot system



https://webchat.snatchbot.me/521e7
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Snatchbot system



 https://webchat.snatchbot.me/521e7 c99260d9c9f3740639ce015197925e90 0605c4e89ce2fbf9e760a347ff1



Snatchbot system



why you should get vaxxed



HI, want to know more about vaccine conspiracy and why they are false? Type your question below!

Aug 3, 2021, 4:23:53 AM

someone claims that vaccines have low protection ability, is this true?



Aug 3, 2021, 4:24:22 AM



It seems that you have questions about vaccine efficacy, here is more information: [url=https://www.yalemedicine.org/news/covid-19-vaccine-comparisonLABEL_URL[/url]

RESULTS

- This AI model has the following deficiencies:
 - Not enough time and data 1. Insufficient training data makes the prediction less accurate;
 - 2. Failure to solve problems such as typos and emoticons instead of words;
- 3. If the query has nothing to do with the epidemic or vaccines, the system will still give the analysis results;
- 4. The system does not perform back propagation to adjust parameters to automatically improve the recognition effect.
- There are 3 solutions :
- 1. Add vaccine-related training data from different dates and groups, such as messages using synonyms;
- 2. Add messages in different languages, different "typing" methods and different alternative emoticons to make the training effect more accurate;
 - 3. Add other or irrelevant classification options.

ANTI-VAX CONSPIRACY DEBUNKER Thanks!

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