Your grade: 100%

Your latest: 100% • Your highest: 100% • To pass you need at least 80%. We keep your highest score.

Next item

1. Which of the following challenges were addressed by the Haitian diaspora and Mission 4636 during the response efforts after the earthquake in Haiti in 2010? Select all that apply. 1 / 1 point

- [x] Limited mapping capabilities for locating specific places mentioned in the messages.

Correct
That's right, in addition to translation, members of the Haitian diaspora geolocated messages based on local knowledge of place names and descriptions.

- [ ] Inability to communicate with people in impacted areas due to damaged communication infrastructure.
- [x] The lack of automatic translation technology between Haitian Kreyol and English.

Correct
This challenge was addressed by members of the Haitian diaspora manually translating messages that had been texted to Mission 4636.

2. Which stakeholders did you identify during the explore phase of this project modeling text messages sent after the Haiti earthquake? Select all that apply. 1 / 1 point

- [x] Members of the impacted community, including Haitians on the island and within the global diaspora.

Correct
Engaging with impacted community members is essential to understand their experiences and perspectives.

- [x] Organizations involved in the response effort in Haiti and those that might be likely to be involved in future responses, such as local organizations and international NGOs.

Correct
Engaging with organizations that participated in the response, as well as those that might be likely to participate in future response efforts, is crucial to gather insights and learn from their experiences to inform future disaster response efforts.

* C: Companies providing digital communication platforms.

Feedback: After a disaster, nowadays, it's expected that digital communications via phone, text, social media, or other messaging services will be a primary means for people to send and receive information during a crisis.

3. Given what you explored in the topic modeling lab for this project, what can you infer about the evolution over time of the two topics initially identified (before removal of additional stopwords or other modifications you may have done)? 1 / 1 point

- ( ) The most important topic shifts from long-term recovery concerns to urgent needs as time progresses after the disaster.
- (•) Initially, the focus is primarily on critical needs, but beyond four weeks or so after the disaster, the need for information or other long-term recovery support surpasses the need for immediate assistance.
- ( ) The need for critical assistance, such as food and medical care, remains constant for months following the disaster.

Correct
The analysis reveals that the demand for information about things like jobs, school, and other long-term needs increases as time progresses, eventually surpassing the focus on immediate assistance.

4. Imagine that you are working to provide support for disaster preparation and response for another low-resource language region and you'd like to use the analysis from this topic modeling project based on the data from Haiti. Which of the following would be considerations in this effort? 1 / 1 point

- ( ) It would be wise to run similar analyses on other post-disaster scenarios to see which of the insights drawn from Haiti generalize well to other situations and what new insights you can draw from other scenarios.
- ( ) The Haiti dataset contains personally identifying information (PII), which could raise privacy concerns.
- (•) The dataset is drawn from a specific event, the earthquake in Haiti in 2010, and the challenges presented in a new location and scenario may be quite unique and different from the experience in Haiti.

Correct
Correct! It is important to consider that every disaster will have unique challenges and circumstances, and so it's important to recognize that, while this topic modeling project with Haiti dataset may provide key insights that generalize well to other scenarios, it may fail to capture others.

5. If an earthquake happened today in a region where low-resource language speakers were impacted, which of the following might be effective in efforts to help coordinate the initial response based on your analysis of text messages sent after the Haiti example? 1 / 1 point

- ( ) Developing a new automated translation app for the local language so that aid requests can be directed to the international respondents.
- (•) Helping to mobilize the local community and speakers of the local language in translation and geolocation efforts to help with logistics in the response and recovery phases.
- ( ) Doing damage assessment via aerial imagery to identify areas most likely to be in need of assistance.

Correct
Yes, this strategy allowed for a means of communication between those needing aid and the international responders in Haiti and a similar system would likely be useful in similar future scenarios.

6. Identity the key steps you performed in text processing to convert the text messages in your dataset into a set of tokens for your analysis. Select all that apply. 1 / 1 point

- [x] Removal of stop words, which involved removing words that added little or no meaning to the message content.

Correct
Yes, you removed commonly used words that don't carry much meaning, such as, "the", "a", and "in".

- [ ] Flagging of important keywords
- [x] Removal of punctuation.

Correct
Yes, you removed punctuation because it didn't add meaning in this context.

- [x] Lemmatization, which involved reducing words to their root form

Correct
That's right, lemmatization is a common step in many English language NLP tasks but may not be applicable in other languages.

7. True or false: Due in large part to the efforts of the Haitian diaspora and Mission 4636, translating and geolocating messages in Haitian Kreyol is now a manageable task for a non-Haitian-Kreyol speaker with access to the internet and this will ensure that many of the challenges faced by responders in 2010 will be easier to overcome in future crises in Haiti. 1 / 1 point

- (•) True
- ( ) False

Correct
That's right, access to translation and mapping services as well as other general purpose technologies not only helps in the aftermath of a disaster but helps communities help themselves in many important ways.

8. Which set of steps best describes the overall process you performed to prepare your data for topic modeling? 1 / 1 point

- [x] Removing stop words from a word cloud reduces the clutter and makes more meaningful and relevant words stand out.

Correct
That's correct! Stop words are commonly used words that often do not carry significant meaning or contribute to the overall understanding of a text, such as "the," "and," "is," or "in." Removing stop words from a word cloud is beneficial because it eliminates noise and focuses attention on the more relevant and informative words that convey the main content and themes of the text.

- [x] The most common words appear larger in size than less common words in the dataset.

Correct
That's correct! In WordCloud, common words appear larger to make them visually prominent. This helps viewers quickly identify the dataset's most frequently mentioned or important words.

- [ ] For messages containing information about `medical_products`, the most common word is `medicine`.

9. Which of the following are true statements about coherence score? 1 / 1 point

- [x] A coherence score is one way to evaluate the performance of an LDA-based topic model.

Correct
In the lab notebook you use coherence score to evaluate the performance of the LDA model and use it to compare the performance of models with different numbers of topics.

- [ ] A coherence score measures how different and unique the topics are in the set by looking at the variety of words used.
- [x] The coherence score is defined in such a way that higher (less negative) values reflect a greater degree of coherence.

Correct
A higher coherence score means that the words within a topic are more closely related and form a more coherent theme.

10. True or false: When it comes to machine learning applied in disaster response scenarios, it's actually much more common to be engaged in applying machine learning in after-the-fact analysis like you have done in this project than it is to apply machine learning directly as part of the response effort. 1 / 1 point

- (•) True.
- ( ) False.

Correct
That's right. The role machine learning more commonly plays in disaster response is as part of the analysis used to help inform future response efforts.