

A tag cloud (word cloud, or weighted list in visual design) is a visual representation for text data, typically used to depict keyword metadata (tags) on websites, or to visualize free form text. 'Tags' are usually single words, normally listed alphabetically, and the importance of each tag is shown with font size or color. More @ http://en.wikipedia.org/wiki/Tag cloud

## Tag cloud evaluation:

The intention of this session is to obtain user feedback about the applicability of a tag cloud prototype user interface.

The objective of a tag cloud is to improve the navigation through a large base of documents related to signals matching a signal definition. The goal is to provide a possibility for epidemic prediction experts to validate signals through exploration and the tag cloud should give an easy access to the documents under generated signal or indicator by simple clicking on particular tags. It also provides an opportunity to browse through documents which are tagged with specific combination of tags and this way to validate or find out which documents actually contribute to the signal or indicator the most. Besides this, the tag cloud provides a simple summary of keywords related to a specific indicator or a signal which have been identified in the documents, so they could be treated as extended symptoms which the documents talk about. In this session we propose a scenario where you as a health surveillance expert, user of M-Eco, should assess the documents related to a cholera outbreak in Haiti.

In this scenario, we assume that you already created a signal definition matching "cholera" as medical condition and "Haiti" as location. We also already provide the set of documents belonging to signals that match this signal definition. You, now, need to find out more about this outbreak based on the documents found and the interface of tag clouds provided.

Firstly, please read carefully the following instructions how to use such tag cloud interface.

- Please open the following link:
   <a href="http://demos.iwis.cs.aau.dk:8081/testproject/clusteredTagCloud.seam">http://demos.iwis.cs.aau.dk:8081/testproject/clusteredTagCloud.seam</a>
- Please spend at least 5 minutes for retrieving, browsing and viewing available documents through the tag cloud provided in the link. Once you are finished, please fill in the following form:

Questions regarding your navigation using the tag clouds:

| How many tags in the tag cloud did you click on? | Number: |
|--|---------|
| How many tags previously chosen did you remove?  | Number: |

| What made you choose the tags you chose? (mark all that apply)   | ( ) The size of its text ( ) The color ( ) Your perceived usefulness of the tag ( ) A previously chosen and related tag (e.g. After choosing Haiti, I chose Port-au-Prince next) ( ) No particular reason ( ) Others, specify: |
|--|--|
| Did you use any query refinements (Selecting more tags from the cloud and the documents, in such way that it adjusts retrieved documents)? | () Yes () No   |
| If yes, on average how many tags assigned to the documents did you click on?   | Number:  |
| If yes, how would you rate its usefulness?   | ()1(poor)()2()3()4()5<br>(excellent)   |
| How useful/helpful was the tag refinement to access the needed information?  | ()1(poor)()2()3()4()5<br>(excellent)   |

Question regarding the tags shown in the tag cloud:

| On a scale from 1 to 5, how would you rate the overall <b>usefulness</b> ( how relevant, interesting are tags for a user interests) of the tags shown in the tag cloud? | ()1(poor)()2()3()4()5(excellent)                    |
|---|---|
| On a scale from 1 to 5, how would you rate the overall <b>correctness</b> (how tags do match to the signal definition) of the tags shown in the tag cloud?              | ()1(poor)()2()3()4()5(excellent)                    |
| Which tags do you consider that did not match the signal definition (:  |   |
| Do you speak German?  | () Yes () No  |
| Is the mixture of English and German tags "confusing"?  | YES / NO<br>If yes, how do you think they should be |

|  | presented instead?  |
|--|---|
| Would you prefer just a single language tag cloud? ( a tag cloud would contain only tags in one language ) | () Yes () No  |
| Regarding the amount of tags in the cloud presented, does it contain:                                      | ( ) Too many tags? How many:<br>( ) An adequate number of tags?<br>( ) Too few tags? How few: |
| How related are the tag cloud to the signal definition?  | ()1(poor)()2()3()4()5(excellent)  |

Questions regarding the results obtained:

| On a scale from 1 to 5, how would you rate the overall <b>usefulness</b> of the documents retrieved through the tag cloud?  | ()1(poor)()2()3()4()5(excellent)   |
|---|--|
| On a scale from 1 to 5, how would you rate the overall <b>correctness</b> of the documents retrieved through the tag cloud? |  |
| Would you take any action to tackle the outbreak given the information found through the tag cloud?                         | () YES () NO<br>Which actions:   |
| Regarding the documents found:  | ( ) They were only news results reporting the outbreak ( ) They contained news results and social media messages ( ) They contained only social media messages |

Now, please try to change visualization settings in the following order:

- $\circ$  try to change colors of the tag cloud
- o try to change sorting of tags in the tag cloud

| Do you prefer colorful tag cloud over single   | YES / NO / |
|--|------------|
| color cloud?   |            |
|  |            |
| Do you find alphabetical sorting of tags more convenient than distribution of tags according to their meaning? | YES / NO / |

| In the MECo prototype, where the tag cloud should be placed?   | () Small Widget<br>()Half page of the front page<br>() Users can enable/disable |
|--|---|
| The personalized tag cloud should be editable?, i.e., users could remove, edit or add new tags?  | () Yes<br>() Maybe. Why?<br>() No   |
| Since the tag cloud intend to represent the document corpus, do you think the search mechanism/ranking should take into account the tags in the cloud? | () Yes<br>() Maybe. Why?<br>() No   |