Trending Topics

How would you design "Trending topics", on websites like Twitter or Facebook? We need to do it reasonably realtime.

Reading:

1. https://stackoverflow.com/questions/787496/what-is-the-best-way-to-compute-trending-topics-or-tags This one is very good. Please be sure to follow the links from there.

2. An excellent pedantic take on this is here: https://www.slideshare.net/arunkejariwal/real-time-analytics-algorithms-and-systems

3. From horse's mouth, where Twitter describes their own algorithm: https://blog.twitter.com/official/en_us/a/2015/trend-detection-social-data.html

4. Here are some good answers to a similar question from Quora: https://www.quora.com/What-tools-algorithms-or-data-structures-would-you-use-to-build-a-Trending-Topics-algorithm-for-a-high-velocity-stream?q=trending+algorithm

5. From the Quora link, here is an intriguing approach: https://www.igvita.com/2010/01/06/flow-analysis-time-based-bloom-filters/

Idea is to recognize that:

1. This problem can get too complex. Depending on the context, it's important to define what does trending mean. Is it just by frequency of occurrence, or are there other things like influencers etc.

2. Recognize that it needs an "algorithm" to be applied to incoming news topic. There are many different such algorithms. Read about them before the interview, but don't get lost in the weeds. Use #1 to reign in the requirements. HackerNews algorithm for example, works quite well. It's simplistic, but powerful because they reign in the use-cases.