

Activity 2.1.2.A.AK Your Favorite Web Page

Procedure

Part V: Create Search Queries

27. Use the information and optionally the video found at http://www.google.com/intl/en_us/insidesearch/howsearchworks/algorithms.html to answer the question “What role do algorithms play in determining search results?”

28. After watching the following video, use the information you gained to try and answer why some web pages might not be returned as search results even if they are relevant to your query. <http://www.youtube.com/watch?v=BNHR6IQJGZs>

29. Even today one of the most important skills you can learn is how to effectively format your search queries. Higher quality queries get you better results in less time, leaving you more time for everything else. They help you conduct research, find images or videos, or locate communities for discussion of various topics. Some of the best tips for improving your searches are incredibly basic: Be as specific as you can, consider the type of vocabulary that is likely to appear on sites that you want to see, and keep your queries simple. You can get a lot trickier if you have specific criteria for your search. Use this page provided by Google to answer the following questions:

http://www.google.com/intl/en_us/insidesearch/tipstricks/all.html

- You want to search for Mustangs but not the car, just the horse. What search operator would you use to ignore sites about cars?

- You want to find PowerPoint slides about a given topic. How can you get results that contain only .ppt compatible documents?

- You saw a really interesting article about whales on cnn.com, but it's been a few days and you can't find it by searching for whales anymore. How can you narrow down your search and only get results from cnn.com?

30. Search is a powerful tool for many reasons. Analysis of search query data has revealed that using Google Flu Trends, researchers were able to predict the outbreak of flu cases more than a week in advance of the CDC. Google's trend search feature shows a visualization of the data that they have collected about what people search for and when. The data is crowd sourced: people all over the world are the ones doing the searching. All Google has to do is record what they searched for, when, and then analyze the data.

Note: Google limits the number of requests to Google Trends per IP address. Refrain from submitting extras until everyone in your class has finished.

Navigate to [google.com/trends](https://www.google.com/trends) and search for "flu". When did people start really worrying about Swine Flu?

31. What else might you be able to predict using a visualization like Google trends? Conduct a search and note any patterns that you found here.

32. Describe a strategy for using Google trends to buy your best friend the most popular Christmas gift.

34. Which search engine's algorithm do you think performed the best, and why?

35. Compare the image results for the query "democracy" on google.com vs. google.com.hk. Governments control or influence network infrastructure and content. Describe your observations.

36. Owners of individual domains get to decide what content is published on their websites. Why might this autonomy be important to the development of the Internet? How or why does autonomy scale?

Conclusion

1. We barely even looked at any code in this activity. Why do you think that knowing about the protocols and features of the web might be useful to you as:

- An informed citizen:

- A professional developer:

2. How do various factors influence the results that different search engines produce?

3. How can crowdsourced data about search trends help predict the future?

4. From the standpoint of the governing bodies of .com, why is it important that owners of individual domains maintain authoritative records of their subdomains and manage the content that is published on their sites? (Hint: think about what the alternative would be.)

5. If the most direct route for packets representing a webpage that you have requested from their server to you is broken (hardware goes down for some reason), what happens to the packets?

6. What makes for a high quality website?

7. What is the basic function of the cookie and where is it stored?