**Police monitor**

**Part 1:** Create a system to visualize which cities appear to have high levels of violence by the police.

Key requirements:

* Write a program that uses a Google search API, or similar method, to retrieve a list of all news articles about police violence in the past few years.
* Write a second program that determines, for each city in the United States (or another country of your choice), how many police violence events occurred.
* Use a Google maps API, or similar method, to present a web page that visualizes the different levels of violence among different cities.
* Somewhere on the same web site (or same web page), display an explanation of how your system computed violence levels.

You will need to use your judgment to decide how to do the computations above. First, you will need to decide what kinds of violence you're going to consider. Second, you will need to figure out how to find news articles about these kinds of violence. Third, you will need to decide how to calculate a meaningful "level" of violence from the data. For example, maybe you will decide (a) to focus on shootings against unarmed minorities, (b) to search for articles that contain "unarmed suspect" and "police" and "grand jury", and (c) to find unique incidents by automatically analyzing the articles to see if they contain unique names and dates.

Be prepared to explain the decisions that you make. People will ask. Be ready to give them answers.

**Part 2:** Do one of the following two things:

* **Part 2 option a:** Once your system is up and running, have at least 10 of your friends use it and give you written feedback via email. Update your system based on their feedback. Then, promote the system until at least 1000 people have used it. Be prepared to convince me that at least 1000 distinct people used it. They don't need to like it; they just need to use it.
* **Part 2 option b:** Get your system in the news. Specifically, there needs to be at least one article that mentions your system in any of the venues listed below. The article only has to mention your system, and it doesn't have to say nice things about your system. It is not necessary for lots of people to use your system, only for it to be mentioned in the article.
  + Reddit.com homepage
  + Slashdot.org homepage
  + CNN.com
  + FoxNews.com
  + theguardian.com
  + reuters.com
  + aljazeera.com
  + xinhuanet.com/english/
  + Any server that contains the word "news" in its domain name and that has at least 1 million unique visitors per day

**Part 3:** Search the web to find three other systems that are at least a little bit like your system. For example, maybe they have some of the features that yours does, but they don't have all of the features that yours does. When you email me to say you've finished the challenge, mention these other three systems and tell me how your system is similar to or different from each of these other systems. Your system doesn't have to be "better" per se. Just explain to me the similarities and differences.