

Lesson 5: Identifying People With Data



Adapted from code.org curriculum

Objectives: You will be able too...



- ☞ Explain privacy concerns that arise through the mass collection of data
- ☞ Use online search tools to find and connect information about a person or topic of interest
- ☞ Explain how multiple sources of data can be combined in order to uncover new knowledge or information
- ☞ Analyze the personal privacy and security concerns that arise with any use of computational systems

Getting Started: Explore – World's Biggest Data Breaches Visualization



☞ Go to this site:

<http://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/>

☞ You can find it on Google Classroom

☞ Spend a couple minutes browsing through the different breaches there.

☞ What kind of data is being lost? How much?

☞ What kinds of issues could arise from this data getting into the wrong hands?

Getting Started: Explore – World's Biggest Data Breaches Visualization



- ☞ All kinds of personal data, from usernames to social security numbers and credit card information, is lost fairly regularly.
- ☞ This information can be used to steal money or identities, get access to classified information, blackmail people, etc.
- ☞ We've seen a lot of potential benefits, but clearly there are some risks with collecting all this info...

Activity: Data Privacy Lab: How easily can you be identified?



- ❧ In the data breaches we just looked at, some fairly important pieces of information were stolen.
- ❧ Credit card numbers, passport information, or government security clearances are obviously not something we'd like to fall into the wrong hands.
- ❧ Other pieces of information, however, don't seem that bad. What about your ZIP code, your birthday?

Activity: Data Privacy Lab: How easily can you be identified?



- ☞ Today we will be working in the Data Privacy Lab – Web Site (see link in Google Classroom)
- ☞ Type in your info (birthday, ZIP, gender) to determine how many other people share those characteristics

Activity: Data Privacy Lab: How easily can you be identified?



- Why is it significant that you are one of only a few people with your birthday, gender, and ZIP code? What concerns does this raise?

Activity: Data Privacy Lab: How easily can you be identified?



- ❧ Why is it significant that you are one of only a few people with your birthday, gender, and ZIP code? What concerns does this raise?
 - ❧ We can be uniquely identified from just a few pieces of information.
 - ❧ Even information we would not normally consider to be “sensitive” can still be used to identify us.
 - ❧ There are security and privacy concerns raised as a result of most information about us being available online.

Activity: Research yourself online

- ☞ As we just saw, there are security and privacy issues that are raised, even when small, seemingly unimportant pieces of information are available online
- ☞ Most of the time, we don't actually think about what kinds of information are available about us, or how someone might connect the dots with that information.

Activity: Research yourself online

- ⌘ We are going to use the “Research Yourself – Activity Guide” (15-20 minutes)
- ⌘ We will use Google, public pages of the school’s website, potentially a social network

Wrap-up: Share out



- ❧ What information were you able to find about yourself?
- ❧ Were you able to make connections in the data you collected to figure out anything else?
- ❧ Were you concerned about anything you were able to find?

Wrap-up: Share out in small groups

- ☞ A great deal of information about us is freely and easily available online.
- ☞ By making connections in this data or to other sources of data, it is possible to form a more complete picture of who we are and what we do.
- ☞ There are security and privacy concerns raised by the data we post online about ourselves.