04 - Introduction to Privacy

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Today’s class

• What does privacy mean to you?
• Privacy goals
• Why is privacy hard to measure?
• How privacy is protected
• Privacy notice and choice (intro)
• Homework presentations
What does privacy mean to you?

http://cups.cs.cmu.edu/
privacyillustrated/
Mechanical Turk is a marketplace for work.
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or learn more about being a Worker
CONTRIBUTE

What does privacy mean to you?

Contribute to the dialogue by submitting your own picture.

Please draw a picture of what privacy means to you and then upload it below. You can either draw the picture on paper and then take a picture of it to upload or scan it for upload. Alternatively, you can draw it using a tablet or other electronic medium and then upload it.
PEARL OYSTERS HAVE SOMETHING VALUABLE TO PROTECT - THE PEARL.
THEY CAN DO SO BY SIMPLY 'CLOSING THE LID'
IF ONLY SAFEGUARDING THE DATA IN MY LAPTOP WERE THAT SIMPLE!

Sharon Monica Rajkumar
Private/own space behind the curtains

Public space
I have nothing to hide

I have lot to hide
"Privacy is being able to cover yourself or your things as much as you want."
Privacy means having a safe space knowing that no one will be able to see it w/o my permission.
the right to be let alone

– Samuel D. Warren & Louis D. Brandeis
The Right to Privacy
December, 1890
Privacy is the right to be by yourself. Privacy is isolation.
– Kevin, age 28
Privacy is protection from unwanted scrutiny or attention.

–RMF, age 54
This is me in my privacy room in my basement. I go in there when I want to be alone. I can calm down and breathe.

ELENA
My clubhouse in my basement is private. My brothers and me have secret meetings. Felicity 5
Being safe in my room....
Curtains on my windows, a
lock on my door, and my
computer protected by a
firewall

– Mori, age 26
My drawing shows physical and emotional privacy. The blanket symbolizes a barrier to openness.

– Kelly, age 36
Ava 8 years old

open up!
It is a woman changing clothes. She is behind a privacy screen so no one can see her changing. – Alessa, age 32
TAYSHAW 5

SPIDERMAN NEEDS PRIVACY TO PUT HIS COSTUME ON.
someone going to the bathroom.

My kitty in the bathroom.

Privacy
Privacy

Sally, 5
Privacy means I can do things and not face public ridicule or judgment. Like taking a shower, who wants to have an audience while taking a shower? – Chris, age 37
This is me enjoying my privacy. This is the only time during the day, where I am truly alone and nothing bothers me. No man, no children, no dogs.

– Cindy, age 54

I have four children, two of which I share a bedroom with. Privacy, to me, is to have a space to yourself that no one is allowed in to keep whatever it is you want to keep for yourself.

– Karin, age 26
I feel privacy is behind this closed door. No one can hear you or see you and you can be alone with your thoughts.

– Tracy, age 34
I believe a fence is a sign of privacy. This picture shows enough of my house to show that I don’t mind some people to see me, but I prefer a barrier when it comes to some things.

– Shanna, age 32
Privacy for me is like a place with a one-sided mirror. I can see outside but no one can see in unless I open the door. Also an extra wall on the outside just in case.

– Kim, age 21
Unfortunately, I think most of my life has been digitized so true privacy would be me alone in a Faraday cage, maybe napping.

– Maddy, age 20
It's a turtle huddled up inside its shell. – John
Privacy to me is sealing my box of data from web applications and services which try to collect it.

– Hana H., age 23
Privacy means that the thoughts in my brain are locked away.

– Thomas, age 19

This is a metaphor for the privacy of the thoughts in my head, although they radiate out you cannot get into it while its still working.

– Kay, age 25
Control

Privacy is the claim of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.

– Alan Westin, Privacy and Freedom, 1967
It is the difference between what the average person wants other people to see, and what they don’t want other people to see. Privacy and personal protection separates those two things.

– CJ, age 20

I can decide who I'd like to share my privacy information!

– H, age 26
– Allison Lefrak, Senior Staff Attorney, Federal Trade Commission Division of Privacy and Identity Protection
Privacy is about control – controlling what is shared about your thoughts and preferences, the things that make you you.

– KRB, age 39
Sometimes the only way to have privacy is to just get up and leave.

– Paula, age 62

A curtain of rain offers more privacy than a solid door.

– Aneta, age 45
ALONE TEXTING!

- Keep calm and cuddle on!
- Texting my friend.
- Stay out.
- Alina, what's up to?
- OK!
How many people can see what you’re doing? Make your pages private!

Jordyn, 16
Privacy means having the ability to not be 'seen' online, to not be tracked or have all of your information remembered.... I think the 'incognito mode' on a browser helps with privacy because your history or cookies aren't tracked.

– George, age 18
... having a conversation out in the open, however, their language is being encrypted with binary code so other people can't tell what they are speaking. – Shinobu, age 24
Privacy is protecting your devices that collect and store information.

–Sarah S., age 23
LIBERTY, JUSTICE, AND HTTPS FOR ALL.
To me privacy means being able to get away from unwanted eyes.

– NotAnArtist, age 19
#TheFappening
#StopTheNSA
#NoSecurity
#Leaks
#NobodyIsSafe
…. all the messages I see online every day that I feel invade my privacy and that I wish I could prevent. – Tiggy, age 52
My picture shows a computer with someone viewing social media sites. They can’t see any private information due to privacy settings....

– Madeline 26
Private Parts Government
Dating/Home Life
What you do on the Computer
Texts/Wiring
Phones
Grades
Thoughts
Sexual Preference
Secrets
Your House

Lexie 17
MY
EMPLOYER

FACEBOOK
POSTS
BY ME

YOU'RE FIRED
EARTH INVISIBLE SATELLITES
GPS SATELLITES ...
"COSMIC SURVEILLANCE"

SECURITY CAMERAS

SURVEILLANCE

SPY DRONES

SPY BUGS

( PHYSICAL ) SPYWARE

INTERNET ELECTRONICS

DIGITAL WORLD

(SATELLITE INTERNET)

INTERNET CABLE

ISP's

NSA

GOVERNMENT

OTHER PEOPLE

STRANGERS

PEOPLE YOU KNOW

FRIENDS

FAMILY

SECRET TUNNEL FOR CLOSE PEOPLE

MY PRIVACY
I don't want my collected data to know more about me than I do.

– Michael Farb, age 42
Privacy is a value that is very important to have in a society to work and progress – Pedro Leon, age 35
You will never outgrow your need for privacy!

– Gladys Lipton, age 91
You have zero privacy anyway. Get over it.

– Scott McNealy, CEO of Sun Microsystems, 1999
It's a box containing the answer to "What privacy means to me." You researchers are measuring it and studying it, but can't actually get the answer, because it's PRIVATE. ha ha.... – Heather, age 44
http://cups.cs.cmu.edu/privacyillustrated/
Hard to define

“Privacy is a value so complex, so entangled in competing and contradictory dimensions, so engorged with various and distinct meanings, that I sometimes despair whether it can be usefully addressed at all.”

Limited access to self

“Being alone.”
- Shane (age 4)

“the right to be let alone”
- Samuel D. Warren and Louis D. Brandeis, The Right to Privacy, 4 Harv. L. Rev. 193 (1890)

“our concern over our accessibility to others: the extent to which we are known to others, the extent to which others have physical access to us, and the extent to which we are the subject of others attention.”
Control over information

“Privacy is the claim of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.”

“...each individual is continually engaged in a personal adjustment process in which he balances the desire for privacy with the desire for disclosure and communication....”

Alan Westin, Privacy and Freedom, 1967
How does each goal relate to privacy?

*I want to have… I want to be…*

- Solitude, uninterrupted
- Unseen, unheard, unread
- Not talked about
- Not judged
- Not profiled, not targeted, not treated differently than others
- Not misjudged
- Free to try, practice, make mistakes, self-reflect
- Not surprised (contextual integrity)
- Not accountable
- Not required to reveal
- Unknown
- Forgotten
- Intimacy
- Control
- Boundaries
- Identity
- Security
- Safety
- Others?
Measuring privacy

• Why is privacy hard to measure?
• Why are attitudes about privacy hard to measure?
• Why is the cost of privacy invasion hard to measure?
How privacy is protected

- Laws, self regulation, technology
  - Notice and access
  - Control over collection, use, deletion, sharing
  - Collection limitation
  - Use limitation
  - Security and accountability
Privacy laws around the world

- Privacy laws and regulations vary widely

- US has mostly sector-specific laws, minimal protections, often referred to as “patchwork quilt”
  - No explicit constitutional right to privacy or general privacy law
  - But some privacy rights inferred from constitution
  - Narrow regulations for health, financial, education, videos, children, etc.
  - Federal Trade Commission jurisdiction over fraud and deceptive practices
  - Federal Communications Commission regulates telecommunications
  - Some state and local laws

- European Data Protection Directive - EU countries must adopt similar comprehensive laws, recognize privacy as fundamental human right
  - Privacy commissions in each country
OECD fair information principles

- Collection limitation
- Data quality
- Purpose specification
- Use limitation
- Security safeguards
- Openness
- Individual participation
- Accountability

http://www.privacyrights.org/ar/fairinfo.htm
US government privacy reports

- U.S. FTC and White House reports released in 2012
- U.S. Department of Commerce multi-stakeholder process to develop enforceable codes of conduct
Privacy self regulation

Notice and Choice
Notice and choice

Protect privacy by giving people control over their information

**Notice** about data collection and use

**Choices** about allowing their data to be collected and used in that way
Nobody wants to read privacy policies

“the notice-and-choice model, as implemented, has led to long, incomprehensible privacy policies that consumers typically do not read, let alone understand”

Cost of reading privacy policies

• What would happen if everyone read the privacy policy for each site they visited once per year?
  • Time = 244/hours year
  • Cost = $3,534/year
  • National opportunity cost for time to read policies: $781 billion

Towards a privacy “nutrition label”

- Standardized format
  - People learn where to find answers
  - Facilitates policy comparisons
- Standardized language
  - People learn terminology
- Brief
  - People find info quickly
- Linked to extended view
  - Get more details if needed
Iterative design process

- Series of studies
  - Focus groups
  - Lab studies
  - Online studies

- Metrics
  - Reading-comprehension (accuracy)
  - Time to find information
  - Ease of policy comparison
  - Subjective opinions, ease, fun, trust


Privacy label for Android

DESCRIPTION
Like word games? Like weasels? This is the game for you. Word Weasel is a fast word game where you find as many words as you can from 9 letters in 50 seconds. Compete with everyone else playing at the same time, a new game starts every minute!

"The most fun you can have on your own with 9 random letters. Brilliantly simple, devilishly addictive." —Kim, Android Market comment

comment
Ad supported, with ability to upgrade to ad-free full version in game.

Uses the SOWPODS word list containing 100,000+ words. They may be obscure, but yes those are words!

Privacy Facts
THIS APP COLLECTS YOUR
- Personal information
- Contacts
- Location
- Calendars
- Photos

THIS APP USES
- Advertising
- Analytics

REVIEWS
Average 4.6
5 stars 534
4 stars 210
3 stars 37
2 stars 5
1 star 7
http://www.azarask.in/blog/post/privacy-icons/
More on privacy coming March 22
Homework 1 presentations