Digital Footprints: The Web, Social Media, and your privacy!
PART 2.

### Interacting On The WWW
- Mostly we think of our small circle of friends & organizations when we are online ...
- But really the whole world has access
- And, to some degree, we are anonymous
- So … we can behave however we like, right?

### Facebook: NYPD Professional/Private overlaps

![Image of police officers on Facebook]

**N.Y.C. Police Maligned Paradegoers on Facebook**


The West Indian American Day Parade is held annually over the Labor Day weekend as a celebration of Caribbean culture.

Published: December 5, 2011

The New York Times

Dirty Word?

They called people “animals” and “savages.” One comment said, “Drop a bomb and wipe them all out.”

The problem with this is that N.Y.C. Police officers were displaying roiling emotions that would not have been expected in such a public forum.

But really the whole world has access … what sort of image do you want to present?

### How Much Do YOU Want To Reveal
- Even though we do the “revealing” we may be wise not to reveal “all”
- People have lost jobs based over FB posts
- Five Guidelines: Watch what you say about behavior, schedule, biases, employer, and the drama in your life

### The Problem
- What you place on FB and Tweet can usually be widely accessed
  - Grandmother (a FB user, too!), HR department, etc.
- Digitization, copying: it doesn’t go away … even if you try deleting
- When people first meet you, they may check you out online … what sort of image do you want to present?
- You’re not really anonymous after all
“Offensensitivity”

Key points – when writing in online discussion

- Thousands of people will see it
  - You can easily and unintentionally offend them
- The collision comes from different cultures, social norms, backgrounds, assumptions, religions
  - You’re not wrong; they’re not wrong... just different
  - They’re no more likely to change their thinking than you

Tolerance, open-mindedness, patience needed

Privacy violations: For good or evil?
Directly related to the essay due on Tuesday!

Guidelines – Think Twice About …

- Behavior – text or photos on socially unacceptable behavior has cost people jobs
- Schedule – posting or tweeting where you are not – “Off to Hawaii” – is direct help to burglars
- Biases – “hating” others is easy enough to do, but is that how you want your public image?
- The boss may follow your thoughts on your job
- Drama – the drama in our lives often consumes us; it’s hard not to tweet, post about it, but it often reveals information about others
Contrast Two Videos: Surreptitious, Not

- Star Wars Kid
  - A/K/A Ghyslain Raza
  - Just messing around in drama studio at school
  - Other kids found and uploaded
    - http://www.youtube.com/watch?v=HPPj6viIBmU

- Numa Numa Guy
  - A/K/A Gary Brolsma
  - http://www.youtube.com/watch?v=WymnUJFHEARg&feature=fvwrel

More Recent Cases

- Tyler Clementi, a Rutgers student whose roommate recorded him during a sexual encounter and uploaded it to the Internet
  - Result: Clementi jumped off a bridge

- Two days later a college student’s phone accidentally dialed his buddies while he was engaged in sex; they uploaded it to youtube
  - Result: Embarrassment

Associated Press found at least 12 cases in the U.S. since 2003 in which children and young adults between 11 and 18 killed themselves after falling victim to some form of “cyberbullying” - teasing, harassing or intimidating with pictures or words distributed online or via text message.

Recent Incidents: Cell phone videos

- Occupy Wall Street pepper spray
- Davis Pepper Spray
  - Changes the process of democracy
  - Right to free speech, to protest
  - Can’t go undetected

His personal details leaked by Anonymous

- Huffington Post Tony Bologna followup
  - As an act of retribution, the hackers group Anonymous identified Bologna and leaked his personal information including his address, phone number, and names of known family members.

Posting Audio/Video Online: Good or Evil?

- Alexandra Wallace original, 2.52 minutes
Jimmy song: Raised Money for Charity?

- Jimmy Response with humor!!

Death Threats, Personal Info, Leave UCLA

Issues

- Surreptitiously capturing behavior => privacy violations
- Capturing potentially criminal behavior => evidence
- But what about innocent until proven guilty?
- What about classic methods for ensuring a fair trial, like change of venue?
- When the internet is involved, changing the venue doesn’t help
- People do something stupid/bad
- Retribution? --- it can never really be deleted
- Reveal their private details online – where they live, their family, pictures, bikini model experience, etc.
- Alexandra Wallace had to change her name, drop out of UCLA

Wikileaks – Changing democracy?

- Wikileaks Documentary.
- 55 minutes long.
- First five minutes, plus from time 30 min – 35 minutes in class
- Watch whole thing for homework!

What are you supposed to learn?

- What is a digital footprint?
- What technology advances in the last ten years have made ‘Big Brother’ possible
- Which organizations try to protect your privacy.
- Why you should read the “Terms and Conditions” for every app you download
- You never know what they might say. Example: Pulse App asks you to give permission for them to track every number you call
- Why you should consider what you put onto public sites like Facebook.
- Are you sure your privacy settings are as you want?
- Name three recent cases of information going viral that could never have happened ten years ago.

Privacy violations: For good or evil?
How technology is changing democratic processes
How many times have you posted something to a semi-public site that you wished you could retract?

- A. never
- B. one or twice
- C. a lot

More --- what are you supposed to learn?

- What was the TIA program?
- What kind of data was TIA interested in?
- What do the TIA program and computational advertising companies have in common?
- How do computational advertising companies get paid?
- How is privacy defined in the United States?
- How are security cameras being used in law enforcement?
- How is the web being used in the democratic process?

2 Homeworks this week!

- Privacy Essay: Due next Saturday at 5pm. But do it today while its all fresh in your mind?
- First Processing homework. Due next Tuesday
  - Download processing from www.processing.org
  - Do the tutorials
- Don’t get behind. GO TO SECTION!

Big Brother?

- Have you read George Orwell’s 1984?
  - How does today’s data gathering and constant surveillance differ from Orwell’s vision?
- We can each be our own little "Big Brother" watching our kids, friends, neighbors ... (iPhone find friends app)
- Vigilante justice with cell phone cameras and web postings
- Cameras everywhere
- RFID tags in humans?

Connecting the dots

- How does the loss of anonymity in the digital age impact free speech and dissidents/whistle-blowers and the like?
- Re-identification of supposedly de-identified medical records. (ucsc faculty survey)
Giving up privacy

- Saves time
- Saves money
- For convenience
- Just for fun

Basic Processing ...

Drawing pictures ...

© Lawrence Snyder 2004
Processing ...

- Processing is a language for programming graphical and image-based computations
- More fun than programming an operating system
- Easier to do because we “see” what’s happening
- Immediate feedback => bottom up programming style

Get It: http://processing.org/download/

- If you have a personal computer, then grab a copy of the Processing system and put it on your machine
- You will want “Windows” or “Mac” versions
- Following installation instructions ... it takes less than 5 minutes and then you can work on your own computer!

What You See

- When you start up the Processing system...

Add Some Code

- Type in instructions that you will learn shortly
- Then run your program

Looking At Simpler Code

- Drawing a snow angel is straightforward ...

Looking At Simpler Code

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Just Do It!
Coding Is ALL Detail

- Notice everything!

```
void draw() {
  size(600, 600);
  background(192, 64, 0);
  stroke(255, 255, 255);
  rect(10, 10, 30, 40);
  fill(255, 0, 0); // red
}
```

Red or White?

This program draws a
A. red rectangle
B. white rectangle

```
rect(10, 10, 30, 40);
fill(255, 0, 0);
```

The Color Purple

- Colors in most Web programming are given as three values: RGB, for red, green, blue
- The Color Purple, for example, is: 128,0,128
- These positions are the intensity of the little lights that make up a pixel on the screen
  - The least intensity is 0, that is, off
  - The greatest intensity is 255, maximum brightness
- Amazingly, the three max RGB colors make white
- So, purple is 1/2 intensity of Red, no Green, and 1/2 intensity of Blue ... makes sense

Questions about “Iron Rich Snow”

- The angel is on a rust-colored background specified by: background(192, 64, 0); ... which means?
- Stroke sets line color: stroke(255,255,255);
- Suppose the angel is “iron rich” and the snow white
- Fill sets color of object: fill(128, 0, 128);

It’s All The Same

- When the values for RGB are all the same, it’s some color of gray, or white, or black
- Since writing background(255,255,255) is kind of a drag, Processing allows us to give just one argument; so background(255) is equivalent to giving all three 255s
- What colors are these backgrounds?
  - background(255,0,0);
  - background(64);
  - background(0,64);

Simple Shapes Make Robots

- Reas and Fry, in their book, show us a cute robot they programmed using simple shapes
- They give their code and we can see how they built it
- To make the point that all code must "make sense" – it’s not gibberish – lets look at it even though we don’t know Processing yet
Knowing Only About Color …

- We “improve” the robot by adding some color

A Quick Comment on Processing

- We have written two kinds of Processing programs –
  - static, which only draw a picture
  - dynamic, which keep drawing a picture

```java
void setup() { // Disable drawing stroke(1000); // Set to gray ellipse(276, 276, 276, 162); // Left ellipse(276, 276, 276, 162); // Right // Reference ellipse(276, 155, 246, 112); // Small ellipse(276, 155, 306, 161); // Tall ellipse(276, 155, 342, 170); // Taller
}
```

What’s The Difference?