CSC104 Winter 2013
Why and how of computing
week 12

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Text: Picturing Programs
Outline

privacy

Notes
share, but don’t share

information wants to be shared... how much? with whom?
privacy, pro or con?
make your lists...
concentric circles of privacy

who fits where?
privacy leaks
know privacy’s plumbing

buyer loyalty plans  what do they for those “deals”?
surveys  not just an interruption
credit information  who knows you paid late?
recorded viewing  check the agreement
black boxes  not just for crashes
911  where’s waldo?
rfid  bar codes, shopping history, drugs?
computer use  what’s your admin see?
cookies  where have you been browsing?
required leaks
can lose your identity

Being born, working, imprisoned, or paying taxes, can generate information about you that you aren’t allowed to keep private. How many of these do you think are necessary to identify an American with more than 80% accuracy (according to Dr Latanya Sweeney)?

- hospital of birth
- date of birth
- gender
- postal code
- blood type
what can you do?

increase privacy and security

- passwords and pins
- know something about contacts
- update security software, OSs
- careful when you click

For important stuff encrypt
flatten

; flatten : list -> list
(define (flatten L)
  (cond
    [(cons? L) (apply append (map flatten L))]
    [else (list L)])
)

; predict what (flatten 3) does

; predict what (flatten (list 3)) does

; predict what (flatten (list 1 2 (list 3))) does
(define (depth L)
  (cond
   [(cons? L) (+ 1 (apply max (map depth L)))]
   [else 0]))

; predict what (depth 3) does
; predict what (depth (list 3 4)) does
; predict what (depth (list 3 4 (list 5 6))) does