CSC104 Winter 2013
Why and how of computing
week 11

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Text: Picturing Programs
Outline

networks

Notes
roundly connected
ring topology

wait for the token
centrally connected

star configuration

server runs things
all connected
bus configuration

coop erate and back off
network of networks

local networks interconnected by gateways
(click images)

gateway, e.g. ccb.r.fitz

FC (Federation of Computing and Library Resources at the University of Toronto)
The medieval internet

- Email
- File transfer protocol
- Network File Service
- Tim Berners-Lee: WWW impossible without open protocols
now the internet ≈ WWW
antipodal clicking...

some "users"

larger corps

more control

then

where’s the content?

how’s it move around

who’s in charge?

teach host & user has some control

mostly in Australia,

from host→host

hopping along the internet

no single authority although
ICANN controls some TLDs
can you believe the web?

- Every browser session requires an exchange of trust, from both sides.

- There is a combination of broad-based publishing and powerful media interests.

- The jury is still out on accuracy, for example Wikipedia versus Britannica.
; 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
depth

; depth : list -> number
(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