Computer & Network Security

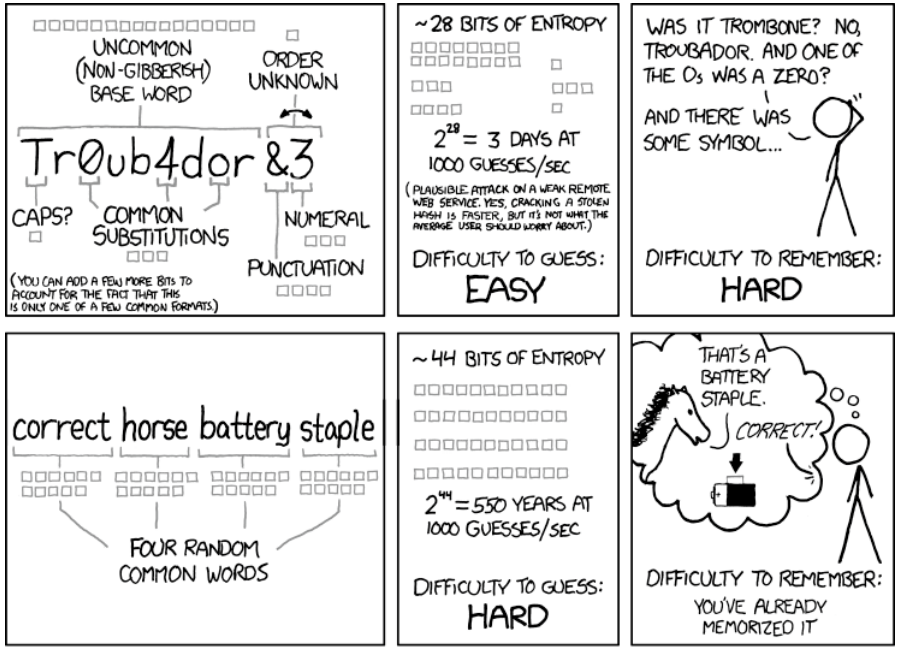
Lecture 7-1

Computers & Society (CPSC 430)

Kevin Leyton-Brown

https://www.cs.ubc.ca/~kevinlb/teaching/cs430

Password Strength



Hackers

- Hacker (original meaning):
  - Explorer, risk-taker, technical virtuoso
  - Values free exchange of information; mistrusts authority; values technical skill; holds an optimistic view of technology
- Hacker (ultimate meaning):
  - Teenagers accessing corporate or government computers
  - Stealing and/or destroying confidential information
- What hasn't changed: hackers' public image

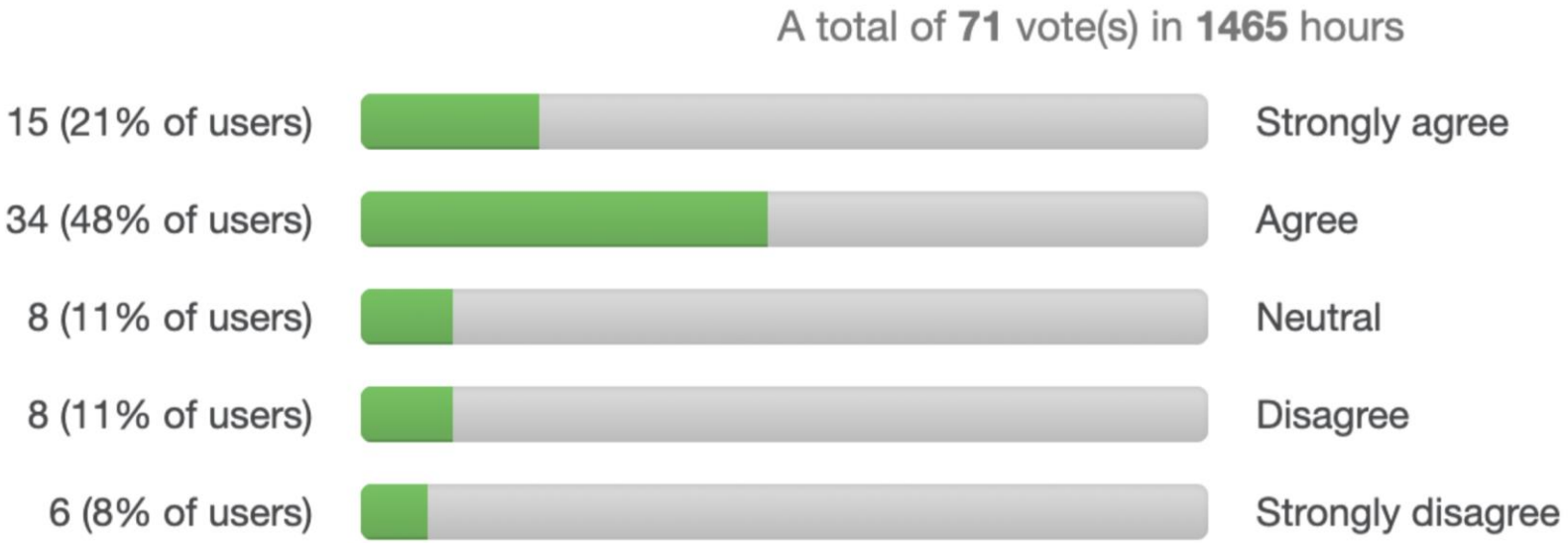
Ethics of Hacking

- Parallels between hackers/phreaks & MP3 downloaders
  - Establishment overvalues intellectual property
  - Use of technology as a “joy ride”
  - Breaking certain laws considered not that big a deal
  - (Guess what the police, RIAA thinks about these arguments?)

- *Have you ever hacked anything?*
- *Which, if any, forms of hacking do you consider ethical?*
- *Is it wrong to learn hacking or phreaking skills, if these skills are never put to use?*

Computer and Network Security

"Canadians should be able to vote online in federal, provincial and municipal elections."



Online Voting

- Motivation:
  - More people would vote
  - Votes would be counted more quickly
  - Cost less money
  - Avoid disputed elections like Florida 2000
  - Eliminate ballot box tampering
  - Software can prevent accidental over-, under-voting
- Risks:
  - Gives unfair advantage to those with computers
  - More difficult to preserve voter privacy
  - More opportunities for vote selling
  - Obvious target for a DDoS attack
  - Security of election depends on security of home computers
  - Susceptible to phony vote servers
  - No paper copies of ballots for auditing or recounts