Offense vs. Defense

Arshiya Khan

Ph.D. Candidate, ECE

University of Delaware, USA

Agenda

- Cybersecurity
- Cyber Threats
- Phishing Attack
- Wireshark
- System Hardening

Cyber Security

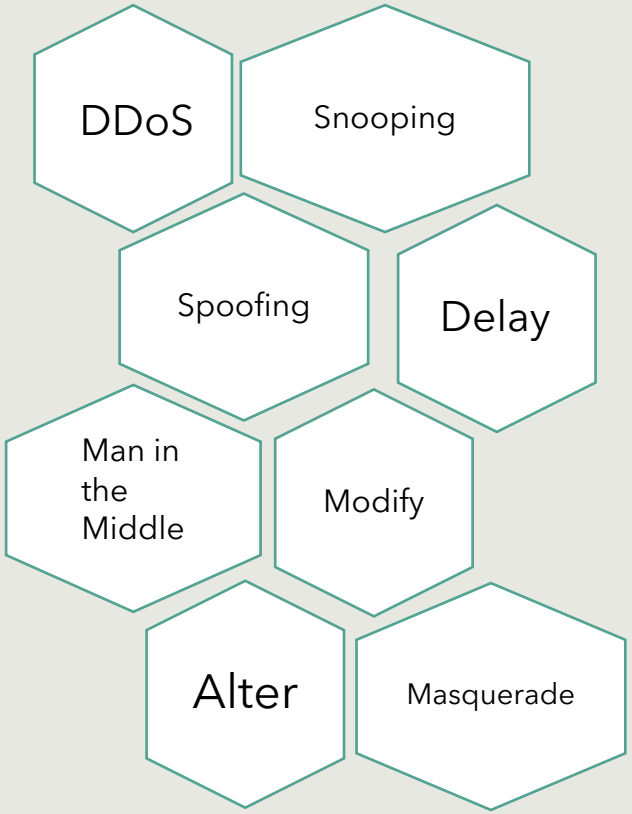
- Computer and Network Security
- Preserve CIA
  - Confidentiality
  - Integrity
  - Availability
- C? I? or A?
  - Credit card numbers are stolen
  - Car
    - Broken
    - Stolen

Cyber Security

- C? I? or A?
  - A user has gained root privileges on an E-commerce website. Changed the domain name of the website. Put all items on 50% discount.

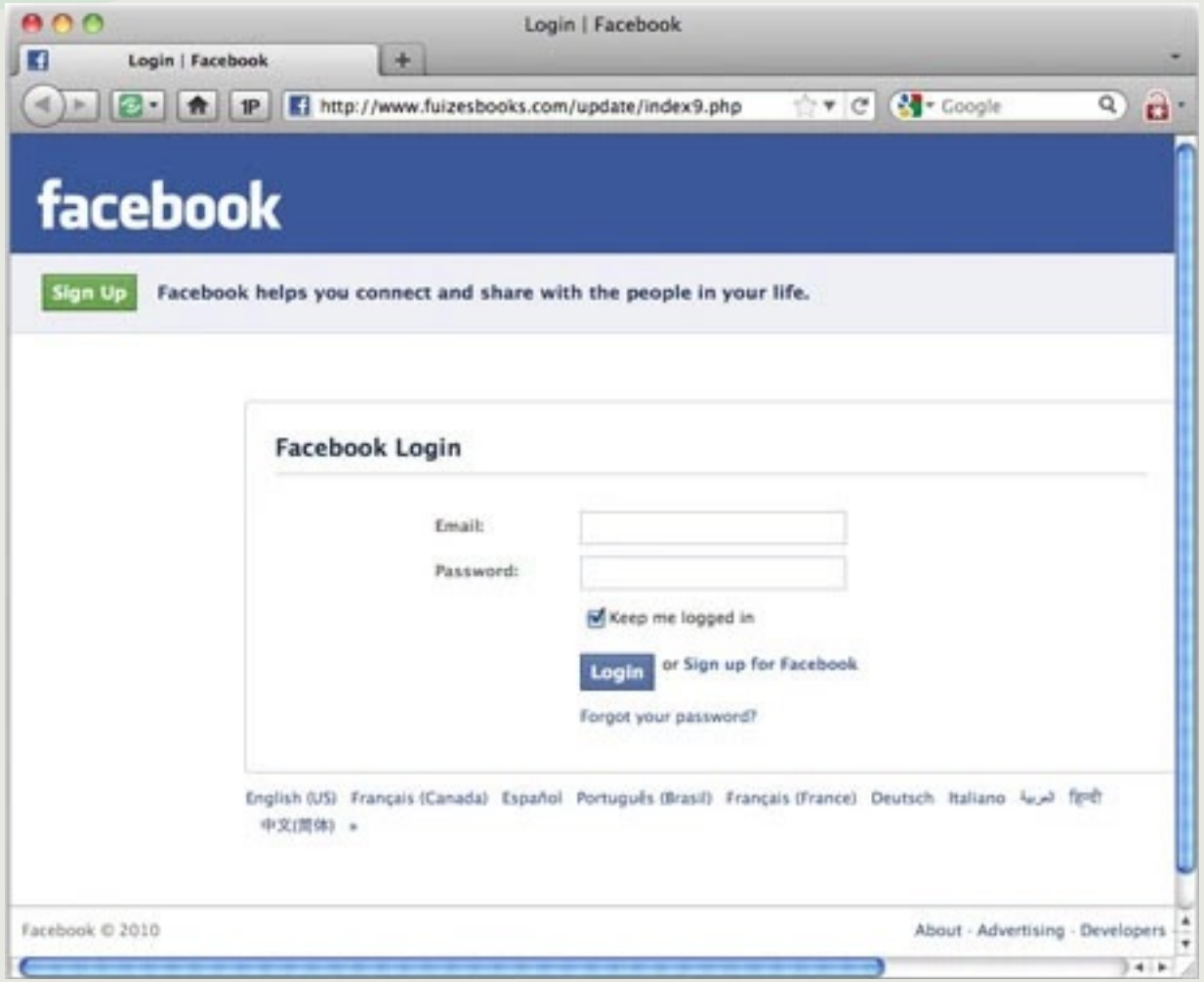
Cyber Threats

- Potential Violation of CIA
- Classes:
  - Disclosure – Unauthorized access to information
  - Deception – Acceptance of false data
  - Disruption – Interruption or prevention of correct operation
  - Usurpation – Unauthorized control of some part of a system
- SQL Injection Attack
  - Try it!
  - Classify?



Phishing Attack

- Social Engineering technique
- Collection of personal data carried out illegally or fraudulently through the internet
- Use the information collected to make purchases online, bank transfers or cash withdrawals on behalf of the fraud victim
- Examples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Wireshark

- Network Packet Analysis
- Install software https://www.wireshark.org/
- Examine http://mailtranscripts.com/

System Hardening

- Defensive policies and steps to make your system difficult to hack
- Computer Hardening
- Network Hardening
- https://www.thefanclub.co.za/how-to/how-secure-ubuntu-1604-lts-server-part-1-basics

Thank You!