Course Introduction

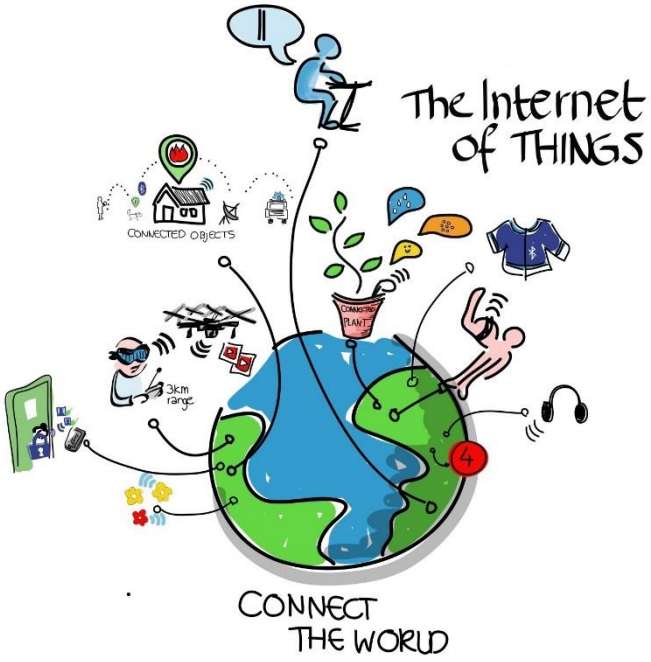
Information Security
2021 Spring Semester
Younho Lee

Course Overview

- **Motivation – why do we need to learn information security?**

Computer has valuable information

Computers are connected



They can control our (physical) world!

Course Overview (Cont'd)

- **This course focuses on the technical aspects of information security**
  - List of the techniques and their usages

  - On various IT areas
    - Network security
    - Database security
    - ....

Course Overview (Cont'd)

❖ Contents

1	Overview (Chapter 1) (3.8)
2	Cryptographic Tools (Chapter 2) (3.15)
3	Cryptographic algorithms: Symmetric Encryption and Message Confidentiality (Chapter 20) (3.22)
4	Cryptographic algorithms:Public key cryptography and message authentication (Chapter 21) (3.29)
5	User authentication (Chapter 3) (4.5)
6	Access control (Chapter 4) (4.12)
7	Database and Data center security (Chapter 5) (4.19)
8	Midterm week (4.26)
9	Denial of Service Attack (Chapter 7) (5.3)
10	Intrusion Detection and Firewalls and Intrusion Prevention System (Chapter 8/9) (5.10)
11	Malicious Software (Chapter 6) (5.17)
12	Buffer Overflow (Chapter 10) (5.24)
13	Software Security (Chapter 11) (5.31)
14	Reserved (6.7)
15	Final Exam (6.14)

Course Overview (Cont'd)

- **Grading**
  - 20% - homework (Programming problem)
  - 40%/40% midterm exam/final exam
- **Younho Lee**
  - Frontier bldg. #712-2
  - Office hour
    - Appointment based
- **Textbook**
  - W. Stalling and L. Brown, "Computer Security: Principles and Practice" (Global Ed.) 4th Ed.

Questions?