Lecture 1 Outline

March 29, 2016

Reading: text, §1

- 1. Greetings and felicitations!
 - a. About the class
- 2. Basic components of computer security
 - a. Confidentiality
 - b. Integrity
 - c. Availability
- 3. Classes of threats
 - a. Disclosure
 - b. Deception
 - c. Disruption
 - d. Usurpation
- 4. Policy vs. mechanism
 - a. Policy
 - b. Mechanism
- 5. Goals of security
 - a. Prevention
 - b. Detection
 - c. Recovery
- 6. Trust and Assumptions
- 7. Types of mechanisms: secure, precise, broad
- 8. Assurance
 - a. Specification
 - b. Design
 - c. Implementation
 - d. Maintenance and operation
- 9. Human issues
 - a. Organizational problems
 - b. People problems