January 8, 2024 Outline

Reading: *text*, §1, 2, 20.1.2.2
Assignments: Homework #1, due January 19; Project selection, due January 21

Module 1

1. Introduction to class

    (a) General information

    (b) Homework

    (c) Handouts

Module 2 (Reading: *text*, §1)

2. The basic components of security

Module 3 (Reading: *text*, §20.1.2.2)

3. Reference monitors and security policy

Module 4 (Reading: *text*, §2)

4. Access control matrix and entities

    (a) Subject, objects (includes subjects)

    (b) State is (S, O, A) where A is access control matrix

    (c) Rights (represent abstract notions)

5. Instantiating access control matrices

    (a) Example: UNIX file system

        i. *read*, *write*, *execute* on files

        ii. *read*, *write*, *execute* on directories

6. Access control matrix and entities

    (a) Example: Boolean expressions

    (b) Example: History and limiting rights