

SENG2250/6250 System and Network Security

Self-Quiz Week 5, Semester 2, 2020

True/False Questions.

1. Access control is a mechanism that limits who can access what system resources in what ways.
2. The mediation issue of access control considers the balance between the expressiveness (on security policies) and efficiency.
3. In a computing system, a user can have multiple principals and a principal will be assigned to different users.
4. Access control list is useful for data-oriented protection and capability list is easy to add/delete users.
5. Bell-LaPadula (BLP) model is a multilevel security access control model which is based on integrity concerns.
6. Apply the Biba access control model and show if the following statements are true or false.
 - a. Coral cannot read personnel files but can write to Email files.
 - b. Bob can read internal documentation, but cannot write to it.

Top Secret	Alice (read and write)	Personnel Files
Secret	Bob (read)	Email Files
Secret	Coral (write)	Internal Documentation
Unclassified	Eve (read)	Phone Extension Lists

Assume that once given read and write capabilities, they are applied to all files.

Short-Answer Questions

7. What is the purpose(s) of a reference monitor for access control?