CS361 Questions: Week 5

Type your answers and submit them on Canvas.

1. Are the SD and ID categories in Lipner's model related to each other?

2. Why is it necessary for system controllers to have to ability to downgrade?

3. Can system controllers modify development code/test data?

4. What form of tranquility underlies the downgrade ability?

5. What is the purpose of the four fundamental concerns of Clark and Wilson?

6. What are some possible examples of CDIs in a commercial setting?

7. What is the difference between certification and enforcement rules?

8. Why would a consultant hired by American Airlines potentially have a breach of confidentiality if also hired by United Airlines?

9. In the example conflict classes, if you accessed a file from GM, then subsequently accessed a file from Microsoft, will you then be able to access another file from GM?

10. What benefits are there in associating permissions with roles, rather than subjects?

11. What is the difference between authorized roles and active roles?

12. What is the difference between role authorization and transaction authorization?

13. What disadvantages do standard access control policies have when compared to RBAC?

14. Why would one not want to build an explicit ACM for an access control system?

15. Name, in order, the ACM alternatives for storing permissions with objects, storing permissions with subjects and computing permissions on the fly.