CS590U: Access Control: Theory and Practice

Spring 2005

Assignment #1 Due: Tuesday, Jan 18, 2005.

You should read the following reading assignments

- 1. Anderson Book: Sections 4.1 & 4.2 (Handout)
- 2. Gollmann Book: Chapter 3: Access Control (Handout)
 You can skip 3.7 for now, but read it before Jan 20 (Thursday)'s class.
- 3. Gasser Book: Chapter 3: General concepts
- 4. Granham & Denning: "Protection: Principle and Practice" (Handout)

Answer the following problems. Don't write too long, stay within two pages for the answer.

- 1. Describe three places in computing/information systems where access control is used.
- 2. Describe one experience that you were frustrated by the existence of (or lack of) access control mechanisms and what you wish the access control would be changed. If you have not frustrated by access control before, think about one place where access control could be improved.
- 3. Identify one vulnerability/attack so that can be attributed to problems in the access control mechanisms?
- 4. Identify places in the readings that you feel unclear and would like to see more explanations.
- 5. Describe what you understand as Discretionary Access Control?
- 6. Exercise 3.2 in Gollmann Book, Chapter 3. (In handout)

Pre-proposal Due: Thursday, Jan 20, 2004.

The purpose of this to avoid more than one persons work on the same project.

List 1 to 3 project topics you find interesting. Describe why these topics interest you? What are your plans? What related backgrounds do you have?

You can also propose new project ideas, including backgrounds, problem description, plan, references, etc.