

Lecture 13, April 29

Reading: §5.2.2, 5.3, 6.1–6.2

Discussion Problem. Computer security experts seem to like puns. So if you want to talk like a computer security expert, you need to be able to inject bad puns into your conversations. To get you started, here are some puns from the *Book of Lists 2*'s list of the world's worst puns. Consider yourselves armed (or forewarned)!

1. The Eskimo stabbed himself with an icicle. He died of cold cuts.
2. In his dessert list, a San Antonio restaurateur suggests, "Remember the alamode!"
3. There was an advice-to-the-lovelorn editor who insisted, "If at first you don't succeed, try a little ardor."
4. The commuter's Volkswagen broke down once too often. So he consigned it to the Old Volks Home.
5. The wise old crow perched himself on a telephone wire. He wanted to make a long-distance caw.
6. A talkative musician couldn't hold a job. Every time he opened his mouth, he put his flute in it.
7. A farmer with relatives in East Germany heard that a food package he had sent had never arrived. Optimistically, he assured them, "Cheer up! The wurst is yet to come."
8. When the promoter of a big flower show was told that a postponement was necessary because the exhibits could not be installed on time, he explained to his backers, "We were simply caught with our plants down."
9. A critic declared that he always praised the first show of a new theatrical season. "Who am I," he asked, "to stone the first cast?"
10. Egotist: a person who's always me-deep in conversation.
11. "It's raining cats and dogs," one man remarked. "I know," said another. "I just stepped into a poodle."
12. An eccentric bachelor passed away and left a nephew nothing but 392 clocks. The nephew is now busy winding up the estate.
13. The baseball pitcher with a sore arm was in the throws of agony.

Lecture outline.

1. Greetings and felicitations!
 - a. Midterm will be on *Wednesday, May 1*, in class; it is open book but you may *not* use your computer (so if your notes are electronic, print them out!)
 - b. There is a study guide, a sample midterm, and answers to it on SmartSite.
2. Example: DG/UX B2 System
3. Tranquility
 - a. Declassification problem
 - b. Strong tranquility
 - c. Weak tranquility
4. Requirements of integrity models
5. Biba Model
 - a. Low-water-mark policy
 - b. Ring policy
 - c. Strict integrity
6. Clark-Wilson Model
 - a. Theme: military model does not provide enough controls for commercial fraud, etc. because it does not cover the right aspects of integrity
 - b. Components
 - i. Constrained Data Items (CDI) to which the model applies
 - ii. Unconstrained Data Items (UDIs) to which no integrity checks are applied
 - iii. Integrity Verification Procedures (IVP) that verify conformance to the integrity spec when IVP is run
 - iv. Transaction Procedures (TP) takes system from one well-formed state to another