

CSC343 Worksheet 9

June 26, 2020

1. **Exercise 11.1.1:** Since there is no schema to design in the semistructured-data model, we cannot ask you design schemas to describe different situations. Rather, in the following exercises we shall ask you to suggest how particular data might be organized to reflect certain facts.
 - a) Add to Fig. 1 the facts that *Star Wars* was directed by George Lucas and produced by Gary Kurtz
 - b) Add to Fig. 1 information about *Empire Strikes Back* and *Return of the Jedi*, including the facts that Carrie Fisher and Mark Hamill appeared in these movies
 - c) Add to (b) information about the studio (Fox) for these movies and the address of the studio (Hollywood).
2. **Exercise 11.1.2:** Suggest how typical data about banks and customers, as in Exercise 4.1.1, could be represented in the semistructured model
3. **Exercise 11.1.4:** Suggest how typical data about genealogy, as was described in Exercise 4.1.6, could be represented in the semistructured model
4. **Exercise 11.1.5:** UML and the semistructured-data model are both "graphical" in nature, in the sense that they use nodes, labels, and connections among nodes as the medium of expression. Yet there is an essential difference between the two models. What is it?