Homework 5

Reading: Finish reading Connie’s Convenience store and Wally’s Warehouse applications. Pay attention to the use of patterns in both applications.

Problem 1 Consider a slightly modified version of the problem from the last quiz.

A nonprofit organization depends on a number of different types of persons for its operation. The organization is interested in the following attributes for all of these persons: social security number, name, address and phone.

There are three types of persons that are of greatest interest: employees, volunteers and donors. For each employee, the organization needs to keep track of the date they were hired, and for each volunteer a designation of the skill is required. A donor is a person who has donated one or more items to organization. Each item is specified by name.

There are persons other than employees, volunteers and donors who are of interest to the organization. At any given time each person can participate in organization in any combination of the roles (e.g. could have a volunteer who is a donor, or an employee who’s also a volunteer).

At the end of each year the organization needs to identify the top ten donors (based on the amount of money their donated items cost); and top ten volunteers (based on the number of hours of service).

1. Draw an object model depicting Class&Objects, their attributes, services and as well as the message connections.

2. Specify (using flowchart method) the services involved in finding ten most active volunteers.

3. Prepare a scenario view for ”organization identifies and prints the name of its top ten donors” scenario.