

## Assignment #4

(due November 9, 1999 - no extensions on this assignment)

Use Rational Rose to create initial class diagrams for the Hollerith case.

Create two separate class diagrams. One should be called Attributes and Operations, and in it you should show all the classes with attributes and operations (short descriptions of each class, each attribute, and each operation should be specified), but no class relationships. The second diagram should be called Main, and it should show all of the same classes, but without attributes and operations, but with all the class relationships. Also show verbs to describe the relationships, and show the multiplicities of the relationships (do not include subclass relationships or aggregation relationships at this time; we will add those later). Make sure that you create the class diagrams in the Logical View. Try to make the diagram as comprehensive as possible (it should include at least 8 classes).

Note: You only define your classes once, then use the same classes in both diagrams, but (under options) suppress the attributes and operations (methods) in the Main diagram.

To identify classes, read the scope of the project and look at the context diagram. The external entities from the context diagram should probably show up as classes, but there may be additional classes. Remember that anything we need to keep data on is likely to be represented by a class. (You do not need to identify primary keys or foreign keys, however, keep in mind that each object within a class has to be unique and there must be some attributes that make it unique.)

Create your class diagrams in the same Rational Rose file that already contains the use case diagram from the previous assignment. Save the Rational Rose file on a diskette. Also, print out the two class diagrams and their specifications. (There is no need to print the use case diagrams or specifications, though they should be on the same diskette.) Fit the diagrams to the page, when you print them. Hand in the diskette and the printouts (the printouts should be stapled together, with the diagrams on top) as your assignment 5.

Make sure your name is on the diskette label and on the printouts. Hand in one diskette and one set of printouts. The diskette should not contain any files not related to assignments 4 and 5.

You should each, individually, keep a backup copy of your work!

Grading Guidelines:

Requirements:	Weight
All of the most important classes included	20
All of the most important attributes included	15
All of the most important behaviors included	10
Important class relationships included and named appropriately	10
Correct multiplicities for the relation ships	10
Good descriptions for all classes, attributes, methods, and associations	20
Neat diagrams, correct linking, everything on disk correctly	15
Total:	100

**Beware:**

Incorrect file names, incorrect labeling of diskette, unrelated files on diskette, hardcopy not stapled together with diagrams on top, hardcopy not labeled properly with names of team members: up to -10 points

Incorrect placing or naming of class diagrams: up to -10 points

Virus on diskette: up to -100 points