



Homework 3

cs329e Elements of Biological Data Models
Created on 2/9/07
Version: 1.1

Assigned: 2/9/07

Due: 2/15/07, 6:00PM

Reading:

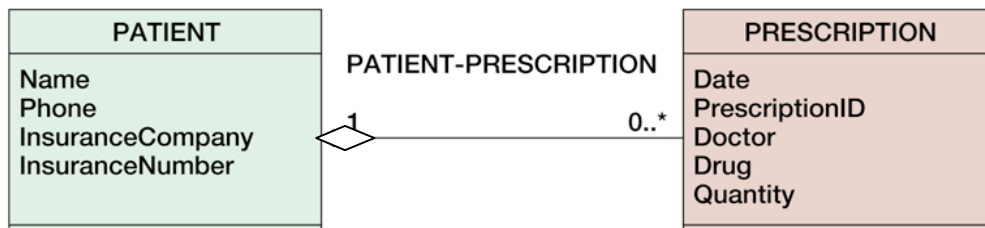
- Old: Text to page 45.
- New: Text 67-89

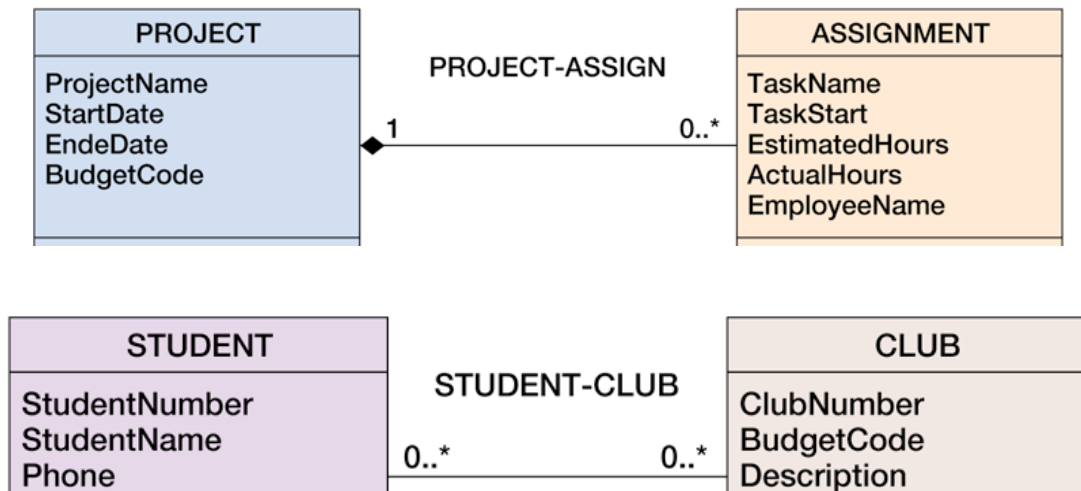
You are welcome, even encouraged, to discuss this homework in groups. But each of you must record, by yourself, all the answers using Rational Rose. You may do the work sitting side by side in the lab. You may absolutely not copy any machine readable representation from one student to another.

Part A: Draw each of these three models and compile to a physical model. [optional, compile to SQL] (suggestion: if you do your work in the lab be sure to save your work for yourself to use later. E.g. email the .mdl file to yourself or write it to flashdrive)

- What change does filling in the diamond make to the physical model.
- Remove the diamond from either of the first two models. How does that change the physical model change?
- How does the physical implementation of many-to-many associations differ from 1-to-many?

- Only hand in your answer to the questions.





Part B: Consider the problem described in the Employee Time Cards problem in the text, page 71

<http://www.tomjewett.com/dbdesign/dbdesign.php?page=timecard.php>

Develop a solution using Rational Rose. (i.e. you are not being asked to turn in the parts of the problem that ask you to write out English description)

- Include the logical data types in the logical model
- Hand in
 - a screen of your logical model
 - a screen shot of the physical model
 - the DDL text (the file with the SQL create table statements)