**Homework: ER-to-Relational Mapping**

**This is a team assignment.**

**Work on it with your database design project team.**

**Each team will then deliver one submission on the due date.**

Use the **posted solutions to questions 1 and 2** of the previous (ER) homework and convert each one of the diagram into a skeleton relational database schema using the procedure and notation that we used in class.

Please pay attention to the following:

* Type your solution using **double spacing**.
* You must submit the solutions to both problems.
* I reserve the right to grade either or both of them.
* Express every relation in the form:**R (A, B, C, D, E)**; Underline a primary key for each relation.
* Write the attributes of a composite key adjacent to each other – just like **A, B** in **R (A, B, C, D E)**.
* Submit a printed copy at the beginning of class on the due date.

**Suggestion for self-study:**

*Do not submit your work for the item below, but of course you are more than welcome to talk to me about your conclusions.*

If your solution to the ER homework was different from the posted solution, do the following as a learning opportunity: *Convert your ER to a relational schema & investigate whether the resulting schema serves the application specs.*

Question 1:

Customer (cID, cName, cAddress)

Site (sID, sAddress, customer)

Order (oID, oDate, oCost, customer)

Product (pID, pName, pDescription, unitPrice, poh)

OrderLine(oID, lineNum, qty, delivDate, site, product, order)

phNum(sID, phoneNumber)

Replaces(product, repProduct)

Question 2:

Pilot(pID, pName)

Aircraft(aID, aType)

Airport(airID, airName)

Flight(date, pID, aID, airID, time)

TIMS SOLUTION: (We have the exact same for the 2nd one, and I think I corrected some things from the first one that you got wrong, I just wanted you to check it before I overwrite your work. So pls look this over. Particularly: Order, Product, and OrderLine) THANKS!

Problem 1:

Customer (cID, cName, cAddress)

Site (sID, sAddress, cID)

Order (oID, oCost, oDate, cID)

Product (pID, pName, pDescription, unitPrice, qoh)

OrderLine (oID, sID, pID, lineNum, qty, delivDate)

phNum (sID, phoneNumber)

Replaces (product, repProduct)

Problem 2:

Pilot(pID, pName)

Aircraft(aID, aType)

Airport(airID, airName)

Flight(pID, aID, airID, date, time)