Project

# Goal

To enable students to experience the process of building a non-trivial database-backed web application.

# Due date

12/xx/xxxx

# Tasks – read carefully

1. Choose any area that interests you – this does not necessarily have to be about business. Here are a few examples: Library system, Car rental system, Theater ticket sales system (like Ticket Master), Airline reservation system, University registration system and Inventory management system -- these are just examples and you can choose any area that interests you.
2. Before you start, work through the following three documents posted on Blackboard under "Project". Do not do anything other than drawing the ERD without working through these documents.
   1. ODM-step-by-step-1.pdf (this is a revised version of the document I had posted earlier. Be sure to get this version)
   2. Oracle-APEX-tutorial-exercise-1.pdf
   3. Oracle-APEX-tutorial-exercise-2.pdf
3. Develop an ER diagram for your chosen area – use Oracle SQL Developer Data Modeler.
   1. Your ERD needs to have at least 8 entity types and at least one of them must be an associative entity type.
   2. To make life easier, do not use any key migration at all. Give each entity type its own integer primary key and also make it "auto-number".
   3. Having a unary relationship will be a bonus, but is not essential.
4. After you complete the ERD and generate the schema, process along the lines indicated in the two APEX tutorials above.
5. Once you have completed the ERD, generate the database schema (SQL file)
6. Using what you learned from the APEX hands-on exercises load the SQL file for your database onto Oracle APEX.
7. Build an application in APEX.
   1. You can choose any theme you like.
   2. Your application should have the ability to maintain (add, modify and delete data) all your main tables (the ones which are not associative entity types) and should have at least one master-detail form (described in the APEX hands-on exercises). This will generally be for associative entity types. Either of the two participating entity types can be the master table, but you should make a sensible choice based on how this will work best in real life.
   3. You must use lists of values for every foreign key attribute
   4. You need not submit anything for the project. After the project due date, I will check on-line. You should have created your account as I had specified earlier.