Lab 6: Object-Oriented and Object-Relational data models

Due date: May 31.

This is a standalone (i.e., not directly contributing to the course project)**team lab**. Each group submits one set of deliverables.

Assignment

This lab includes two tasks: development of an object-oriented data model using ODL as the modeling language, and development and deployment of an object-relational data model using Oracle's object-relational extension to SQL.

Object-oriented Data Model. Develop an object-oriented version of the data model for the CPLOP database. Record the model using Object Definifion Language (ODL) syntax. In particular, your model should identify all of the following:

- All object classes you want to create.
- All attributes for each class.
- All relationships between classes. Make sure to specify correct relationship type and to identify inverse relationships when needed.
- Any method declarations you deem necessary.

To submit this part of the lab, create a plain text document containing the definitions in the ODL format and any comments you want to embed, and post it to your team's wiki page.

Object-relational Data Model. Develop an object-relational version of the data model for the CPLOP database. Record this model using Oracle's object-relational extension of SQL. Your model shall contain

- `CREATE TYPE` declarations for each user-defined data type your model needs.
- `CREATE TABLE` declarations for each object-relational table in the model.
- Any other SQL commands you deem necessary.

Put all your SQL commands in a file called `cplop-or.sql` and submit this file to the wiki. Additionally, create a SQL file `cleanup.sql` which cleans the database, i.e., drops all tables. Both files shall be debugged using `ora10g` Oracle server (see CSC 365 web page for handouts on using `sqlplus` if you need a refresher).

Good luck!