CPS480 Database Systems, Spring 2003
Project 1
A Web-Based User Management System

DUE DATES:
Design Report due: March 10 (in class)
Executable codes due: March 19, 11:59 p.m.

Goal of the projects:

There are two projects in this course. Project 1 involves designing and implementing login/logout and session controls for database users on the web. Project 2 involves designing and implementing a 'Student Enrollment Information System' for these users. This enrollment system will allow a student to query her/his course information as well as allow them to enroll in courses through a web interface. Administrators of the system will be able to manage and maintain the student enrollment information system through a web interface.

Project 1 Description:

In this project you will design and implement a login/logout system where a student will be able to login as a student user through a web interface. An administrator of the enrollment information system will be able to login as an administrative user through a web page interface and will have more privileges to access and update the database. You will design and implement php programs that will generate student user web pages and php programs that will generate administrative user web pages. Session of each logged in user has to be managed appropriately to guarantee access controls by the two different type of users. You will design and implement the following in project 1:

1. Extend the EER diagram of lab 5 to include student user as a subclass of Student and User, administrative user as a
subclass of **User**.

2. **User** entity type has attributes such as login id, password and type of user (student or administrative).

3. Add other entity types to this EER diagram as necessary (for example, session control table).

4. You design your own user interface. Interface should be **intuitive, and clear**.

5. **Submit your design on March 10 in class.** This should include all user interfaces, extended EER diagram with explanation and relational database schema. You may submit relation schemas for only those tables that are needed for this project. However, you will need relation schemas for most of the other tables for the EER diagram in project 2.

6. Implement the following functions for the project:

   (a) login and logout functions making sure that a **student user** can access only **student user** Web pages and not the **administrative user** web pages while an **administrative user** can access both.

   (b) Add a **student user web page** enabling a student user to change his/her password.

   (c) Add an **administrative user web page** allowing an administrative user to reset user-passwords to default passwords. This page should allow an administrative user to list all or part of any student information and allow the administrative user to add, delete and update the user information.

**SUBMISSION OF EXECUTABLE CODES:**

1. You must send an email to the TA by **March 19 (11:59 p.m.)** with a link to your login page. TA will check the time stamp of your project files for submission deadline.
2. Attach all your source codes with the email. Include the administrator id and password, a student id and password.

GRADE DISTRIBUTION:

1. Design, EER diagram and relation schemas: 30%
2. Correct implementation of all functions: 55%
3. Intuitive and clear user interface design: 10%
4. Commented source code and good code structure: 5%