

**CMPS460
SPRING 2007
ACTR BUILDING
DATABASE PROJECT**

PROJECT DESCRIPTION

Now that we are in the new Advanced Computer Technology and Research building, we need a database to track and report on personnel and space utilization. The system will provide the following features:

For each employee in the building:

- The employee's name, office, office hours, photo (where available), web site, and position (secretary, faculty, research assistant, teaching assistant, grader).
- If the employee has teaching duties, the system will also include the days, time slot, and location of all regularly schedule classes.

For each room in the building: The room number, and room type (office, classroom, seminar room, laboratory).

- If the room is an office, the name, photo, and (if appropriate) the schedule of the occupant.
- If the room is a classroom, display a schedule of all classes meeting in it during the current term. Include a link to the faculty member teaching the class.
- If the room is a seminar room, display a schedule of all activities currently scheduled in the room. Each activity will include a contact person (name, phone, and office), the date, the starting and ending times, and a brief description of the purpose.
- If the room is a research laboratory, display the purpose of the lab, the contact person, and hours of operation.
- If the room is a computer laboratory, display the purpose of the lab, the number and type of the computers, the contact person, and hours of operation.

For Computer Science and CACS courses:

- Display schedules for the current term and all terms available (see Ulink)

SYSTEM REQUIREMENTS

Your system will be responsible for creating and maintaining the database. This includes the ability to add, change, and delete all data in the database (taking into account referential integrity). At a minimum, your system will include the following capabilities:

- Display screens for all data in the database.
- Add, change, and delete an employee.
- Add, change, and delete a room.
- Add, change, and delete a class.
- Add, change and delete an event.
- Display the current class schedule.
- Display employee data.
- Display room schedule.
- Display a calendar of all scheduled events.

CONSTRAINTS

Two classes/ events cannot be scheduled in the same room at the same time.

PROJECT REQUIREMENTS

Your system will use the MySQL database and will be written in PHP and all interaction with the system will be via a web browser. All programs will be created and maintained in your cs4601 class account.

Demonstrations will be scheduled for the last week of classes. A signup sheet will be posted on my office door sometime in April. All group members are required to be present during the demonstration.

Each member of the group must be prepared to demonstrate her/his portion of the system. You are responsible for providing test data adequate to demonstrate all features of the system. Any feature of the system that cannot be proven to function correctly will be counted as inoperative. Under NO circumstances will I (or you) "logon" to MySQL during the demonstration. There must be test data in the database that will allow all features of the system to be demonstrated.

The moral is – be finished, have the necessary test data loaded into the database, be ready to demonstrate, and have your documentation with you.

DOCUMENTATION:

The following documentation is required and due at the demonstration:

- A document describing the architecture of the application. This includes the database design (ER diagram), the data dictionary, and the function of all PHP scripts and a description of the interaction between them.
- A user's guide with sufficient detail to enable a new user to understand and use the system.
- A printout of the final version of the PHP scripts. The code must be well structured and appropriately commented. Each script must include the author's name, the data, and a certification that the code is the work of the author.

GRADING:

Obviously, you will be graded on the extent to which your system conforms to the requirements. You will also be graded on consistency, continuity, error checking, spelling, grammar, and system design. Remember, all members of your group will receive the same grade on the project.

There will be no extensions given. All material is due at the beginning of the presentation.

<i>Please note that any material of an offensive nature (by my standards) found in your project will result in a grade of 0 on the project for all group members.</i>
