Exercise

Initial System Requests

Wylie College is planning to develop a new online Course Registration System. The new Web-enabled system will replace its much older system developed around mainframe technology. The new system will allow students to register for courses from any Internet browser. Professors will use the system to register to teach courses and to record grades.

Because of a decrease in federal funding, the college cannot afford to replace the entire system at once. The college will keep the existing course catalog database where all course information is maintained. This database is an Ingres relational database running on a DEC VAX. The legacy system performance is poor, so the new system will access course information from the legacy database but will not update it. The registrar's office will continue to maintain course information through another system.

Students may request a printed course catalog containing a list of course offerings for the semester. Students can also obtain the course information online at any time. Information about each course, such as professor, department, credit hours, and prerequisites will assist students in making informed decisions.

The new system will allow students to select four course offerings for the coming semester. In addition, each student will indicate two alternate choices in case the student cannot be assigned to a primary selection. Courses will have a maximum of ten and a minimum of three students.

The registration process closes on the first or second day of classes for the semester. Any course with fewer than three students enrolled on the day registration closes will be cancelled. All courses without an instructor on the day registration closes will be cancelled. Students enrolled in cancelled classes will be notified that the course has been cancelled, and the course will be removed from their schedules. The registration system sends information about all student enrollments to the Billing System so that the students can be billed for the semester.

For the first two weeks of the semester, students are allowed to alter their course schedules. Students may access the online system during this time to add or drop courses. Changes in schedules are immediately sent to the Billing System, so that an updated bill may be sent to the student.

At the end of the semester, the student will be able to access the system to view an electronic report card. Since student grades are sensitive information, the system must employ security measures to prevent unauthorized access. All students, professors and administrators will have their own identification code and password.

Professors must be able to access the online system to indicate which courses they want to teach. They will also need to see which students signed up for their course offerings.

In addition, professors will be able to record the grades for the students in each class.