

CS 6310 Software Architecture and Design

Assignment 5: Course Management System – Next Design Phase (v3)

Explicit and Implicit User Requirements

1. Each main course in a catalog can also have one or more other prerequisite courses.
2. Student must complete all prerequisite courses before they can request and register for a main course.
3. Student must earn a grade of A, B, C or D to successfully complete a course.
4. A grade of F is not a satisfactory grade.
5. There can be a course without any prerequisite courses.
6. Number of available seats for a course is determined by the instructors who have been assigned to teach a course.
7. The capacity is a positive integer value that represents the maximum number of students that the instructor can teach for that course during the upcoming semester.
8. There can be multiple instructors to teach the same course during the semester.
9. Students can retake a course to improve their overall grades and grade point average.
10. Students can retake a course if and only if they have earned D's or F's in that course.
11. The system must keep a track of denied student requests.
12. Admins will have the privilege to add, modify and delete records as needed. Usually known as CRUD (Create, Read, Update, and Delete) operations.
13. Students can earn a grade of W which means they withdrew from a course and must retake that course. (Based on #3)

14. Courses without any prerequisite are the introductory courses or a special topic course.

(Based on #5)

15. Students that wish to improve their overall grades and grade point average will be able to register for the same course after the students who want to take that course for the first time registered and if the student did not earn a satisfying grade. (Based on #3, #9, and #10)