

Course Enrollment Application

Your development team has been tasked with developing a prototype for a college course enrollment website called QCfirst.

Below are the specifications of some of the features you are required to implement.

User Management

User signup

Users can be of two types

- 1) students
- 2) instructors

Users sign up using their email addresses. The email addresses are used as the QCfirst usernames of the users.

Users need to set their account information where:

- username, password, and first and last names are strings
- a user is assigned an id number which is unique to the user
- one email address can only be used to register one account

User session

A user should only be able to take actions while they are logged in

Course Management

An instructor (and only an instructor) can create and delete a course.

Each course consists of

- a unique number
- a semester
- a course name
- a department
- an instructor
- a roster of students
- a description
- a schedule
- a capacity
- an enrollment deadline (the first day of instruction)

Enrollment Management

A student can only enroll in a course if

- the capacity is not full
- the student is not already enrolled in a course which conflicts with this course
- the enrollment deadline for the course has not passed