Team Name: Collegefulbar

Team Members: Saiful Islam and Akbar Haider

CSc 336: Database Systems

Project 1 Part 1

Software Project

In general, the purpose of our software is to allow college students to enroll and manage their classes effortlessly. More specifically, administrators will be able to create, view, update, and delete courses and students. Also, students will be able to enroll, view, and drop courses. Our product idea is similar to the "School Management" idea presented in the project's specifications. As it stands right now, the process to enroll, drop, or swap classes is very tedious for many students. Our goal is to make the UI simpler to follow and fetch data faster in the backend process. For example, when a user clicks the back button on a browser while using CUNYFirst, the website often disregards every search filter which forces the user to start all over. For students who are new to the website, this is extremely frustrating. Hence, our goal is to improve processes like this.

The software is interesting because many colleges offer different course enrollment platforms, however, there is no perfect course enrollment software. Also, the application will always be used for as long as colleges exist. Hence, it is clear that our product is something that can be used for a long time. Furthermore, we are tackling a problem that exists in every university. Usually, colleges ignore student experience with websites that deal with course management, causing unnecessary stress for students when they are enrolling for their courses. If we can reduce even a slight bit of stress from a college student's life, it can increase productivity in the long run. Furthermore, due to high website traffic during registration seasons, course enrollment sites tend to crash, and it takes extra time for students to get back to the enrollment

screen. This causes some students to miss enrollment and forces unnecessary changes to their plans. Our website will be more efficient in making sure that even if there's a crash, a student can get back to the enrollment screen without going through extra clicks, which adds to the product's interests.

CUNYFirst and My.Fordham are similar products to the project that we are proposing. However, these products are used for different college institutions, and the goal of our product is to be used by any institution around the globe and account for efficiency.

Schemas

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Class(<u>id</u>, title, section, instructor, dept, year, semester, credits, cost)

Student(<u>id</u>, name, age, email, credits, registered_or_not, probation_or_not)

Instructor(<u>id</u>, name, email)

Enrollment(<u>class id</u>, student id, grade)

PendingStudent(<u>id</u>, name, <u>ssn</u>, email)

ProgramAdvisor(<u>id</u>, name, email, dept, initials)

EnrollmentDate(<u>credits</u>, enrollment_date, <u>year</u>, <u>semester</u>)
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- ProgramAdvisor.initials: ProgramAdvisor advises students with these initials for their last name
- EnrollmentDate.credits: Students with this number of credits can enroll after EnrollmentDate.enrollment date for each respective semester