

Assignment 3

Ruqin Liu	001563117	liu.ruq@northeastern.edu
Yuting Su	001563838	su.yut@northeastern.edu
Cong Wang	001002178	wang.cong1@northeastern.edu

Design Goal

In order to improve the quality of our school's education and the rationality of our school's teacher allocation, it is planned to collect the satisfaction degree of our school's courses and teachers by tracking the career situation of our school's graduates in five years, so as to analyze the correlation between curriculum arrangement and career achievement. The collected evaluation reports will be compiled into quantitative results for students to refer to in course selection, so that students can choose more targeted and effective courses according to their career goals in course selection, so as to optimize teaching results of our school.

Design Thought

The users of this system are mainly divided into administrators, teachers, graduates and students, so the user interfaces can be divided into four parts correspondingly. Management interface realizes the functions of adding, cutting and changing data for administrators. The school teachers interface implements the functions of querying the teaching curriculum and teachers score. Graduates interface plays a role in the questionnaire survey to collect the graduate job information. Then the students interface realizes students' course selection function. By the graduate information analysis of curriculum and teaching teacher ratings will be reflected in the student interface as a reference for students' course selection. All four user interfaces need to be logged in before use.

Design Models

a. Professors

Users need to enter the system through the login interface. After entering the system, users can check the teacher's grades and the degree of correlation between teaching courses and jobs in order to improve their own teaching methods, enhance the level of teaching.

b. Graduates

The system will track the jobs and promotions graduates get over time through questionnaires for graduates. After the graduates enter the system through the login interface, the system will use `getTranscript()` method to call the course and teacher selected by the graduate during the university period and allow the graduates to evaluate the relevant degree of the courses they have learned and their work and their satisfaction with their teachers. Graduates are also required to register their job promotions and positions over a five-year period. Each piece of questionnaire information will be stored in the Survey Directory and calculated. So that school

administrators can see the graduate's rating of each course and the evaluation of each teacher, so as to improve the quality of teaching and improve teaching methods.

UserId	<input type="text"/>	Career:	<input type="text"/>																
password	<input type="text"/>	Promotion times in 5 years:	<input type="text"/>																
college	College Of Engineer ▾																		
major	Information System ▾																		
Log in		<table border="1"> <thead> <tr> <th>Course Name</th> <th>Course Grade</th> <th>Teacher Name</th> <th>Teacher Grade</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		Course Name	Course Grade	Teacher Name	Teacher Grade												
		Course Name	Course Grade	Teacher Name	Teacher Grade														
		Commit																	

c. Current Students

When current students selecting a course, the interface will display the available courses and the scores of the courses and work-related levels calculated based on the data provided by the graduates. Help students decide what courses to take.

After select a course, the table on the right will display all professor and their scores of that course. Students can view and edit their course selection contents in the selected course form below. The final course selection results will be submitted through the submit button at the bottom.

Semester: 2020 Fall ▾																					
<table border="1"> <thead> <tr> <th>Course ID</th> <th>Course Name</th> <th>Course Grade</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Course ID	Course Name	Course Grade										<table border="1"> <thead> <tr> <th>Teacher Name</th> <th>Teacher Grade</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Teacher Name	Teacher Grade						
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Course ID	Course Name	Teacher Name																			
Delete	Commit																				

d. Administrators

Mainly responsible for the management of the information of professors, graduates and current students. The information of the above three users can be viewed, and the work of adding, deleting and revising can be made when necessary. Administrators can also use the Ranking System to manage and analyze relevant data.

e. Ranking System

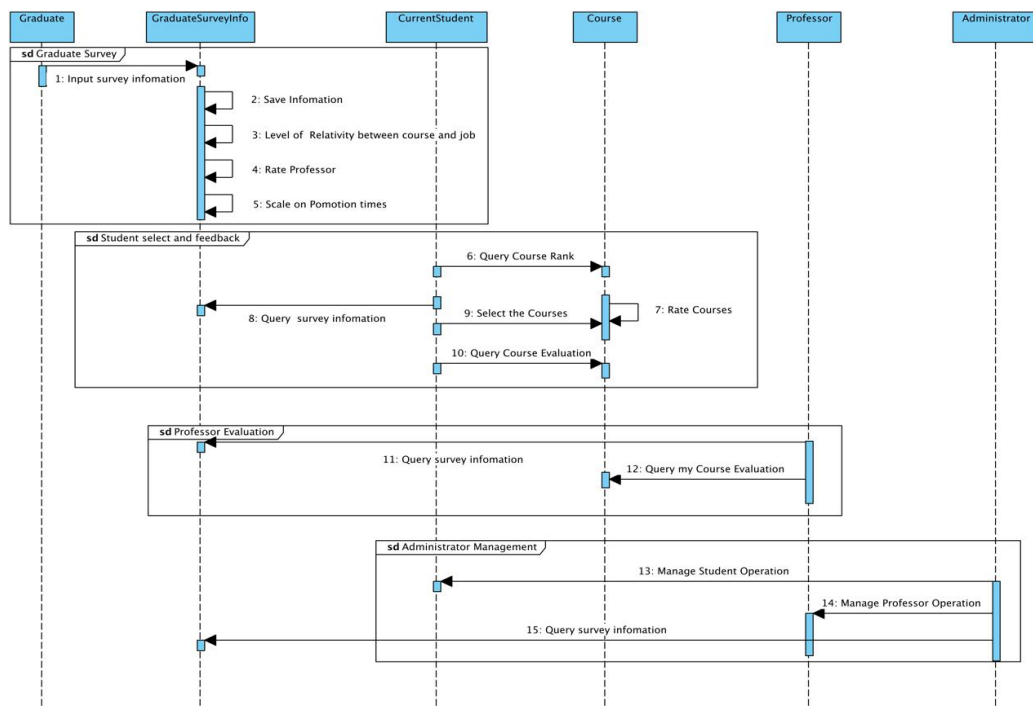
The collected graduate Survey Information was used to calculate the degree of relevancy of the courses and work of the graduates and their satisfaction with the course teachers, and then the ranking was carried out and classified according to the number of promotions in the five years. So students and school administrators know

which courses are recommended by graduates who have been promoted more than five times, two to four times, or once in five years. Students can consider their future development direction according to the ranking, and universities can compare the performance of their academic units which enable universities to measure the quality of the education they deliver to their students. Universities may have the option of eliminating less useful courses or adding more useful courses.

0-1 promotion	2-4 promotions	5+ promotions	0-1 promotion	2-4 promotions	5+ promotions
Course and Job Relevance Ranking Data provided by graduates who have been promoted 0-1 time in five years			Course and Job Relevance Ranking Data provided by graduates who have been promoted 5+ times in five years		
Rank of Relevance	Relevance Score	Course Name	Rank of Relevance	Relevance Score	Course Name
1	4.73	INFO 5100	1	4.54	INFO 6205
2	4.53	INFO 6200	2	4.20	INFO 6000
3	3.63	CSYE 6250	3	3.98	INFO 5100
4	3.23	INFO 2300	4	3.23	CSYE 2578

UML

1. Sequence Diagram:



Part I Graduate Survey: The information entered by external graduates is processed from the three defined attributes (Level of Relativity between courses and job, Rate Professor, Scale on Promotion times) inside the module, and is used as important information for graduate surveys to store data. It is performed inside the module to perform operations such as ranking and evaluation.

Part II Student Select and feedback: There is an interaction with the frame of the first module. The student objects can query the graduate survey information about course rank and use it as their own course selection guide; in this part, students can also select courses at the same time, and view professors, course rankings and score cases.

Part III Professor Evaluation: In this section, the professor can see the scores of the courses he teaches, and can query the first module to obtain the information about ranking of the courses, etc., so as to adjust and improve his teaching plan by the interaction.

Part IV Administrator Management: This part can perform necessary additions, deletions, corrections, and searches for both students and professors. With a wider range of queries to the Graduate Survey part to collect data, school's senior staff can charge more comprehensive survey results, and analyze the variance between the courses that university gives and the job in real workspace. then help university improve courses from different aspects based on the survey results and the change of settings and the configuration of personnel ensure a better educational environment for students and better educational development for the university.

2. Object Diagram:

