**Course Registration and Rating Web Application**

Hi, we are group 12. Our project is a course registration and rating web application, by which you could register a course or rate a course which you have finished previously.

In order to run our web application, the first you need to do is run the seed.js file in tasks directory. There are 4 created users. First one is gjc921019, password: password. Second is ly930919, password: password. Third is abc123, password: 123456, The last one is tester, password: test. The tester is complete empty, no finishedCourse, no currentCourse, and no registeredCourse. On contrast, abc123 is almost full, with lots of finishedCourse, currentCourse and registeredCourse. You are welcome to login with several different accounts and have fun with our application.

The login page is localhost:3000. Once the user login, it will show the mainPage of our website, where it will show the basic information of the user, and also two options (registration and rate).

For the registration part, it contains three parts, search course by courseID, search course by department, and drop your registeredCourses. If you choose a specific course by whatever methods (search by courseID or by department), you can see the detailed information about this course. Most importantly, there is an attribute called as comments. If you clicked it, it will show all the comments and rates made by students who has already finished this course in the past. You can also make your own comment and rates about the courses you have finished. I will explain it in Rating parts. Also, there is an attribute called as AvgRating, which shows the average rating for this specific course, if someone add a new rate to this course, this average rating will also update. In the end of this page, there is a register button. If you click that button, the system will check whether you are able to register this course or not. The checking list includes the prerequisite, available seat, have you ever finished this course before, are u enrolling this course right now, have you already registered this course in the next term. If everything passed, then the system will add this course and its corequisite to the user’s profile in the database. Once you come back to the mainPage, you could see that this course and its corequisite will be added into your registeredCourse list. If it does not pass the registration check list, it will show a page and state why you fail to register this course. You can also drop your previous registered course by choosing it in the third part of registration page. Once you click the name of the course you want to drop, it will show a page saying are you sure you want to delete that registered course. If you choose yes, then it will drop this specific course and also its corerequisite.

For the rating part, it will show all the courses you have finished in the past terms. Because we require that each user could only publish one comment and rating score for a specific course, therefore if you choose a specific course and you have never made a comment for that course, then it will show only one option “make a new comment”. But if you choose a course which you have previously made a comment, then it will show the previous comment and rate you made and give you two options, “change your comment” and “delete your comment”. In this way, we allow user to only make one comment and rate for a particular course. After you make a comment, you could always go back to the information about this course in the registration part and choose comment option, where you can find your newly created comment and rate showing in the list.

Overall, each page has a navigation bar, by which you can always go back to a previous page or go back to the mainPage directly. Besides, there is a log out option in the navigation bar too. If you click log out, it will show a really cool log out animation. More interestingly, you can find an option called as “About us”, where you can find the picture for our teams and our github webpage. All these really awesome designs are made by Janiece. Thanks to her, our website becomes much cooler and interesting. Previously, it was really ugly.

Also, we also checked authentication of the user. If the user is not login but try to reach any specific web page of our application, it will show a declined page and ask them to login first. Besides, we also checked XSS attack in every form to avoid hackers. For the search by courseID form, we also add AJAX so that it would check the illegal input in the front-end.

I guess that is pretty much everything of our web application. Thank you so much for using our application. I hope you have a wonderful summer vacation ☺

**Contributions:**

Jiacheng Guo:

Finished most parts of routers, databases, handlebars and seed.js. For details, check the comments in project code.

Janiece Pandya:

Finished the authentication check for all pages, xss, html validations using W3C Markup Validation Service, accessibility check using tota11y, entire frontend from modifying handlebars to css to animations, to make the website look as beautiful as possible.

Kenneth Mason:

Created the /data files and functions, created routes, set up database and collections, added AJAX to “Search by Course ID” to notify the user when they start giving an invalid course ID, commented database code for readability and instructions.