Graduation Project

1. Theme: 「工」無不「課」
2. Motivation:

   During our student life, we often feel confused and lost. We are always wondering what kind of work should we do after graduation. If I choose to do a certain job, what kind of skills does it requires? So far in the APP store, we can only find job-related apps that don't integrate into the school's curriculum and skills, so we were trying to build a bridge between the school curriculum to the skills and work we need. The APP will allow students to stop losing their way and to manage their learning direction more systematically.
3. Purpose:

   We use the web crawling technology to capture the work content and requirements of the top three human resources banking websites in Taiwan and combine the positions and vacancies into a table and set the scheduler letting the program automatically updated to get the latest job vacancies, so as to avoid the problem of user information asymmetry.
   We also use web crawling technology to get the school's curriculum and use text analysis techniques to combine the skills taught in course with the skills necessary for the job. When you choose a job that you are interested in, you can find out what kind of courses you should take according to the conditions of the job requirement. On the contrary, you can also find out which job requires the skills you learned in this course, establishing a two-way query platform.

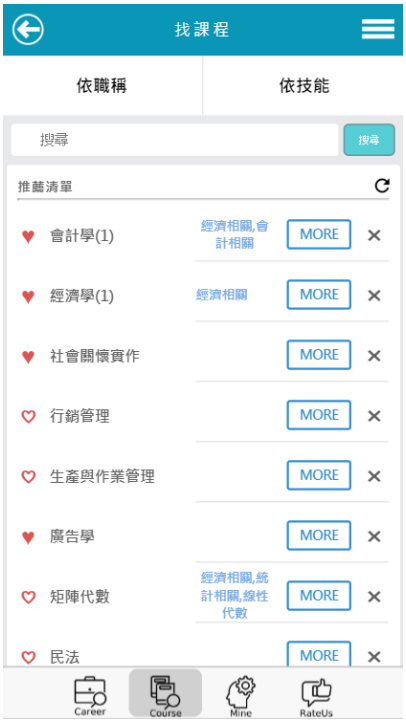
   This system also has a personalized feature. By setting the user's favorite, able users to add the course you want to take or jobs that you're interested in the job to my favorites. Personalization also records the skills you have. After logging in, users automatically enter the stored data so that users can find courses or job vacancies. Recording completed classes also allow users to monitor how many credits they have earned to meet the graduation threshold or learn the skills necessary for future dream careers.
4. Development Tools:

Item	Tools' name
Programming Language	● R ● Html ● Css ● jQuery ● JavaScript
Development Software	● NodeJs ● RStudio ● Postman ● Adobe Dreamweaver ● Visual Studio Code

5. Users' interface:

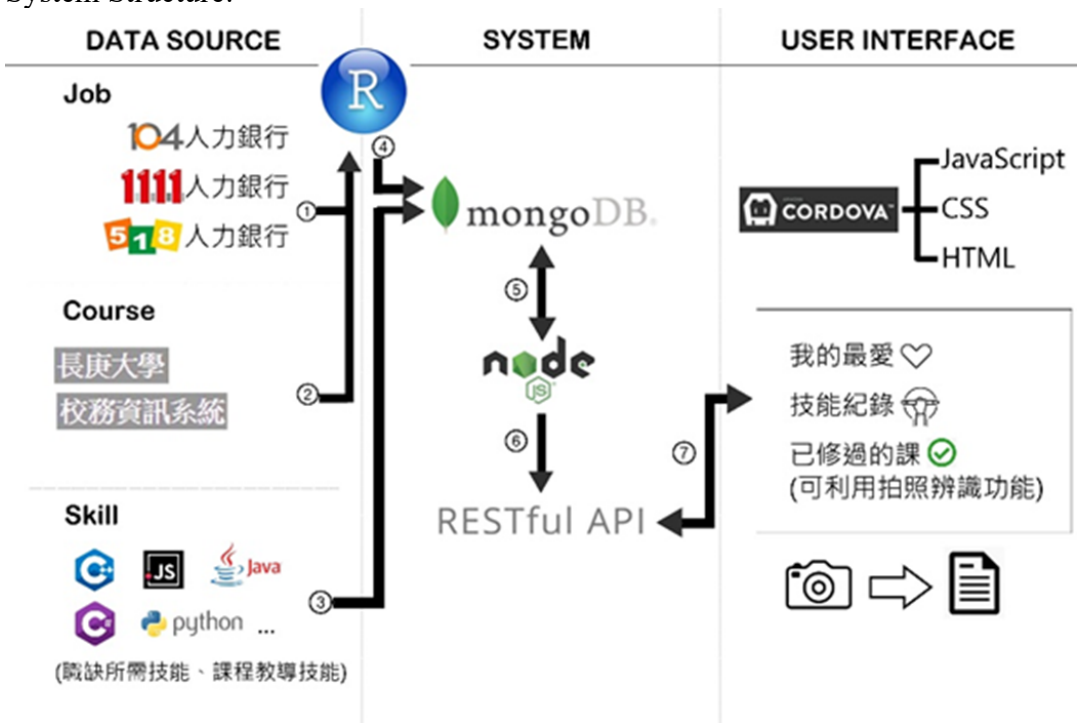
- Job Searching Page

- Courses Searching Page



- Personalized Page

6. System Structure:



①: Job vacancies crawled by R
②: School curriculums crawled by R
③: Skills insert into MongoDB
④: Job vacancies and school curriculums insert into MongoDB
⑤: Build connection between Node.js and MongoDB
⑥: Build RESTful API by Node.js
⑦: Getting personalized through RESTful API to get the data in MongoDB