Specification

Module 1. Login/Register (*shiqiw*)
  A. Register
      Standard Login implementation

  B. Login
      Standard Login implementation

Module 2. Home page and profile related functionality

  A. home page and navbar**(*mohanf*)**
     a. Categorized courses ranked by popularity
        Course will be divided into different categories, like Math, CS, business... . The homepage will display popular courses in each category. On the homepage of the website, there will be a sidebar consisting of all categories, acting as an anchor to a certain category. There will also be a "see more" link, by which users can get a full list of courses in the certain category.

     b. Search course in navbar
        Student can search course by keywords in the navbar. The keywords will try to match courses' title or tag(category) and show searching result in another page.

     c. All navbar related (setting, logout, etc.)
        By clicking on the dropdown list in navbar, a user can get access to their own profile and change settings of their account or profile.

     d. Show course in each category
        By clicking the "see more" link in each category of course, user can view this page, and courses displayed in this page can also be sorted in different order.

  B. Search result page (*mohanf*)
    After input keywords and click search, results will be shown in the "search result page". The result can be sorted by possibly published time and popularity. Also, the course list can be filtered by various combinations of categories by a checkbox on the left.

  C. profile page (*shiqiw*)
     a. User info
        Show basic profile information

     b. Courses taking (in progress, completed)
        Show courses which the user is taking or have taken. The progress will be displayed. Link to the courses will be provided.

     c. Show student's grades of tests in each course
        User can view their scores for each course they are taking or have taken

d. Courses created (published and unpublished)
Show courses which are created by the user. User can modify and edit courses that have not been published yet. Published courses cannot be modified further.

Module 3. Quiz and Test related (*xinyangg*)
A. Create quiz and test
    a. Create quiz:
    Course creators can create a quiz for each lecture. The quiz (if exists) is the last part of a lecture and can be taken after user complete learning the other learning materials such as reading and videos.

    b. Create test:
    Course creators can create tests for each course. The tests (if exist) are parts of a course. Each course can have multiple tests such as midterm test and final test. Each quiz and test can have many questions and the question types can be multiple choices or blank filled.

B. Student taking quiz and test
Students can take quiz after learning each lecture. They can also take tests in the progress or after taking the course. The quiz or test may have time limits. Students can submit their answers when finished. Otherwise, the system will automatically submit their answers when time is out.

C. Auto-grading
After students submit their answers, the web apps will auto-grade their answers and show their grade on the screen. If the user's answer is correct, just show the user's answer. If the user's answer is wrong, show both the user's answer and the correct answer as a feedback. Their scores for each test and each course will be stored and can be seen in their own profile page.

Module 4. Course Creation (Lectures, Readings and Videos) (*mohanf*)
A. Create new course
When a user first creates a new course, they need to input the title, description and save.

B. Create new lectures
    a. After creating a new course, the user needs to create a series new lectures and tests in the course management page.
    b. When creating new lectures, the user needs to input the title and description of certain lecture and save.

C. Create lecture materials including readings and videos
    a. To manage the content of a lecture, users can add readings and videos into the course material in certain order.
    b. Readings needs to be uploaded as pdf or doc file and videos can be provided as a link to YouTube.

c. After readings and videos being added, the content can also be modified later by clicking manage button, or deleted by delete button

D. Include quiz (implemented in module 3 (*xinyangg*)) into lectures
Quizzes can also be added into lecture, in the same way as readings and videos, after clicking the adding quiz button, the quiz can be designed in module 3.

E. Include tests (implemented in module 3 (*xinyangg*)) into courses
Tests can be added into course, in the same way as lectures, after clicking the adding test button and the content of test can be designed in module 3.

F. Making course published
   a. In the course creation process, any part of the course can be modified by simply clicking on the managing content button and modify the content. But, during this process, the course is not visible to any other user.
   b. If the user click on the publish course button, then the user cannot modify the course anymore and the course becomes visible to all users.

Module 5. Course taking from students' perspective (*shiqiw*)

A. Student enrolls into courses
Users can view a general introduction of each course, including how many lectures each course has. After users register this course, they can view the full content of the course.

B. Course detail page (for students of this course only)
Each course is organized by Lessons, within each lesson, there will be readings, videos, and/or quizzes. User can navigate through each lesson from the side bar.

C. Show and record student's progress in each course detail page
After finishing the reading or video, student can mark it as completed. And their progress will be recorded.

D. Render files and videos
Readings(pdf) and videos(YouTube) are embedded in the course's page so that students won't need to go outside of Cognita to view course content.

E. Student take quiz and tests (implement in Module 3 (*xinyangg*))
Student can take quiz and tests, this will be auto-graded by Cognita. Implemented in Module 3

F. Add Course Statistics
Student and instructor can view course statistics, including the number or takers, grade distributions, etc.