Requirement Analysis

Yutong Zhu

Professor Goggins

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Step 1:

Different types of Users:

1. Student

2. TA

3. Professor

Step 2:

Students:

1. Students can submit assignment in their section.
2. Students can check their grades.
3. Students can send message to TA and professor.

TA:

1. TA can download and view all assignments.
2. TA can post students' assignment grade.
3. TA can post announcement and reply students' question.

Professor:

1. Professor can add or delete the course information, assignment and TA's information.
2. Professor can download and view students' assignment and have a right to change assignment's grade.

Step 3:

Student(Student Pawprint, Student Name, Student Email Address)

TA(TA Pawprint, TA Name, TA Email Address, TA's Office Hour)

Professor(Professor Email Address, Professor Name, Professor's Office Hour)

Course(Course Name, Course Syllabus, Course Number)

Assignment(File Name, File Type, File Data Type, Submitted Time, Grade, Comment)

Requirement(File Name, File Type, File Date Type, Due Time, Grading Rubric)

Question(Student Name, Content, Course, State, Authority)

For Student:

1. Students can submit assignment in their section.

- Data Entities and Attributes
- Assignment(File Name, File Type, File Data Type, Submitted Time)

- Constraints:
- 1) When submit successful will get submission success hint soon.
- 2) System should be secure and stable
- 3) Submission only performed by student.

2. Students can check their grades.

- Data Entities and Attributes
- Assignment(Grade, Comment)

- Constraints:
- 1) System should be secure and stable.

3. Students can send message to TA and professor.

- Data Entities and Attributes:
- TA(TA Email Address, TA's Office Hour)

    Professor(Professor Email Address, Professor's Office Hour)

    Question(Student Name, Content, Course, State, Authority)

- Constrains:
- 1) System should give a response within 2 seconds after submission
- 2) System should give feedback on whether the problem was successfully submitted.
- 3) System should give the correct authority.

For TA:

1. TA can download and view all assignments.

- Data Entities and Attributes:
- Assignment(File Name, File Type, File Data Type, Submitted Time)

- Constraints:
- 1) System should be able to download and check assignment in 2 sec.
- 2) System should have security to protect students' assignment.
- 3) System should have interoperability to download the assignment.

2. TA can post students' assignment grade and comment.

- Data Entities and Attributes:
- Assignment(Grade, Comment)
- Student(Student Pawprint, Student Name,)

- Constraints:
- 1) System should have interoperability to make TA to grade the assignment.
- 2) System should have reliability to make sure the grade and assignment are corresponding.
- 3) System should be secure to protect the student's information.

3. TA can post announcement and reply students' question.

- Data Entities and Attributes:
- Question(Student Name, Content, Course, State, Authority)
- Student(Student Pawprint, Student Name, Student Email Address)
- TA(TA Pawprint, TA Name, TA Email Address, TA's Office Hour)

- Contraints:
- 1) System should give the correct authority.
- 2) System should give feedback to the TA's answer in 2 second.
- 3) System should be secure to protect student's data.

For Professor:

1. Professor can add or delete the course information, assignment and TA's information.

- Data Entities and Attributes:
- TA(TA Name, TA's Office Hour)
- Professor(Professor Email Address, Professor Name, Professor's Office Hour)
- Course(Course Name, Course Syllabus, Course Number)
- Requirement(File Name, File Type, File Date Type, Due Time, Grading Rubric)

- Constraints:
- 1) System should give feedback to professor to make sure the change is successful.
- 2) System should be reliable to make sure that only professor can edit the course's information.
- 3) System should be secure and stable.

2. Professor can download and view students' assignment and have a right to change assignment's grade and add comment.

- Data Entities and Attributes:
- Assignment(File Name, File Type, File Data Type, Submitted Time, Grade, Comment)

- Constraints:
- 1) System should be stable and secure.
- 2) System should give feedback to professor in 2 second.

- 3) System should be secure to students' data.

Step 4:

System requirement and constraints:

- System need to use less money to complete.
- System should be used in different operating system, like iOS, Windows, Android.
- Storage should be big enough to store all the data.
- CPU should be good enough to reduce the time of transmission the information.
- System need some support service: database service and internet service.