

Idea

Task1

Utalk

Open Forum Software for university (Android app)

University Information Sharing Software?

Brief description:

We want to create a user-specific Software that can provide students with a platform to discuss course content, course evaluation and program assessments.

1. User:

(also has a user authorization page and different users have different levels of authority)
client-oriented, management control

Program officer:

(methods for example)

`course.add()`, `course.delete()`, `comments.control().gf`

`program.add()`, `program.delete()`, `program.comments()`, `course.assessment()`

Student: different categories based on year of study, etc.,
program of study + course enrolled.

2. Outline different course information; inside comment

3. function realization

course analysis

4. some other possible functions:

display the relationship between different courses,
basics for different programs

5. Basic structure:

register -> program -> different forums.

diagram

Specification

Our program is dedicated to provide a service for students to discuss course content, for faculty to post about course and program information, and for professors to post and delete comments. All three types of users should go through the registration process to access this program. Students will need their student id, and if already known, names of program enrolled and names of courses enrolled. Faculty and professors will need their staff id.

Students who enrolled in the same courses can post to the current course discussion board, reply to others' comments and delete their own comments. They also have access to the past post pages to learn from past students who previously enrolled in the course. They can also see other courses taught by their professors to learn about them.

Inside the course page, students can see course name, course information, professor information, current discussion board and the discussion boards in the past three semesters. Professor and faculty can see the same course page, with faculty being able to update course information. Faculty can create and update course pages. For professors, they have the right to delete comments and reply to the comments.

entities classes: User, CoursePage, AcademicSemester

case classes: Student, Office,

controller:

interface: UI interface

CRC model

| User | |
|--|--|
| Responsibility <ul style="list-style-type: none">• int student_id• String utorid• String user's name• ArrayList course list• Void function create new comments (addcomment)• String function DeleteOwnComment (Return a notice if the user didn't have access or delete otherwise)• Void function register (Act as constructor, override in each subclasses)• Void function enroll_course (All users can voluntarily enroll courses) | Collaborators Subclasses: Student Office Interact: Comment |

| AllCourse | |
|--|--|
| Responsibility <ul style="list-style-type: none">• store all course that can be enrolled: Dictionary[Str name, CoursePage course] | Collaborators CoursePage Faculty Professor |

| AllPrograms | |
|--|----------------------------------|
| <p>Responsibility</p> <ul style="list-style-type: none">• Store all programs that can be enrolled <p>Dictionary[Str name, ArrayList[CoursePage]]</p> | <p>Collaborators Faculty</p> |

| CoursePage | |
|---|---|
| Responsibility <ul style="list-style-type: none"> • string course_info (can be edited by professor) • ArrayList[Professor] professor_list • ArrayList[Student] student_List • ArrayList[Postpage] (Store all relevant postpages) | Collaborators <p>Comment</p> <p>Professor</p> <p>Faculty</p> <p>PostPage</p> |

| ProgramPage | |
|--|----------------------|
| Responsibility <ul style="list-style-type: none"> • string course_info (can be edited by | Collaborators |

| | |
|--|---------|
| <p>professor)</p> <ul style="list-style-type: none">• ArrayList[id CoursePage] (The list of course that contains in program arranged by faculty through edit_program_course) | Faculty |
|--|---------|

Responsibility

- Store Comments: Dict[int:Comment]
- store String current_time
-
-

collaborators

Comment
CoursePage

| Comment | |
|---|--|
| <div>Responsibility</div> <ul style="list-style-type: none">• Store instance attributes: User user; String content; ArrayList[Comment] replies int poster_ID int Comment_ID | <div>Collaborators</div> User Comment |

| Student | | User |
|---|--|--|
| Responsibility Arraylist [course] Courses_enrolled Arraylist[program] Programs_enrolled <ul style="list-style-type: none"> • instantiate instances of this class • enroll in courses through EnrollCourse • Void function add_program from data in program page • Void DeleteOwnComment | | Collaborators User Comment Course |

| Faculty | | User |
|---|---|------|
| Responsibility instance variable: <ul style="list-style-type: none">• ArrayList: course_management• Void function Change_info• Void function add_course• Void function edit_program | Collaborators User Comment PostPage ProgramPage | |

| <div> <div>Professor</div> <div>User</div> </div> | |
|---|---|
| <div>Responsibility</div> <ul style="list-style-type: none"> • Void Function delete_comment • Void Function add_pro_comment • Void Function edit_comment • Void function edit_course_info | <div> <div>Comment</div> <div>AddComment</div> <div>PostPage</div> </div> |

| Interface AddComment | |
|--|-------------------------------------|
| Responsibility <ul style="list-style-type: none">• Void function add_comment | Collaborators User CoursePage |

| | |
|---|--|
| <div>Interface</div> <div>Registration</div> <div>Student, Office, Professor</div> | |
| <div>responsibility</div> <ul style="list-style-type: none">Void constructor register() | <div>Collaborators</div> <div>User</div> |

| | |
|--|--|
| Interface | |
| EnrollCourse | |
| Student, Professor | |
| responsibility <ul style="list-style-type: none"> • Void function enroll() | Collaborators Student Professor |

controller: pass the data and change its type to the one java can deal with
 course; parent class of comment
 Storage: in the database

