

INFOO5100 Professor-As-A Service Report

Team Members:

Yanqi Ma 002774114

Zihao Liu 001567668

Wentian Zhang 002738592

Problem Statement:

As the university has autonomy over the operations, the professor gets very little flexibility in terms of what course content needs to be delivered, what the schedule of those courses would be, what the cost of those courses would be etc. The main objective of a college management system is to automate all functionalities of a college or university. Using this system you can manage all administration-related work like admission, fee collection, timetable management, result declaration etc.

Existing System: In the existing system, the university manages every single aspect of education delivery. That is, the university onboards or removes a professor, the university adds or removes a course etc. The university also decides the fee amount for each course, collects this fee from the students and pays the professor. As the university has autonomy over the operations, the professor gets very little flexibility in terms of what course content needs to be delivered, what the schedule of those courses would be, what the cost of those courses would be, etc. The main objective of a college management system is to automate all functionalities of a college or university. Using this system you can manage all administration-related work like admission, fee collection, timetable management, result declaration etc.

Solution Proposed:

The solution for the problem would be to design an online learning system which is completely professor centric. That is, the professor would control every element of education/course delivery.

Main features of this improved system would be:

1. System startup with all the initial configurations all worked out. Determine the user roles required to manage the system. These include universal student directory, the universal certification authority to say if a student is ready to graduate. A student is ready to graduate with an MS degree if they take 8 course max. A directory of professorAsAService listing, etc.
2. A professor can sign up to the service and then able to manage their course catalog (1 or 2 courses) and course schedule for the courses.

4. Professors create course schedule every term with the courses they plan to offer for that term

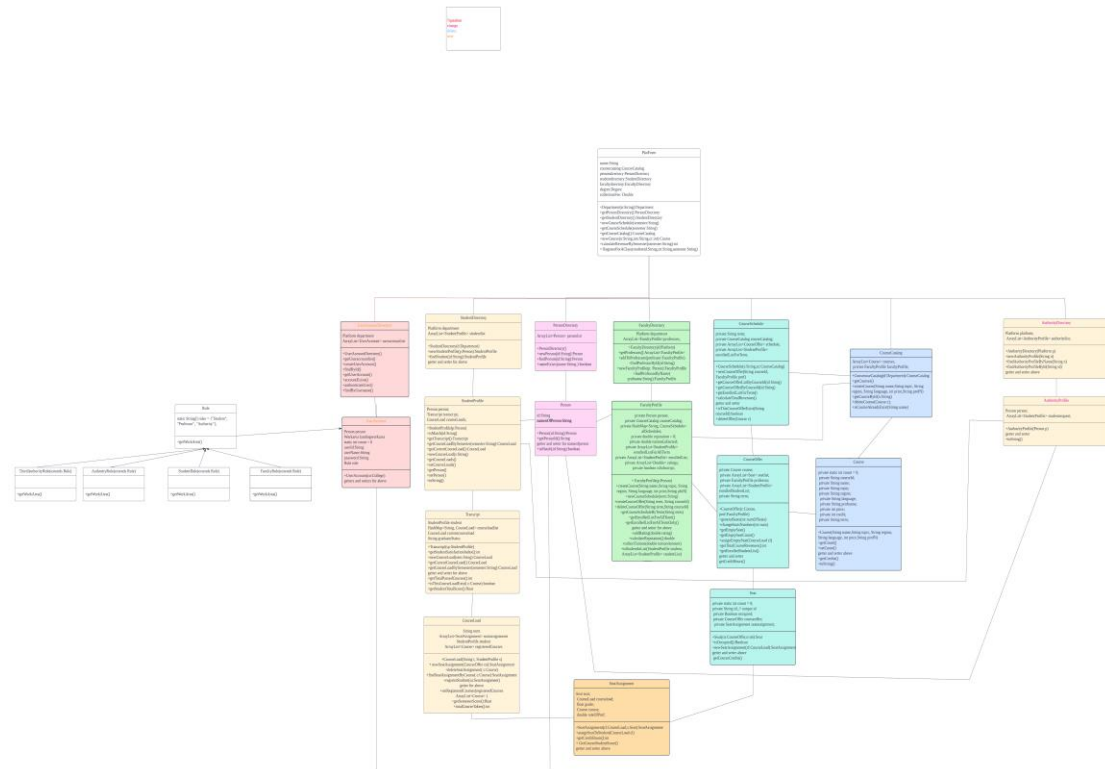
6. Students decide to register for classes. They will search for topics and register the courses they want to take. They should be able to see the professor rating before they register.

8. A dashboard that enables platform owners to collect performance data of different varieties.

Class Design Decisions:

[illegible]

(2) Professor-As-A Service-model



Design Model:

1. Sign up as admin

2. Sign up with different roles

The screenshot displays two side-by-side windows from the 'Professor As A Service Cloud' application. The left window, titled 'Professor As A Service Cloud', is a login page with a pink background. It contains a 'Username' field with the value 'admin', a 'Password' field with the value 'admin', a 'Sign In' button, and a 'Sign Up' button. The right window, titled 'Create An Account', is a registration page with an orange background. It contains a 'Name' field, a 'Username' field, a 'Password' field, a 'Choose your role' dropdown menu with 'Professor' selected, and a 'Sign Up' button.

The screenshot displays two side-by-side windows from the 'Professor As A Service Cloud' application.

The left window, titled 'Professor As A Service Cloud', is a login page with a pink background. It contains the following elements:

- Username:** A text input field containing the text 'admin'.
- Password:** A text input field containing the text 'admin'.
- Sign In:** A button located below the password field.
- Sign Up:** A button located at the bottom of the page.

The right window, titled 'Create An Account', is an account creation page with an orange background. It contains the following elements:

- Name:** A text input field containing the text 'p1'.
- Username:** A text input field containing the text 'p1'.
- Password:** A text input field containing the text 'p1'.
- Choose your role:** A dropdown menu with a blue arrow icon. The menu is open, showing three options: 'Professor' (highlighted in blue), 'Professor' (in grey), and 'Student' (in grey). Below the dropdown is a text input field containing the text 'Authority'.

3. Sign up as professor

4. Click Course Management btn

(create/delete course and make course schedule)

Log Out

Course Management

Student Management

My Analytics

Course Name: Region: Language:

Topic: Price:

My Courses

Course ID	Course Name	Topic	Region	Language	Price
Course0	1	1	1	1	1
Course1	11	11	11	11	11

Create Course Delete Course

Update content: Update

My Course Schedule

Term: Course ID: Course Name: Term: Professor Na... No. of seats

Course ID	Course Name	Term	Professor Na...	No. of seats
Course0	1	2022Fall	p1	1
Course1	11	2023Spring	p1	11

Number of seats:

Create Course Offer Delete Course Offer

Update number of seats:

5. Sign in as student

6. click register course btn

(search course & register/delete course for different term)

log out

register course

Transcript

Search courses by: Search

Course... Course... Semester topic region language credit price RatingOf... Seat

Course...	Course...	Semester	topic	region	language	credit	price	RatingOf...	Seat
Course0	1	2022Fall	p1	1	1	4	1	NaN	1/1
Course1	11	2023Spring	11	11	11	4	11	NaN	11/11

choose Semester you need to register: Register

Registered Plan

CourseNum	CourseName	semester
Course0	1	2022Fall
Course1	11	2023Spring

Delete Total tuition: 12

7. click transcript

8. sign in as professor, click student management

(grade professor's course)

(grade student for different course)

log out

register course

Transcript

CourseNumber	CourseName	Semester	Professor	Grade	RateOfPro
Course0	1	2022Fall	p1	0.0	1.0
Course1	11	2023Spring	p1	0.0	1.0

Rating this course: Rating

Choose the third authority to evaluate your request: Request to graduate

Graduate request status: **Not ready to graduate**

Log Out

My rating from students: 1.0

Term:

StudentName	Student ID	Grade Status	CourseId	Term
s1	user0	4.0	Course0	2022Fall

A grade

9. Sign in as student, click transcript

(student can see grade and ask graduate)

10. Sign in as professor, click my analysis

(view registered students number and total revenue & subscribe fee to platform)

log out
register course
Transcript

CourseNumber	CourseName	Semester	Professor	Grade	RateOfPro
Course0	1	2022Fall	p1	4.0	1.0
Course1	11	2023Spring	p1	4.0	1.0

Rating this course: Rating
(integer number 1-10)

Choose the third authority to evaluate your request: Request to graduate

Graduate request status: Pending...

Log Out
Course Management
Student Management
My Analytics

Number of students: 1
Subscription Fee need to pay: 1.7...
(15% of your total revenue)
Subscription Fee already paid: 1.7...
My Revenue from course: 12.0

11. Sign in as authority

(approve/reject student's graduate request)

12. Sign in as student, click transcript

(graduate request status changed)

Log Out

Student Name	Total Course Num	Status
s1	2	Graduate

Student Transcript Table

CourseNumber	CourseName	Semester	Professor	Grade
Course0	1	2022Fall	p1	4.0
Course1	11	2023Spring	p1	4.0

log out
register course
Transcript

CourseNumber	CourseName	Semester	Professor	Grade	RateOfPro
Course0	1	2022Fall	p1	4.0	1.0
Course1	11	2023Spring	p1	4.0	1.0

Rating this course: Rating
(integer number 1-10)

Choose the third authority to evaluate your request: Request to graduate

Graduate request status: Graduate

13. sign in as admin

14. click show performance

(view all information, like professor, student, course, authority, platform revenue etc.)

log out
ShowPerformance

Prof Name	Prof ID	Prof Revenue
user1	p1	12.0
user2	p2	0.0

Stu Name	Stu ID	IsGraduate
s1	user3	Graduate
s2	user4	Not ready t...

CourseName	CourseNum	language
Course0	1	1
Course1	11	11

AuthorityId	AuthorityName
user5	a

Total Revenue of the platform: 1.7999999999999998

Functionalities:

Admin model: default username and password are admin

- 1.Register for three different roles(professor student authority)
- 2.View platform information(professor, course, student, authority and platform revenue)

Professor model:

- 1.Add/update/delete course information
- 2.Make schedule for courses' seats and term
- 3.Grade every course enrolled students (A = 4.0)
- 4.View total revenue and number of enrolled students
- 5.Subscribe course income to platform

Student model:

- 1.Search course by professor name/coursename/topic/region/language
- 2.According search outcome to register course
- 3.View transcript for all registered course
- 4.Rate for all registered courses' professor
- 5.Request for graduation
- 6.View graduation status

Authority model:

- 1.Manage students' graduate request(meet 8 credits courses passed& courses should be taught by different professors)

Opinion and Conclusion:

The future digital education platform greatly reduces the difficulty for less affluent people to access quality courses because professors can be unrestricted by region and language, etc. In addition, professors can carry out some free courses regularly according to the course topics, such as python course free in fall 2022, as an educational charity to support the learning of less affluent people, in addition, professors can also reach cooperation with the platform, such as In addition, professors can also reach cooperation with the platform, for example, professors can pay less, provide more courses and students, and attract more students and professors to use the platform, so as to increase revenue. In general, whether the future development of digital education platforms can make education more accessible and affordable to the less affluent depends on the cooperation between the platform and professors, but any party that takes profit as the first goal will threaten the healthy development of the platform.