

AED ASSIGNMENT – 3

DIGITAL PLATFORM DESIGN FOR “PROFESSOR-AS-A-SERVICE”

TEAM MEMBERS:

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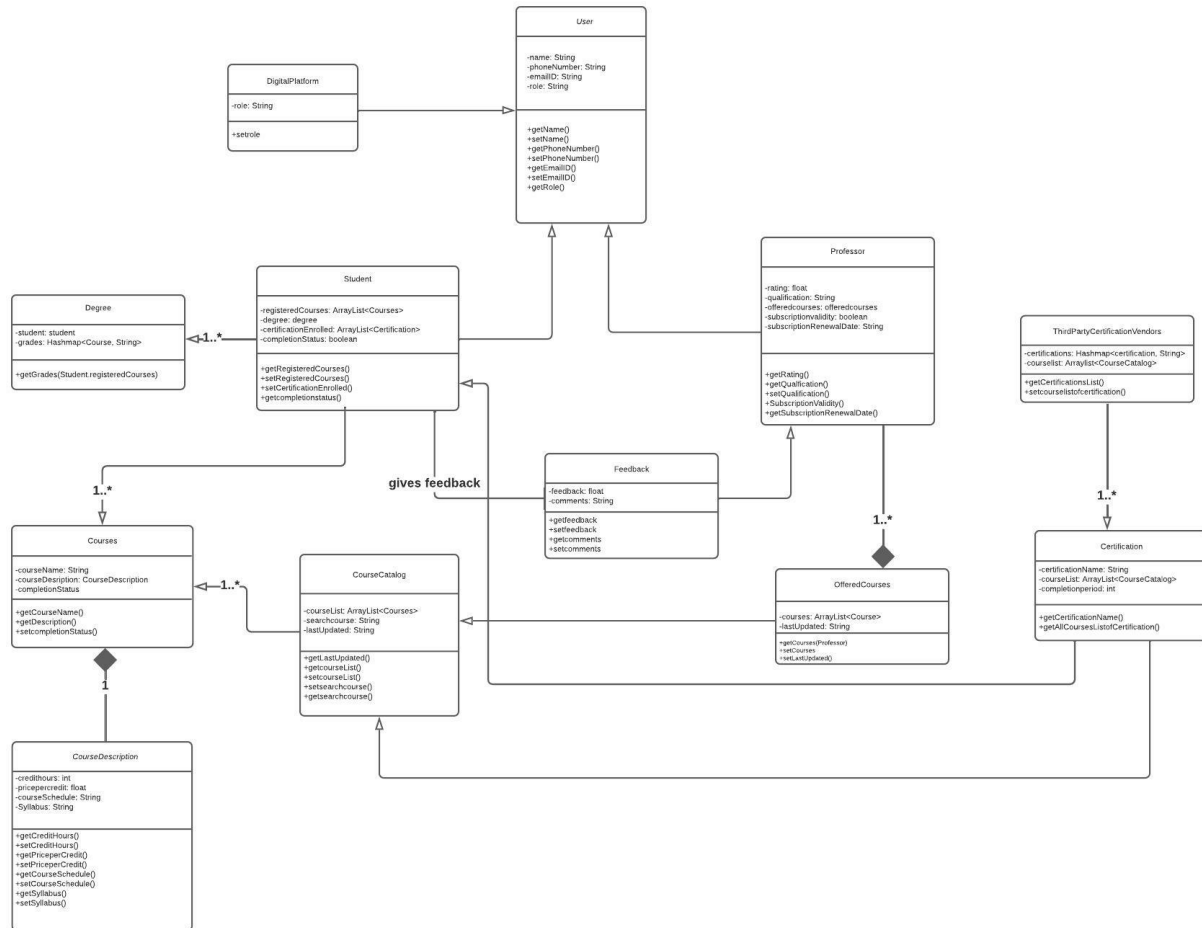
INTRODUCTION:

By gaining an understanding of how an object model can be turned into a machine that collects information and aggregates data, this assignment will help you to reduce tuition costs within the educational system while improving education quality by using software engineering techniques. People need to be held accountable for improving the quality of life for the masses by educating them, teaching them how to learn, and providing them with feedback.

GOALS OF THE ASSIGNMENT:

- We are creating a new educational model considering “Professor as a Service”. It is the professor who is at the center of students learning process but not the university.
- Students seeking a course in their field of specialization can use a reputation index to find the best courses to pick. Professors are free to offer courses according to their unique expertise. The professor is responsible for managing their own courses, including what they want to teach and when they want to teach it. Students can choose which courses they wish to take.
- Students will be able to access these services using tablets, browsers, and smart devices from anywhere within the world. Professors will join the service and operate remotely from anywhere within the world.
- Tuition for courses is set by the professor and is determined based on demand. The professor pays subscription fees for the use of digital platforms. Prices for courses can vary and are easily adjusted based on demand.

CLASS DIAGRAM:



CLASSES WE USED IN THE MODEL AND THEIR IMPORTANCE:

❖ DigitalPlatform



Role

A person whoever has entered the DigitalPlatform should provide their role here. This is where the person will be registered as a student or the professor.

❖ USER

- name: String
- phoneNumber: String
- emailID: String
- role: String

Once the role is registered, the person has to give his details like name, phone number, emailid and his role in the user class.

❖ Student

- registeredCourses: ArrayList<Courses>
- degree: degree
- certificationEnrolled: ArrayList<Certification>
- completionStatus: Boolean

In the student class, a list of all the registered courses of the student will be stored. Once the student finishes all the requirements of a given subject, it gets updated in the certification enrolled arraylist and also updates the course completion status.

❖ Professor

- rating: float
- qualification: String
- offeredcourses: offeredcourses
- subscriptionvalidity: Boolean
- subscriptionRenewalDate: String

In the Professor class, details like qualification of the professor, the courses that are offered by him during the particular period and also the subscription validity of the digital platform along with its renewal date. This class also stores the rating of the professor which awarded by the students who are all enrolled under him.

❖ Degree

- student: student
- grades: Hashmap<Course, String>

The degree class stores the status of a particular student's degree and the grades which he was awarded.

❖ Courses

- courseName: String
- courseDescription: CourseDescription
- completionStatus

The Courses class which is linked to the student's class will be storing the course name and its description which the student has taken and the current status of the completion of the course will also be stored.


❖ CourseDescription


- credithours: int
- pricepercredit: float
- courseSchedule: String
- syllabus: String

The course description class will have all the details of the courses credit hours and what is the cost per credit. It also has the schedule and the syllabus of the given course.

❖ **CourseCatalog**

 courseList: ArrayList<Courses>


 searchcourse: String

 lastUpdated: String

Course Catalog has a list of all the courses that are available at a particular period and it gets updated whenever there is a change in the availability of the courses. The student can search for the intended course that he wishes to do.


❖ **OfferedCourses**

 courses: ArrayList<Courses>

 lastUpdated: String

The Offered Courses class which is linked to the Professor class has all the list of courses that are offered by the professor and also gets updated when ever the changes are made.

❖ **Feedback**

 feedback: float

 comments: String

All the students will have a chance to submit feedback on the courses they have taken and the appropriate faculty as soon as the course is concluded.

❖ **ThirdPartyCertificationVendors**

certifications: Hashmap<certification, String>

courselist: ArrayList<CourseCatalog>

All the details of the Certification Vendors will be stored here, which also has all the courses list that are provided.

❖ **Certification**

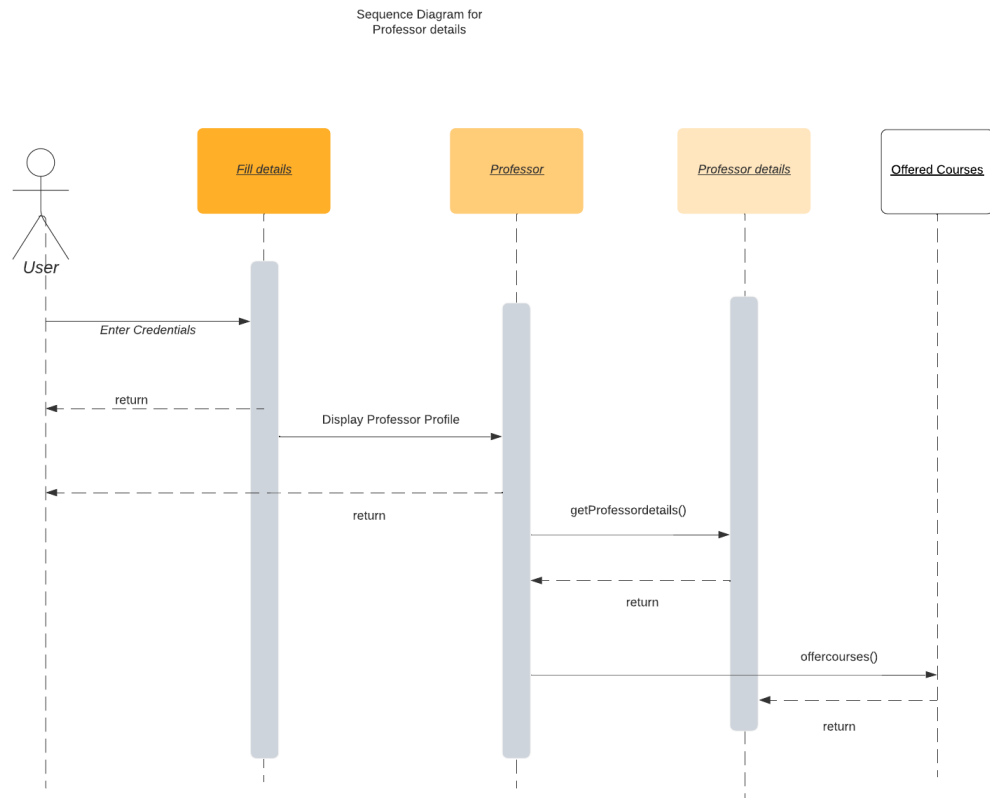
certificationName: String

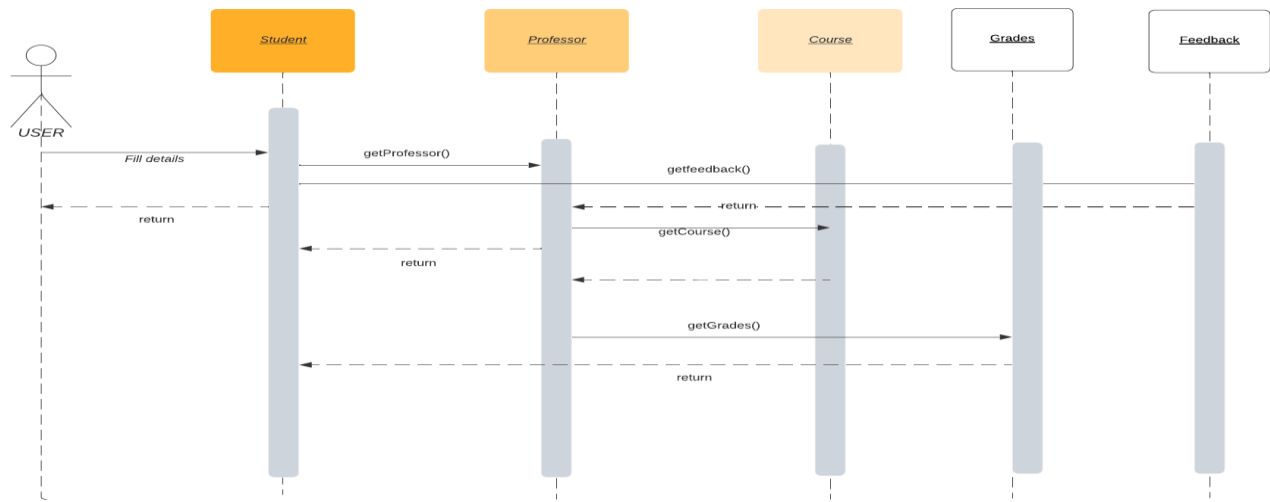
courseList: ArrayList<CourseCatalog>

completionperiod: int

Once the student completes the course, the certificate which guarantees the completion of the course will be given to the student. The certificate provides the course list and the completion period of the course when it is done.

SEQUENCE DIAGRAM:



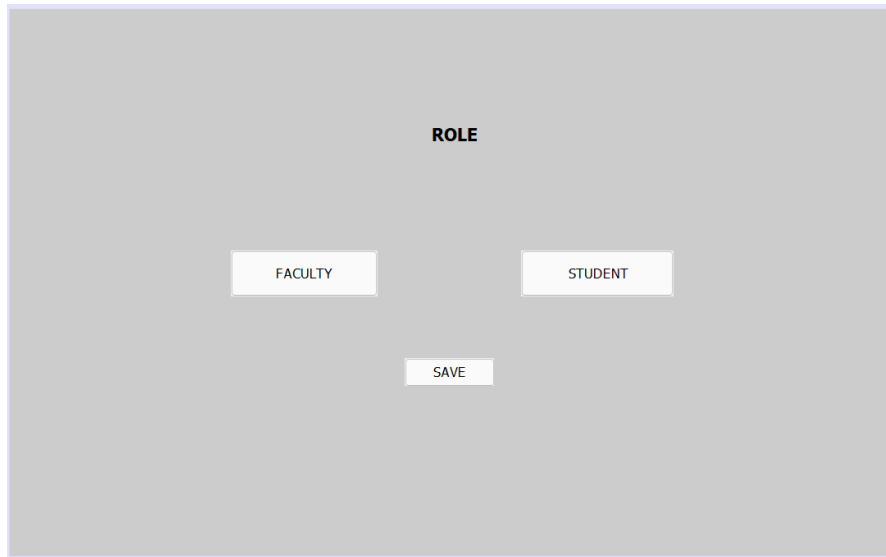


DASHBOARD:



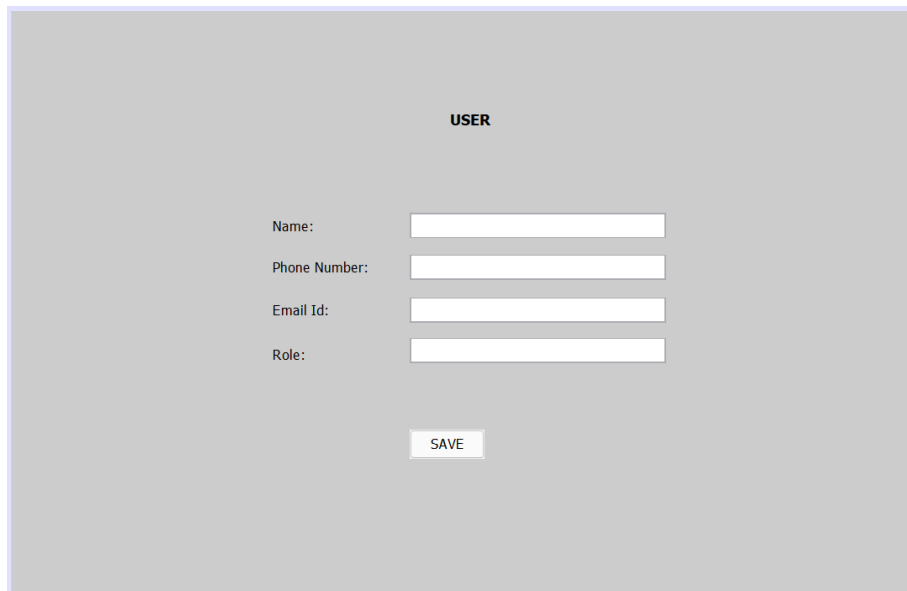
SCREEN DESIGNS FOR THE DIFFERENT USE CASES:

This is the initial screen where a user selects his role as a student or professor.



A screen titled "ROLE" with a light gray background. It features two white rectangular buttons labeled "FACULTY" and "STUDENT" arranged horizontally. Below these buttons is a single white rectangular button labeled "SAVE".

On this next screen, user fills his details.



A screen titled "USER" with a light gray background. It contains four labels on the left, each followed by a white rectangular input field: "Name:", "Phone Number:", "Email Id:", and "Role:". Below these input fields is a single white rectangular button labeled "SAVE".

In this Student Profile screen, Student will be able to see his registered degree, completion status, registered courses and the certification that he is enrolled in.

Student Profile

Degree:

Completion Status:

Registered Courses

S.No	Name of the Course

Certification Enrolled

SNo	Certification

In this Professor Details screen, the professor enters his highest qualification and the courses that he is planning to offer. The Subscription validity and renewal date will populate automatically.

Professor Details

Qualification:

Rating:

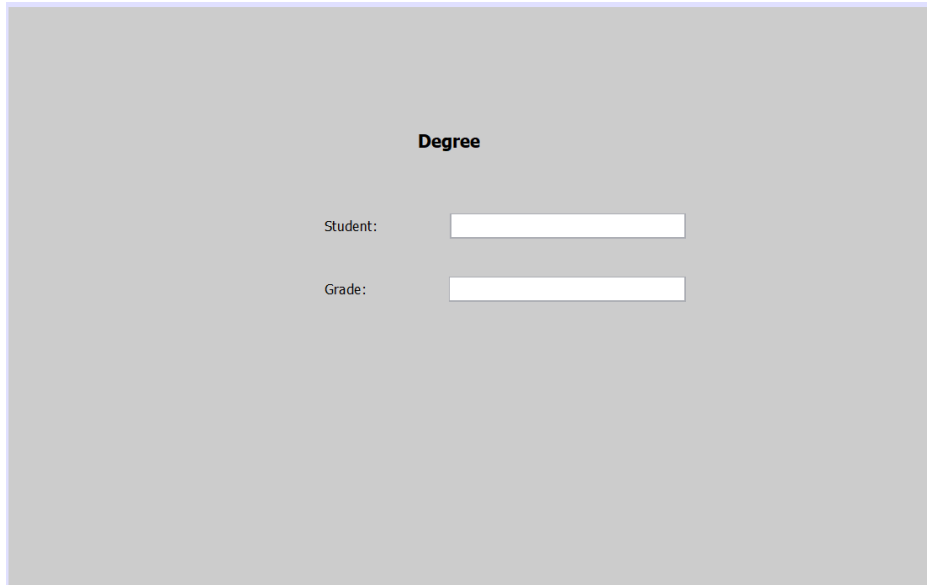
Subscription Validity:

Subscription Renewal Date:

Offered Courses

S.No	Name of the Course

This is the Degree screen where student finds his grades for the degree he is enrolled in.

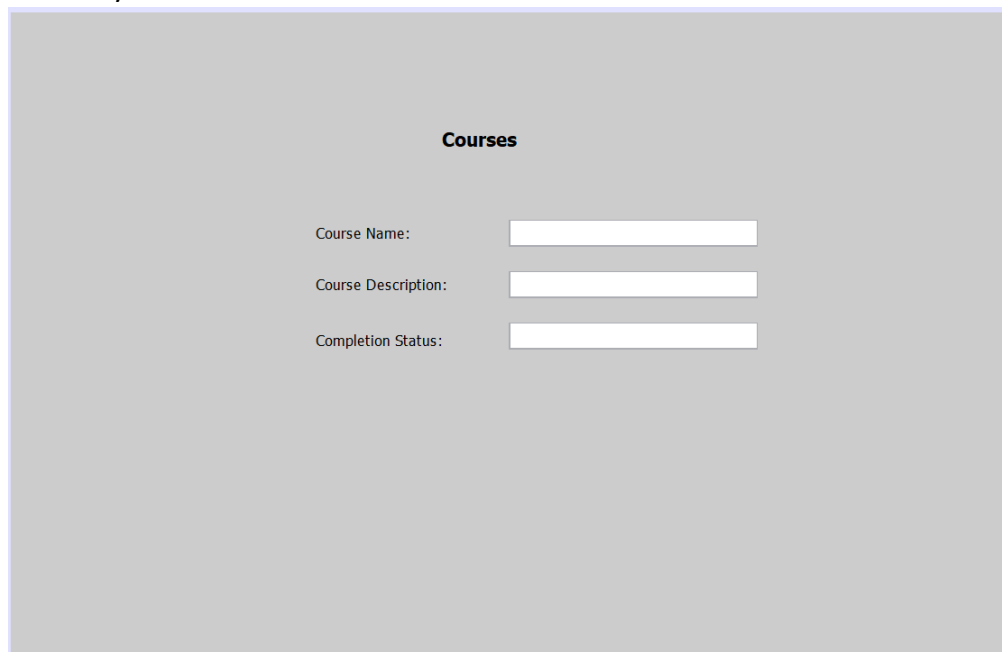
A gray rectangular mockup representing a web screen. At the top center, the word "Degree" is displayed in a bold, black font. Below this, there are two input fields. The first is preceded by the label "Student:" and the second by "Grade:". Both labels are in a standard black font, and the input fields are white rectangles with thin gray borders.

Degree

Student:

Grade:

In this screen, the student can find the completion status of the courses that he is enrolled in currently.

A gray rectangular mockup representing a web screen. At the top center, the word "Courses" is displayed in a bold, black font. Below this, there are three input fields. The first is preceded by the label "Course Name:", the second by "Course Description:", and the third by "Completion Status:". All labels are in a standard black font, and the input fields are white rectangles with thin gray borders.

Courses

Course Name:

Course Description:

Completion Status:

In this screen, one can find the course description like the no.of credit hours, price per credit, the slots available for that particular course and its syllabus.

Course Description

Credit Hours:

Price Per Credit:

Course Schedule:

Syllabus:

In this Course Catalog screen, one can search for the courses they are interested in.

Course Catalog

Search Course:

Last Updated:

Course List

S.No	Name of the Course

This is where the professor updates that course names that he is going to offer for that semester.

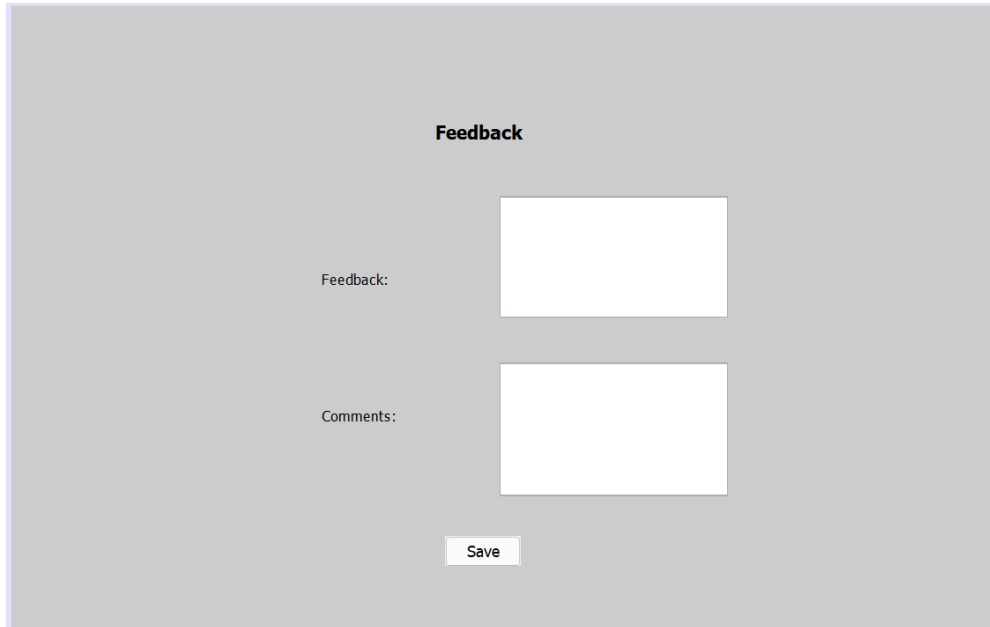
Offered Courses

Offered Courses

S.No	Name of the Course

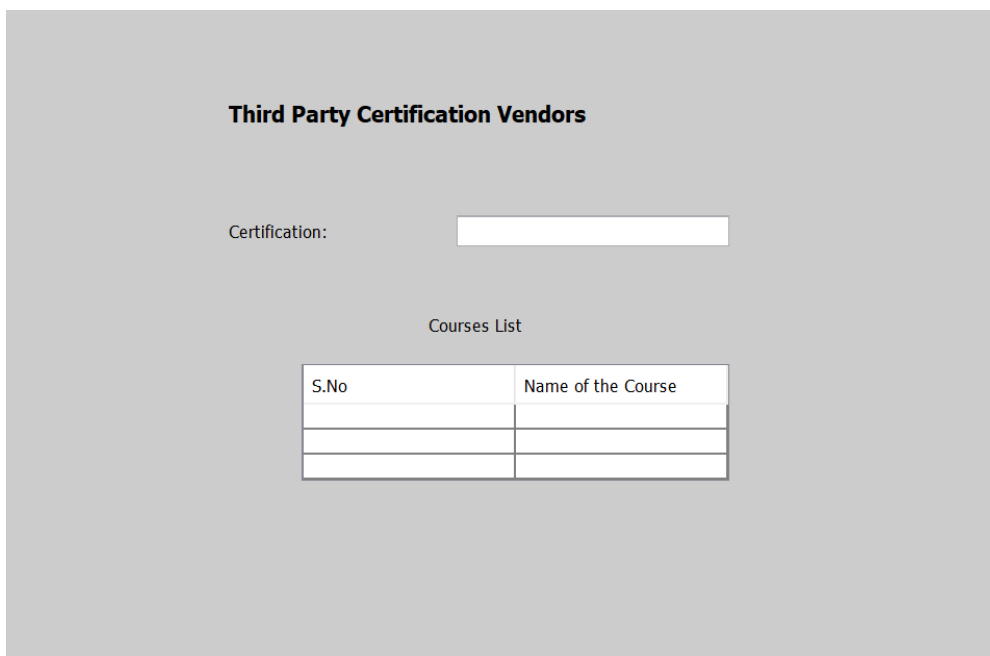
Last Updated On:

In this screen, Students will be able to give their feedback and comments about a course or professor they have studied under.



The image shows a feedback form on a gray background. At the top center is the title "Feedback" in bold. Below it, on the left, is the label "Feedback:" followed by a large white rectangular input box. Further down, on the left, is the label "Comments:" followed by another large white rectangular input box. At the bottom center, there is a small white button with the text "Save" in black.

In this screen, one can find different Third party certification vendors that are available and partnered with the digital platform and the list of courses they can authenticate.



The image shows a screen titled "Third Party Certification Vendors" in bold. Below the title, on the left, is the label "Certification:" followed by a white rectangular input box. Below this, centered, is the label "Courses List". Underneath, there is a table with two columns: "S.No" and "Name of the Course". The table has three rows, including the header row.

S.No	Name of the Course

In this screen, the available certifications, their required time for completion and the courses that are available under that particular certification are showed.

Certifications

Certification Name:

Completion Period:

Courses List

S.No	Name of the Course

OUR OPINION:

- With this new age education system, students can get quality education at lower tuition fees, as the university maintenance expenses won't be there in this. Some Professors can charge lesser than others and the students can select the professors considering the fee they charge as well unlike the conventional system.
- Students can access the courses at their comfort from any smart device and from any location.
- Students can choose their professor by seeing his rating. With this the students will know how a professor teaches and if it suits their learning pace. With the conventional model, this won't be possible.

