COURSE PROJECT

PROJECT TITLE

University Course Registration System

NAME: Mansura Manik Mou ID:151-35-912

Supervisor Name : Md. Alamgir Kabir

Department : Software Engineering

Faculty of Science and Information Technology

December 2017

Table of Contents

Chapter 1 ---------- 3

1. Introduction ---------- 3

1.1 About the System ---------- 3

1.2 Purpose ---------- 3

1.3 Scope ---------- 3

1.4 Vision ---------- 4

1.5 Why this system is necessary? ---------- 4

1.6 Proposed Solution ---------- 4

Chapter 2 ---------- 5

2. System Analysis ---------- 6

2.1 Actor Goal List ---------- 7.

2.2 Use Case Model ---------- 6

2.3 Use Case Description (Brief) ---------- 7

2.3.1 Register for course (Example) ---------- 7

2.3.2 selecting course to teach(Example) ---------- 7

2.3.3 Register validity checking (Example) ---------- 8

2.4 Use Case Description (Detailed) ---------- 8

2.4.1 Register for course (Example) ---------- 9

2.4.2 Request for course catalog (Example) ---------- 10

2.4.3 select course to teach (Example) ---------- 11

2.5 System Sequence Diagrams ---------- 12

2.5.1 Register for course ---------- 12

2.5.2 Request for course catalog (Example) ---------- 13

2.5.3 select course to teach (Example) ---------- 14

2.6 Domain/Conceptual Model ---------- 15

2.7 Activity diagram ---------- 16

Chapter 3 ---------- 17

3. System Design ---------- 17

3.1 Sequence Diagrams ---------- 18.
3.1.1 Register for course ---------- 18
3.1.2 Request for course catalog ---------- 19
3.1.3 Select Course ---------- 20
3.2 Class Diagram ---------- 20

Chapter1: Introduction

1. Introduction

   The name of system is university registration system here is student register for their course.

1.1 About the system

Select Courses to Teach This Course Registration System is a web-based program aimed to make easier and more convenient the class registration process, a hassle through which students go every semester. As it stands, here is University, in order to officially register for classes, each student must fill out a course registration form manually, bring it to the Registrar's Office at University Hall, stand inline (often for upwards of twenty to thirty minutes), and finally have the form officially approved and stamped. In order to change anything About one's current schedule, such as dropping or adding a class, Changing grade option, or showing official permission from a professor, the student must go through the same tedious process.Course Registration System attempts to alleviate these hassles by providing several services to students through the internet. Course Registration System provides a way to search for classes without having to open a course catalog, a way to "shop" around and view various possible schedules, and finally, officially register for the chosen classes. All this can be done in the privacy of the students' own rooms and without the stress and time it takes to stand in line in University Hall.

1.2 Purpose

Course Registration System attempts to alleviate these hassles by providing several services to students through the internet. Course Registration System provides a way to search for classes without having to open a course catalog, a way to "shop" around and view various possible schedules, and finally, officially register for the chosen classes. All this can be done in the privacy of the students' own rooms and without the stress and time it takes to stand in line in University Hall.

1.3 Scope

The student is first requested to fill the form. This form will contain important particulars of the student like his name,DOB,branch,his marks,dept. Course Registration System provides a way to search for classes without having to open a course catalog, a way to "shop" around and view

various possible schedules, and finally, officially register for the chosen classes.

1.4 Vision

University registration system can reduce our time. This allows you to reap the benefit of a massive cost reduction in your annual enrollment and registration process. No more paper to lose, no more trying to figure out what is the name written in that document. Course Registration System provides a way to search for classes without having to open a course catalog. Instead you end up with clear validated data that is ready for your University Registration System.
In this system we can make –

- Student registration
- Professor registration
- Class schedule
- Course catalog

1.5 Why this system is necessary

To reduce our time and we can fulfill it easy .we can easily register my course at home. It cannot complicated. That's why we need this system.

1.6 Proposed solution

- Online course registration for semester
- Drop semester

Chapter 2: System analysis

2.1 Actor Goal List

Actor	Goal
Student	• View result • Register for course • Login • View course Prerequisite • Check seat availability
Professor	• Login • View course Prerequisite • Check seat availability • Select course • Submit grades
Register	• Login • Maintain Professor info • Maintain student info • Close registration

2.2 Use Case Model

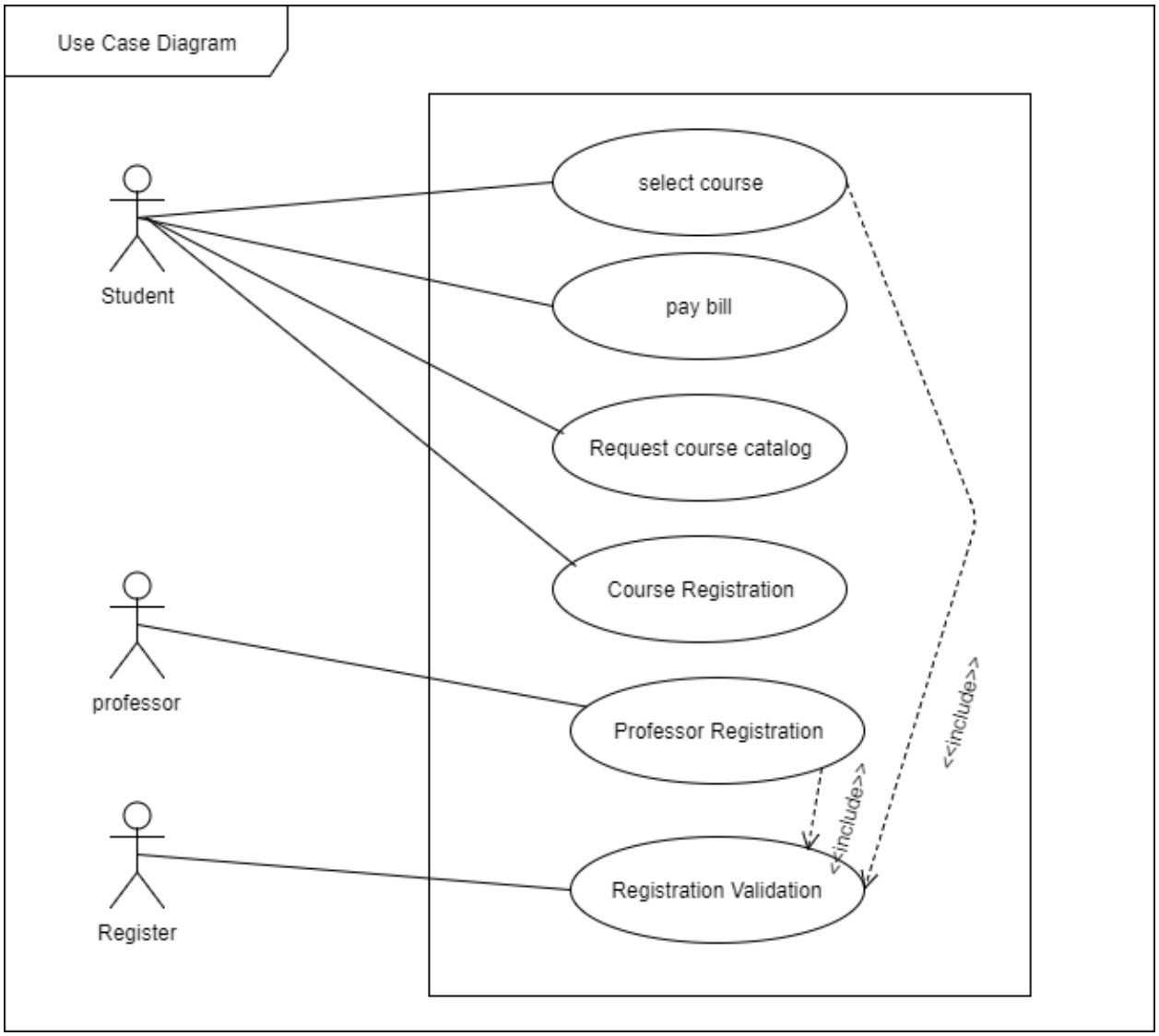

Fig-1: Use Case Diagram

2.3 Use Case Description (Brief)

2.3.1 Register for Courses (success scenario)

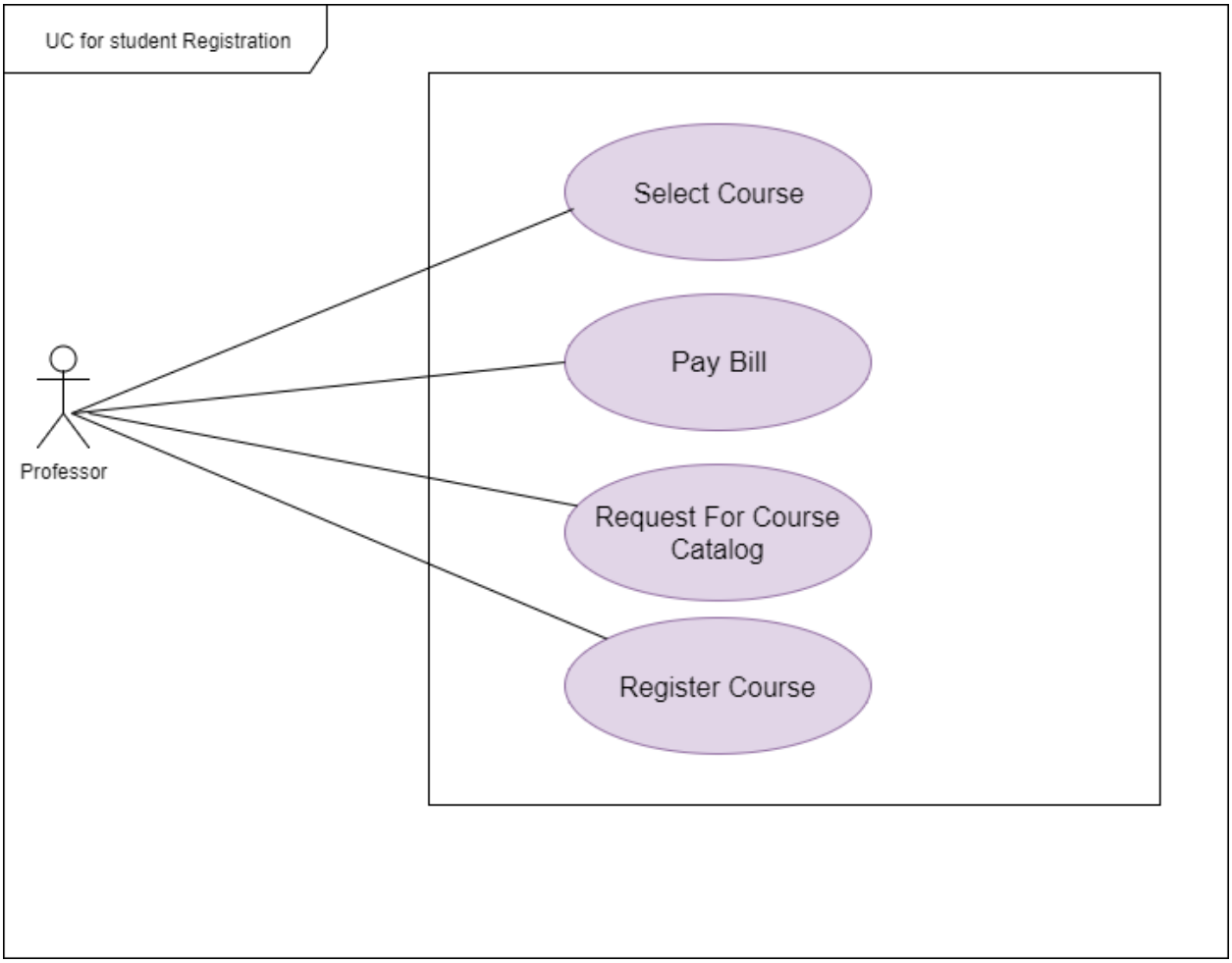

Fig-2: Use Case Diagram for Register Course

2.3.2 Select Courses to Teach (success scenario)

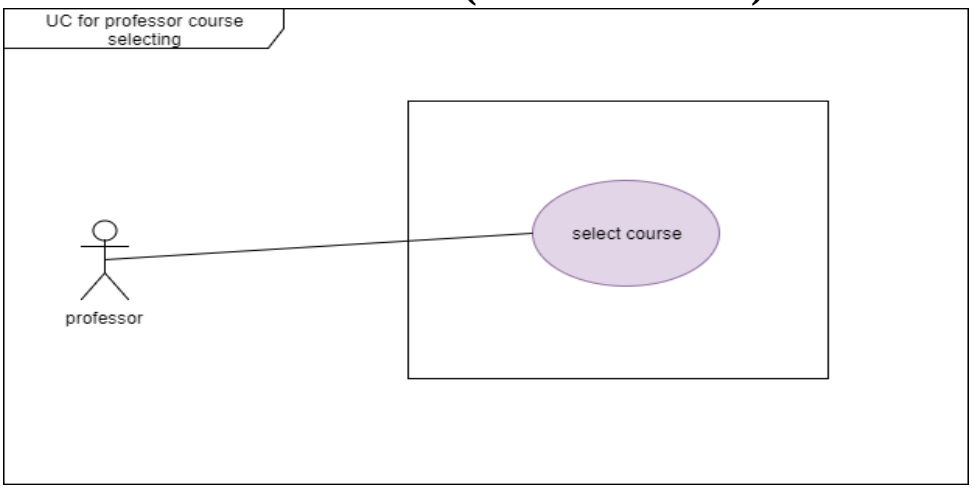

Fig-3: Use Case Diagram for select course to teach

2.3.3 Register Validity checking **(success scenario)**

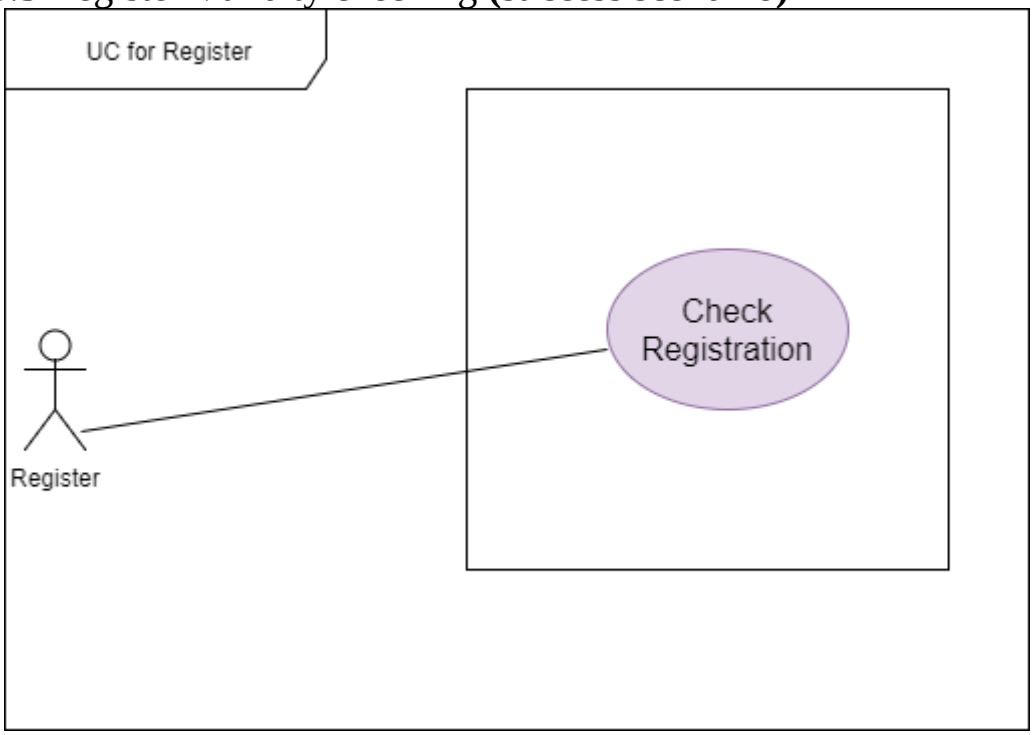

Fig-4: Use Case Diagram for Register check registration validity

2.4 Use Case Description Details

This use case allows a Student to register for course offerings in the current semester. The Student can also update or delete course selections if changes are made within the add/drop period at the beginning of the semester.

2.4.1 Register for Courses

Use case Id	1
Name	Register for Courses
Scope	This use case allows a Student to register for course offerings in the current semester. The Student can also update or delete course selections if changes are made within the add/drop period at the beginning of the semester. The Course Catalog System provides a list of all the course offerings for the current semester.
Level	User goal
Primary Actor	Student

Pre-Conditions	The Student must be logged onto the system before this use case begins.
Post-Conditions	If the use case was successful, the student schedule is created, updated, or deleted. Otherwise, the system state is unchanged.
Main Flow	1.Create a Schedule The system retrieves a list of available course offerings from the Course Catalog System and displays the list to the Student. 2. Update a Schedule The system retrieves and displays the Student's current schedule The system retrieves a list of available course offerings from the Course Catalog System and displays the list to the Student. 3. Delete a Schedule The system retrieves and displays the Student's current schedule The system prompts the Student to confirm the deletion of the schedule. The Student verifies the deletion. 4. Submit Schedule For each selected course offering on the schedule not already marked as "enrolled in", the system verifies that the Student has the necessary prerequisites, that the course offering is open, and that there are no schedule conflicts.
Alternate Flow	1. Save a Schedule At any point, the Student may choose to save a schedule rather than submitting it. If this occurs, the Submit Schedule step is replaced with the following: 2. No Schedule Found If, in the Update a Schedule or Delete a Schedule sub-flows, the system is unable to retrieve the Student's schedule, an error message is displayed.

	3. Delete Cancelled If, in the Delete A Schedule sub-flow, the Student decides not to delete the schedule, the delete is cancelled, and the Basic Flow is re-started at the beginning. 4. Unfulfilled Prerequisites, Course Full, or Schedule Conflicts If, in the Submit Schedule sub-flow, the system determines that the Student has not satisfied the necessary prerequisites, or that the selected course offering is full, or that there are schedule conflicts, an error message is displayed.

2.4.2 **Request for course catalog**

Usecase Id	2
Name	Request for course catalog
Scope	University Registration system
Level	User goal
Primary Actor	Student
Preconditions	Student has already received students ID and personal number.
Post conditions	After loading course catalog, student will see the Course list of their current semester. Student will also see the information
Main flow	1. Student restarts System, logs in, and requests recovery of prior choice 2. Students continues working with the system starting at the point where system failed previously.
Alternate Flow	1. System Error

2.4.3 **Select Courses to Teach**

Usecase Id	3
Name	Select Courses to Teach
Scope	This use case allows a Professor to select the course offerings from the course catalog for the courses that he/she is eligible for and wishes to teach in the upcoming semester.
Level	User goal
Primary Actor	Professor
Pre-Conditions	The Professor must be logged onto the system before this use case begins.
Post-Conditions	If the use case was successful, the course offerings a Professor is scheduled to teach have been updated. Otherwise, the system state is unchanged.
Main flow	1. The system retrieves and displays the list of course offerings the professor is eligible to teach for the current semester 2. The professor selects and/or de-selects the course offerings that he/she wishes to teach for the upcoming semester 3.The system removes the professor from teaching the de-selected course offerings.
Alternate flow	1. No Course Offerings Available If, in the Basic Flow, the professor is not eligible to teach any course offerings in the upcoming semester, the system will display an error message. 2. Schedule Conflict If the systems find a schedule conflict when trying to establish the course offerings the Professor should take, the system will display an

	error message indicating that a schedule conflict has occurred. 3. Course Catalog System Unavailable If the system is unable to communicate with the Course Catalog System, the system will display an error message to the Student.

2.5 System Sequence Diagram

2.5.1 **Register for Courses (success scenario)**

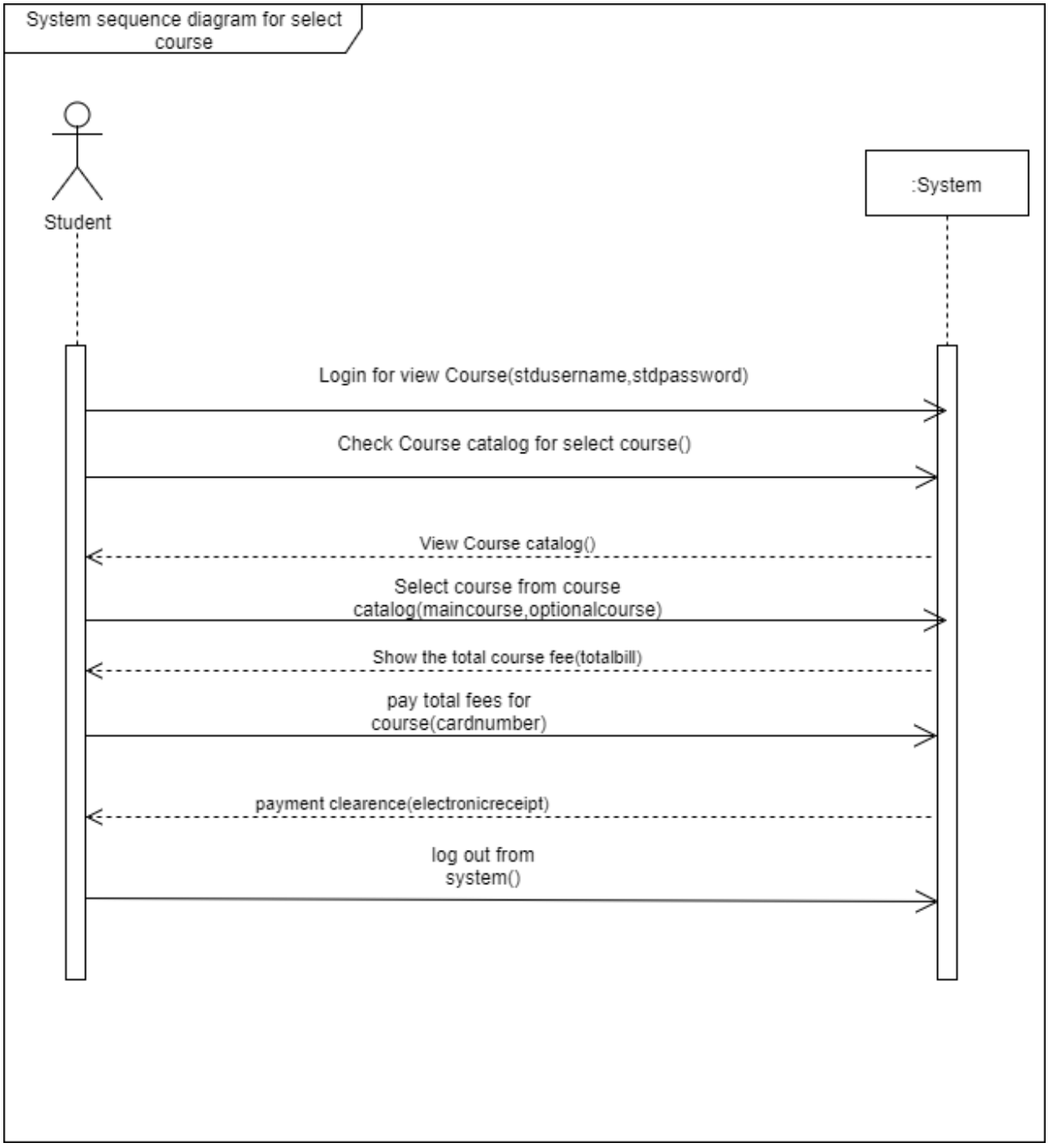

Fig-5: System sequence diagram for register course

2.5.2 **Request for course catalog**

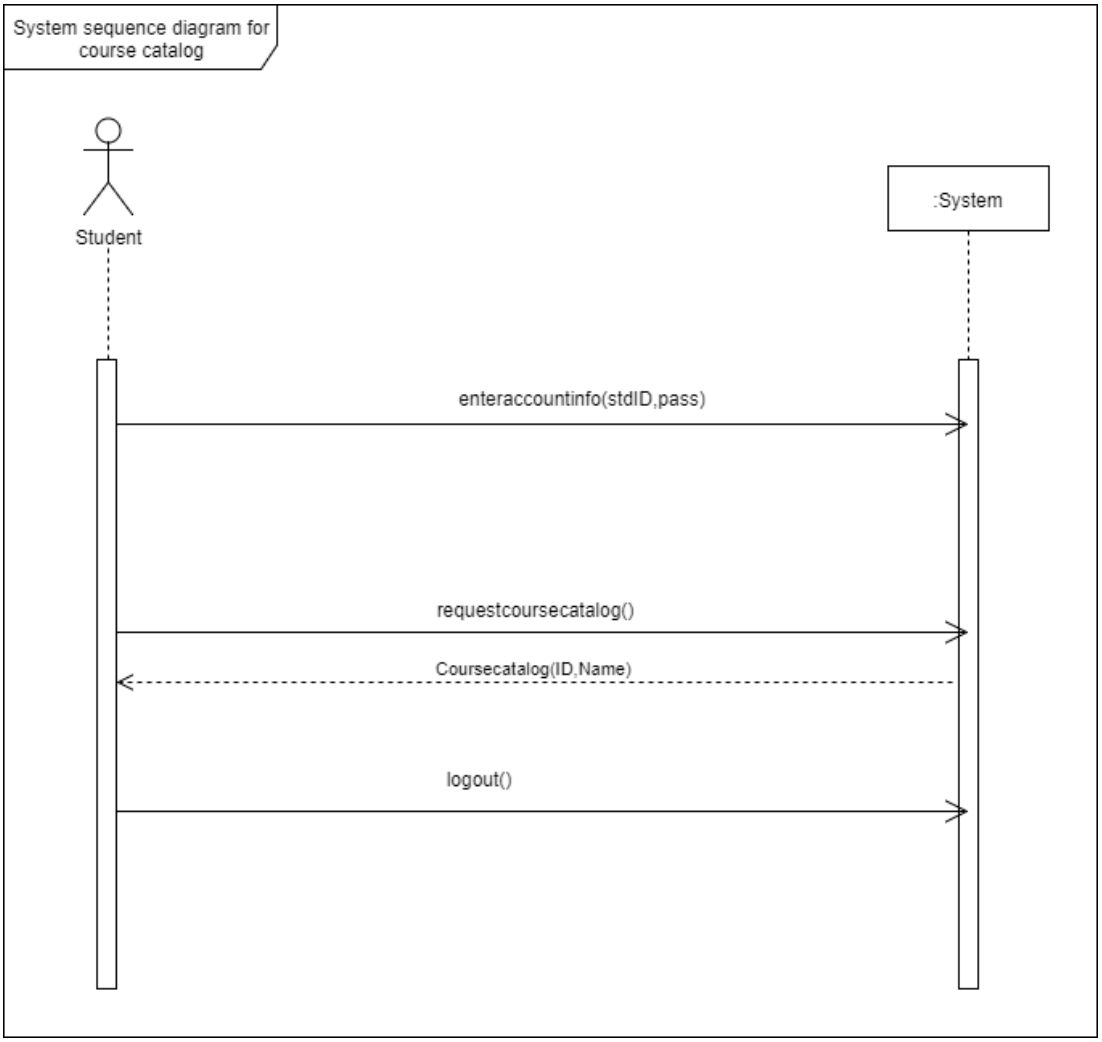

Fig-6: System sequence diagram for Request for course catalog

2.5.3 **Select Courses to Teach**

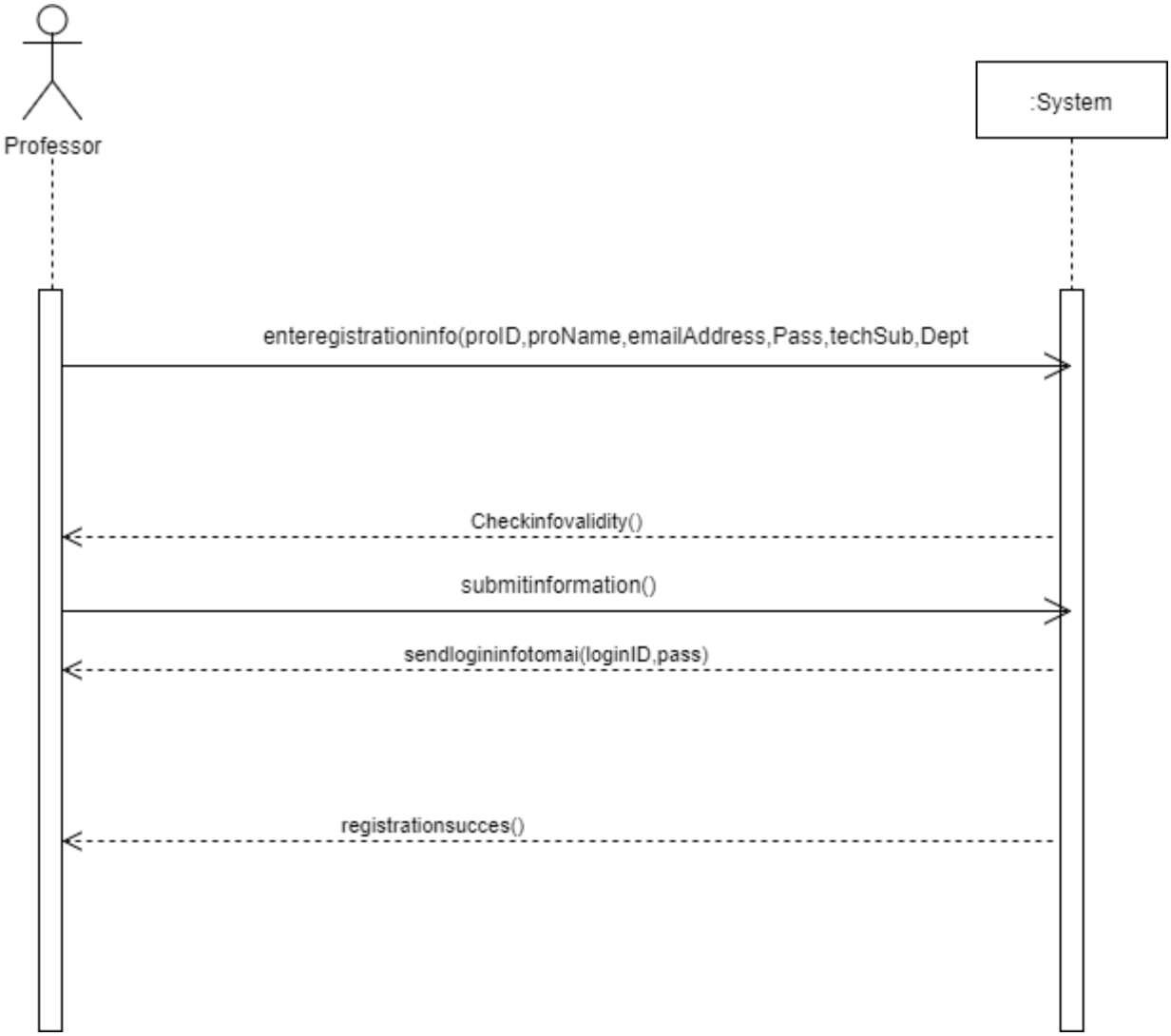

Fig-7: System sequence diagram for Select Courses to Teach

2.6 Domain/Conceptual Model:

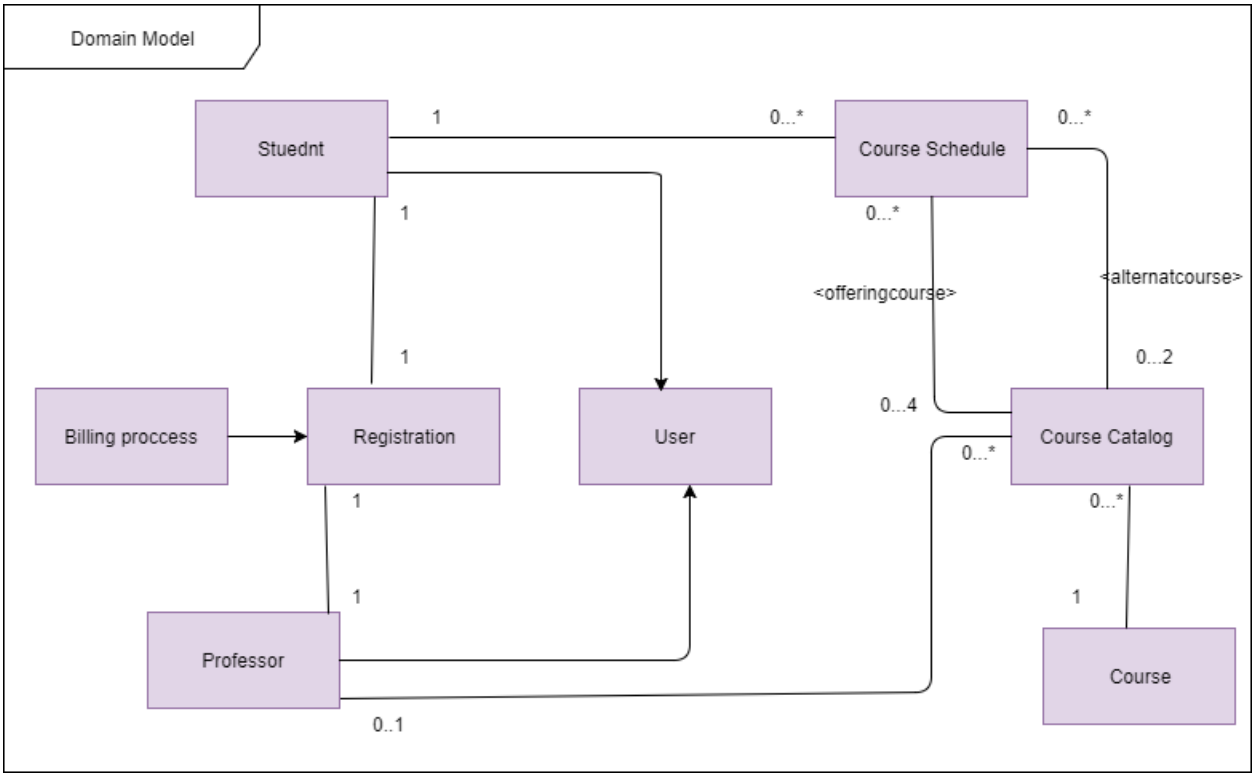

Fig-7: Domain/Conceptual Model for university course registration system

2.7Activity Diagram

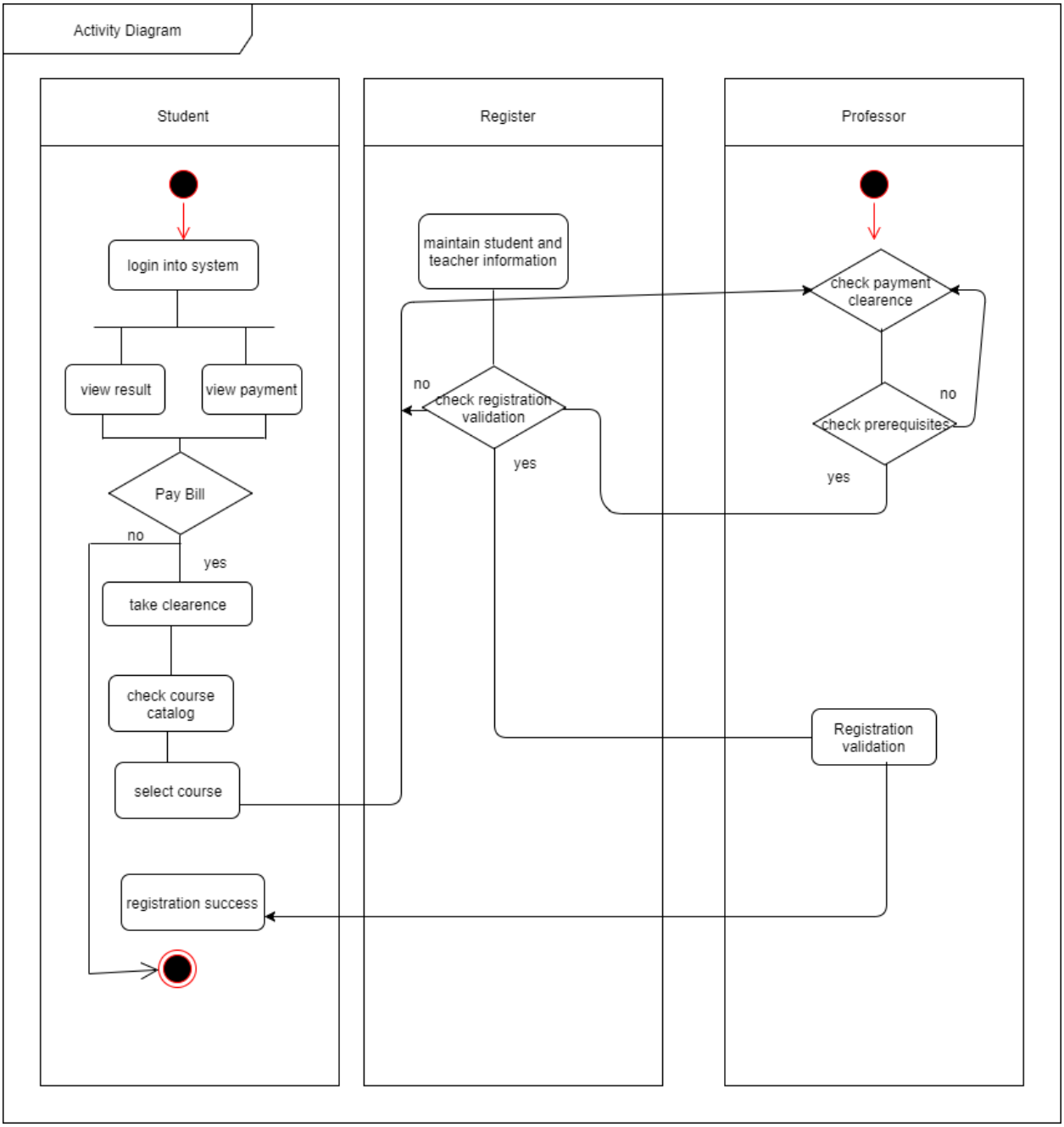

Fig-8: Activity Diagram for university course registration system

Chapter 3: System Design

System Design

System design is the process that is the system how it work .our system processing design in the system design.

3.1 Sequence Diagram

Sequence diagrams is vary useful to understand the System behave it describe interactions

3.1.1 Register for Courses

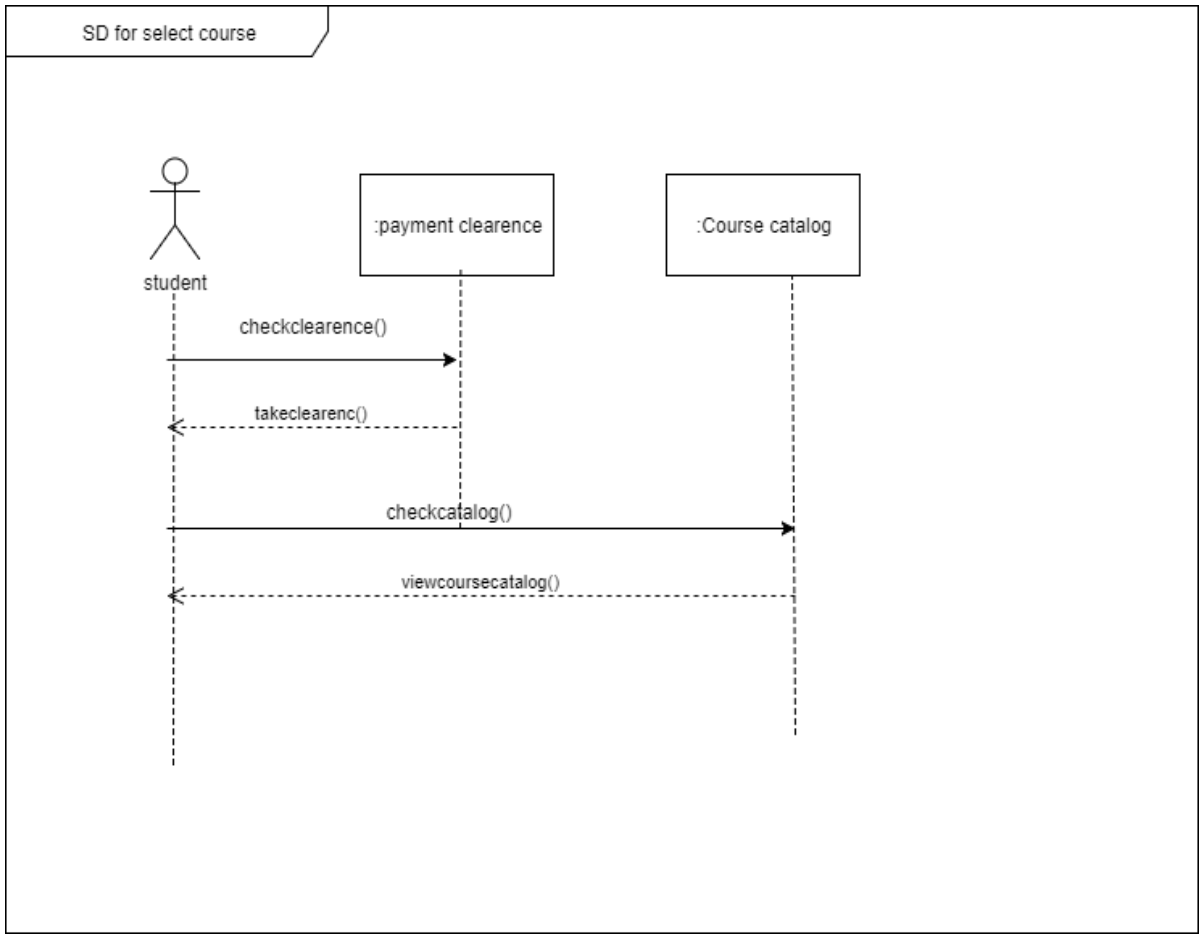

Fig-9: Sequence diagram for Register course

3.1.2Request for course catalog

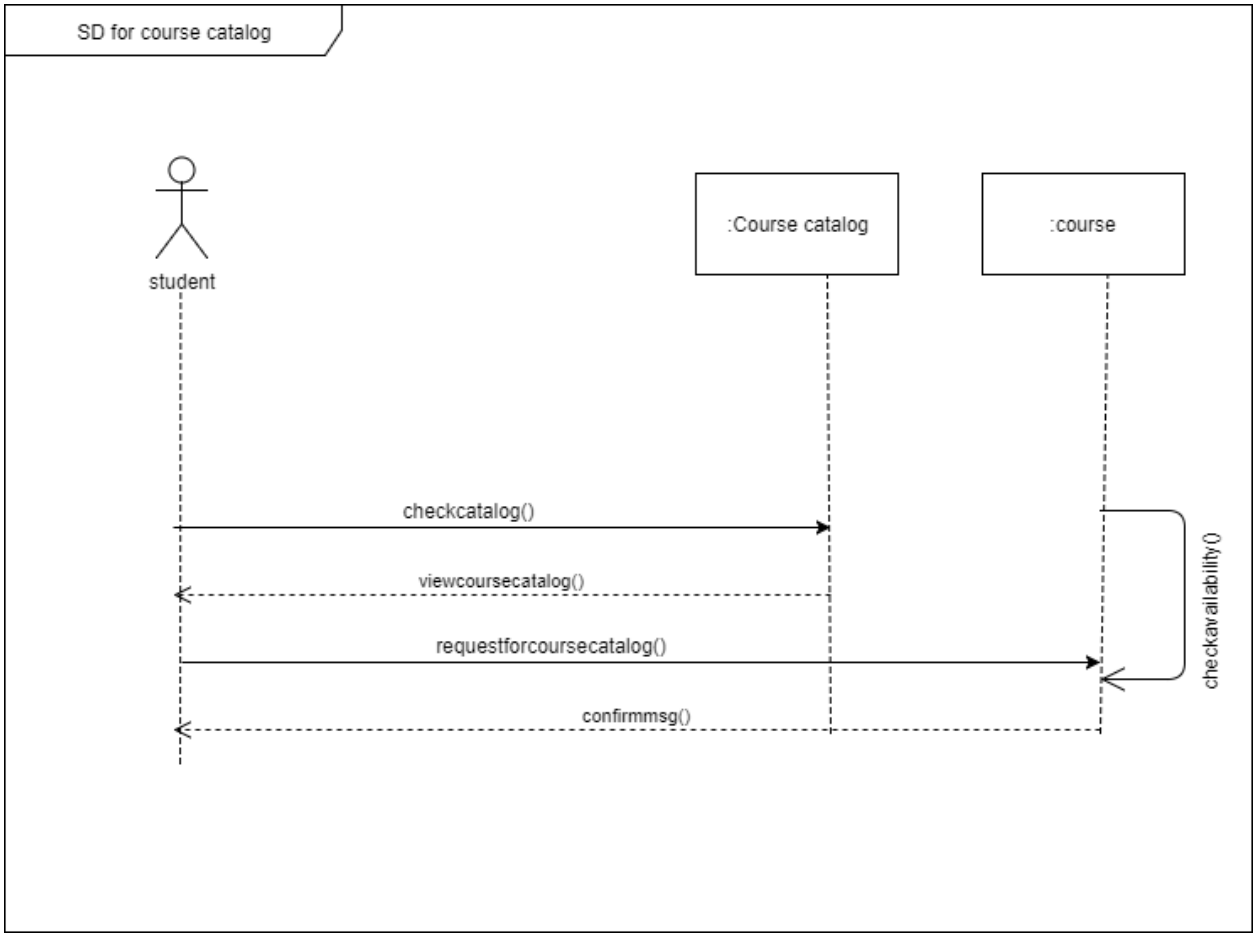

Fig-10: Sequence diagram for Request for course catalog

3.1.3 Select Courses to Teach

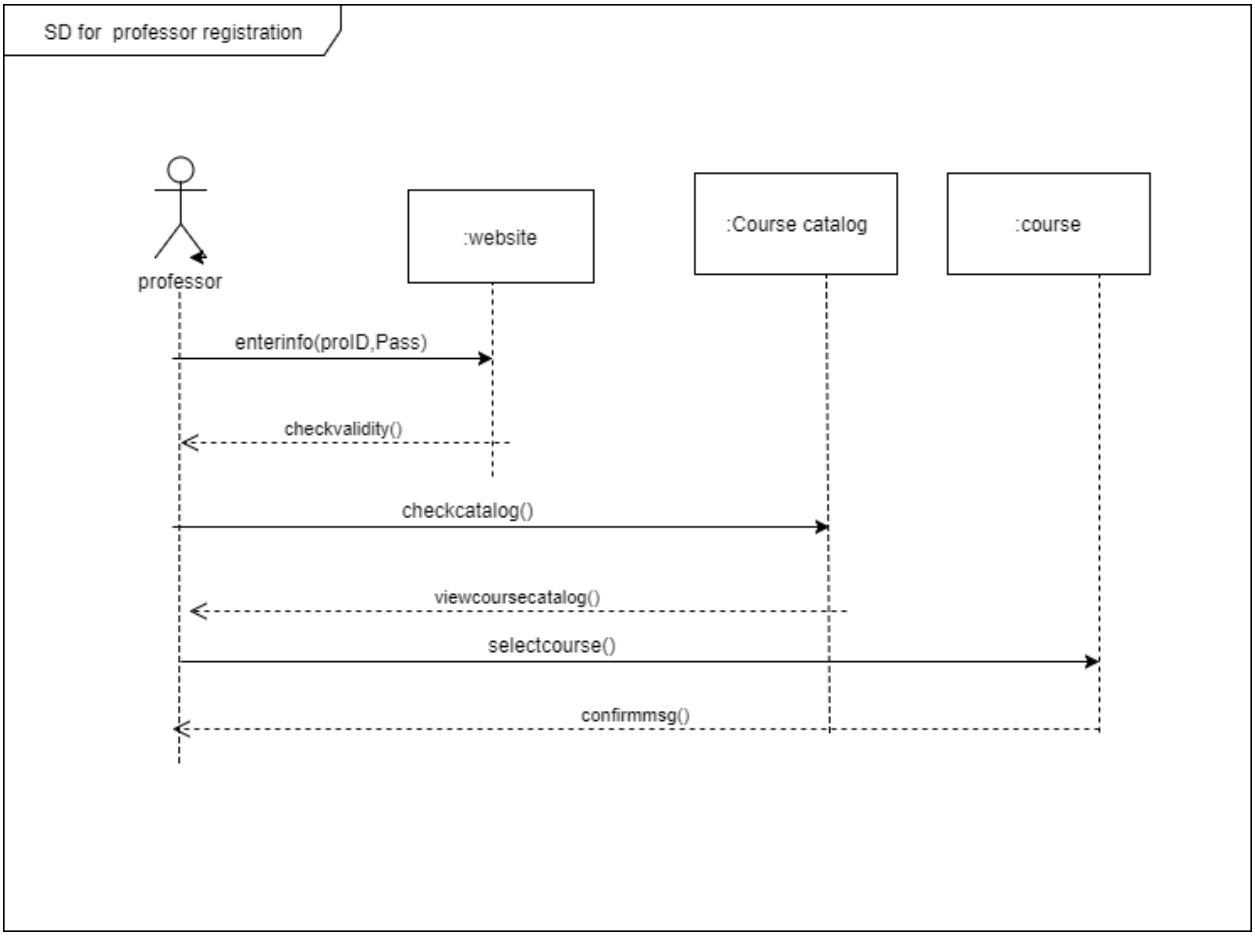

Fig-11: Sequence diagram for Request for Select Courses to Teach

3.2 class diagram

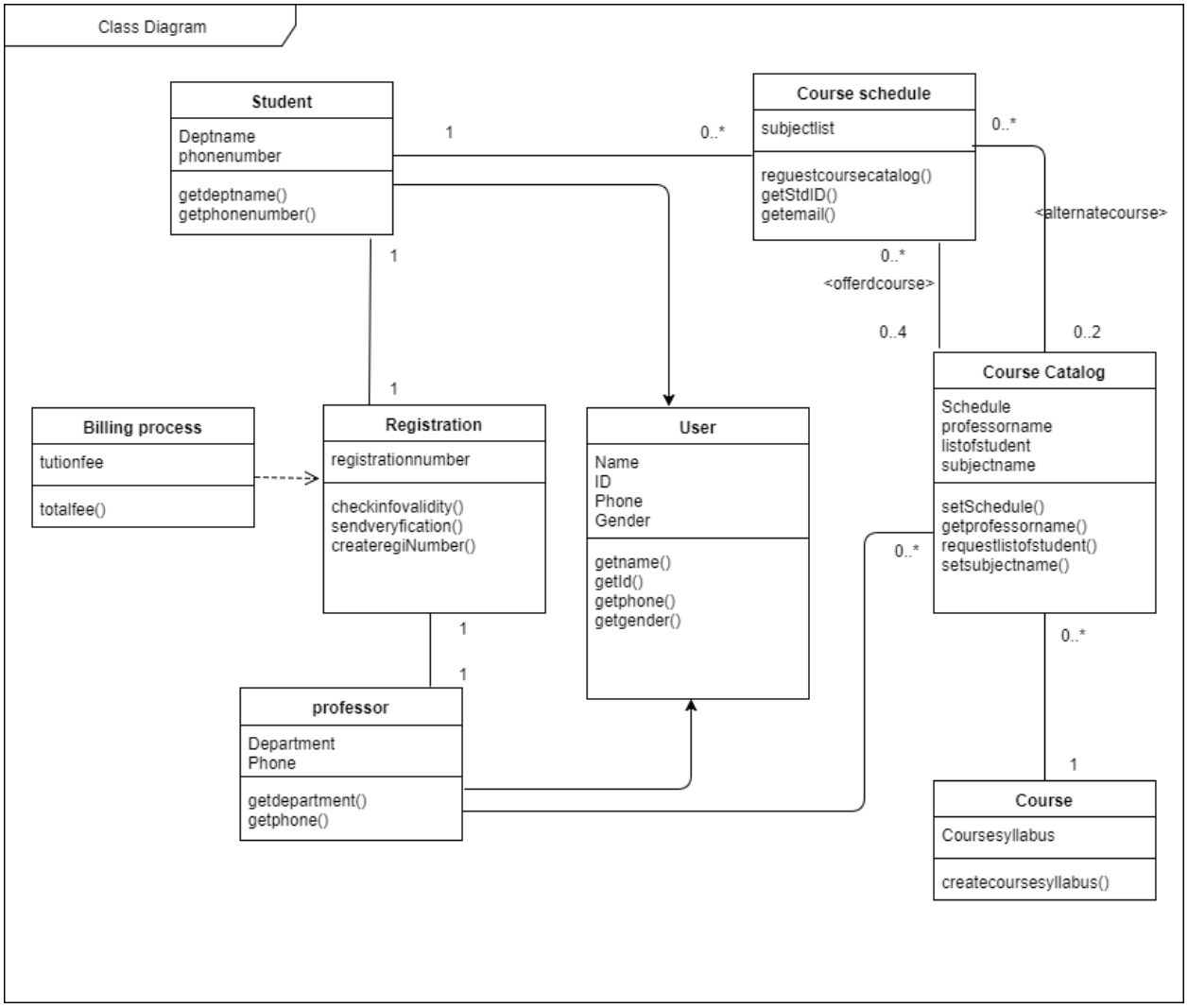

Fig-12: Class Diagram