

 <p style="text-align: center;">OOP PROJECT</p>				
PROJECT TITLE University Registration System				
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Chapter 1

Introduction:

1.1: About the system:

The system is about doing registration of an university where students can request a course catalog containing of course offerings. The system allows students to select four courses. No course will have more than 10 students and fewer than 3 students. After completing the registration process the system sends billing information so the student can be billed for the semester. The university professors must be able to access in the system. They can view their courses and can see which students signed up for their course offerings. And there is a period of time students can change the schedule, drop or add courses.

1.2: Purpose:

The purpose of the system is registration of the students of an university for upcoming semester.

1.3: Scope:

In this system students can complete their registration in an easy process. There is a course catalog for students. Students can add courses, drop courses in given period. They can also change the schedule. No course will have more than 10 students and fewer than

3 students. After registration students have to pay their bills. Professors can see their courses and which students signed up their course offerings. Register can access and modify the whole system.

1.4: Vision:

Chapter 1

Introduction:

The vision of the system is to provide the best modifying and understanding registration process of the semester for the university students and professors.

1.5: Why this system is necessary:

This system is necessary for the student's an easy, accessible and welcoming experience. In this online registration system, all the information stays together in one confidential and secure location.

1.6: Proposed Solution:

In our proposed system we have the provision for adding the details of the students by themselves. So the overhead of the university authorities is become less.

2. System Analysis

2.1: Use Case Model:

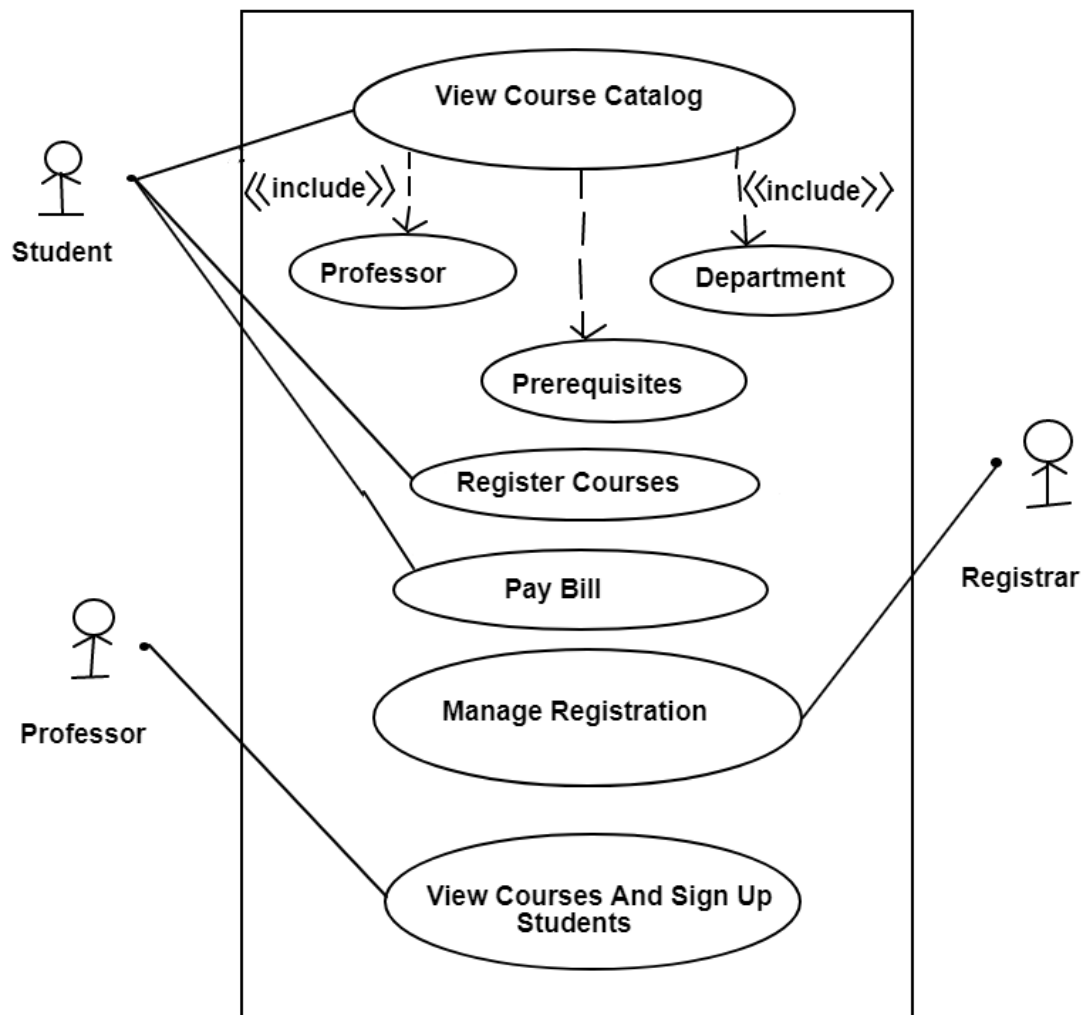


Figure No:2.1.1

2. System Analysis

2.2: Actor Goal List:

Actor	Goal
1. Student	1.1 View course catalog 1.2 Select course 1.3 Add course 1.4 Drop course 1.5 Change schedule
2. professor	2.1 View courses 2.2 View sign up students
3. Registrar	3.1 Send info 3.2 List of courses 3.3 Ad courses 3.4 Remove courses 3.5 Limit the enrollment of student in each course 3.6 Restrict the max number of courses for each student

Figure No:2.2.1

System Analysis

2.3: Use Case Model:

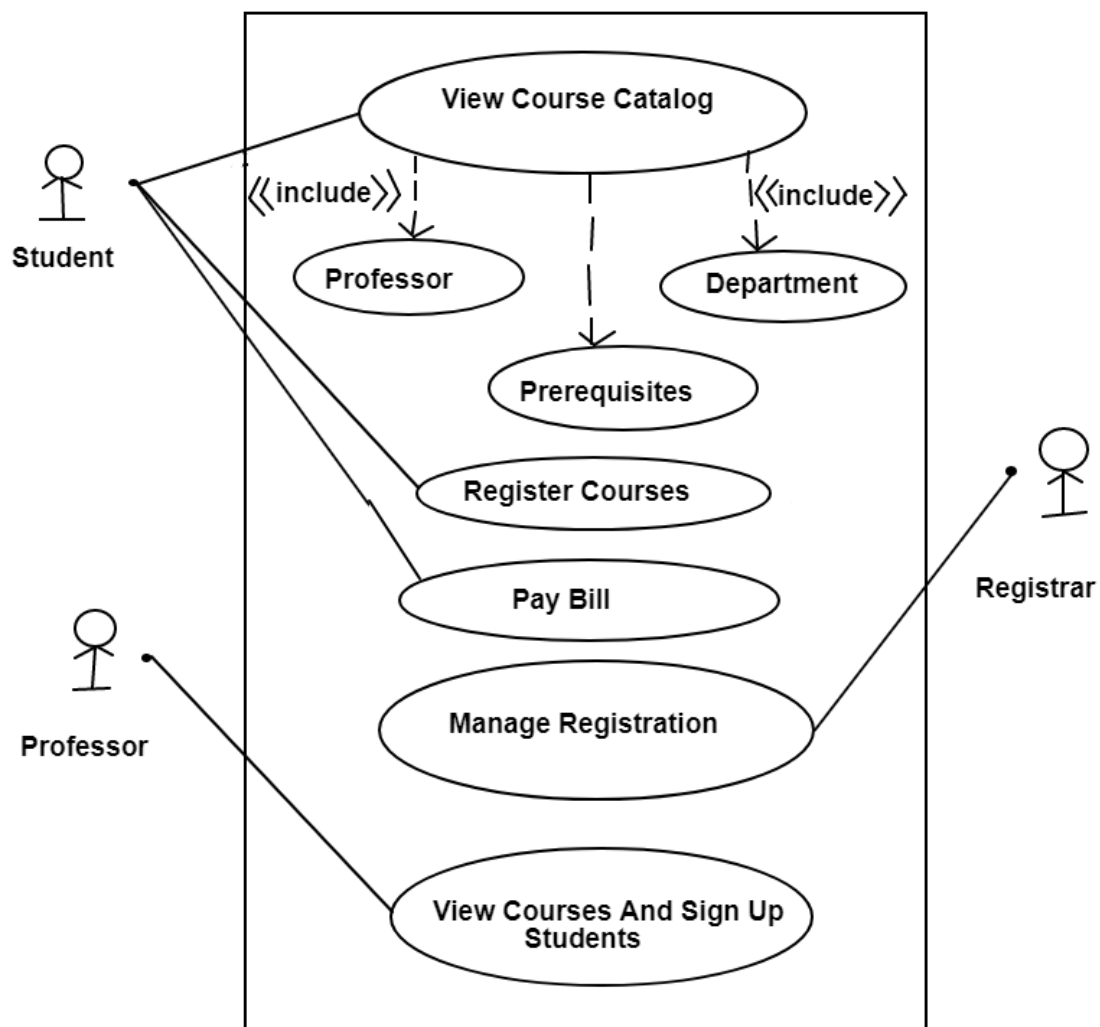


Figure No:2.3.1

System Analysis

2.4: Use Case Description (Brief):

Student can view course catalog, add courses, drop courses, change schedule. Professor can view their courses and sign up students for their course offerings. The registrar can access the whole system and can modify all the system.

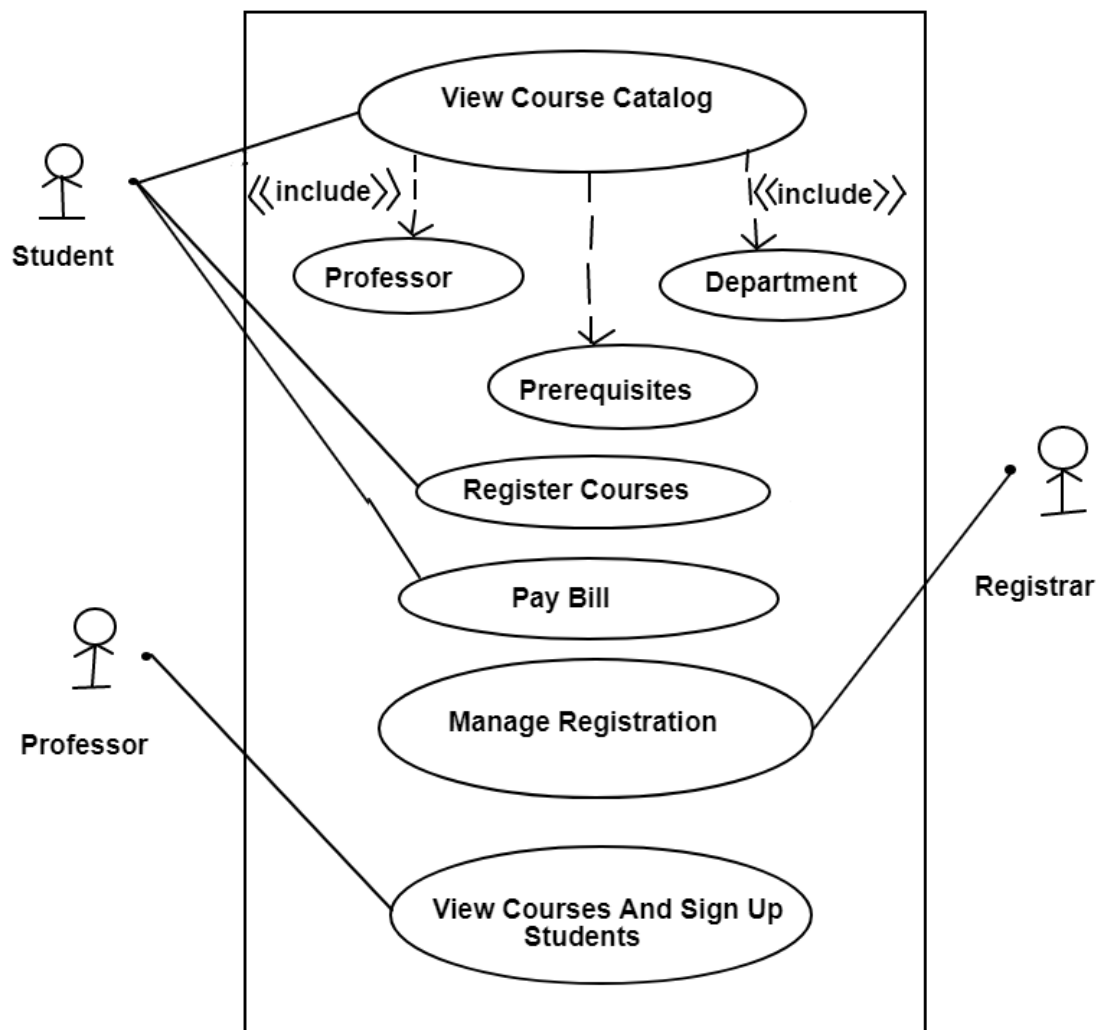


Figure No:2.4.1

System Analysis

2.5: Use Case Description (Detailed):

Description of Use Case 1: View course catalog

Use Case Name:	View course catalog	
Scenario:	Request a course catalog containing list of courses, professor, department and prerequisites.	
Brief Description:	When a student wants to view course offerings for the semester by clicking course catalog button easily he/she can view the courses, professors, departments.	
Actor:	User	
Precondition:	User must have the university provided email and password to access the system.	
Post condition :	Can't view the course catalog if user doesn't click the course catalog button.	
Flow of events:	Actor	System
	1.Request to access the system	1.1 Give access the user with correct email and password.
	2.Request to view the course catalog	2.1 Show the course catalog.

Exception condition:	<ul style="list-style-type: none">1.1 System might not give access.1.2 If system denies to show the course catalog.
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Figure No:2.5.1

System Analysis

Description of Use Case 2: Register Courses

Use Case Name:	Register courses	
Scenario:	Student from their course catalog can select, add and drop their courses. They also can change schedule in the given time period.	
Brief Description:	When a student wants to select or add courses he/she has to click the add course button. And for drop course has to click drop course button and change schedule button to change schedule.	
Actor:	User	
Precondition:	User must be complete his/her previous semester.	
Post condition:	User can't add, drop courses or change schedule if they can't click the right buttons.	
Flow of events:	Actor	System
	1 Request to select courses	1.1 Confirm selected courses
	2 Request to add courses	2.1 Confirm added courses
	3 Request to drop courses	3.1 Confirm drop courses
	4 Request to change schedule	4.1 Confirm change schedule
Exception Condition:	1.1 If system denies to select courses. 2.1 If system denies to add courses. 3.1 If system denies to drop courses. 4.1 If given schedule is expired.	

Figure No:2.5.2

System Analysis

Description of Use Case 3: Pay Bill

Use Case Name:	Pay Bill	
Scenario:	When a student completed his/her registration he/she will has to pay bill for the semester.	
Brief Description:	To pay bill a student has to click the payment button.	
Actor:	User	
Precondition:	User must be complete his/her registration process.	
Post condition:	If student can't manage the bill.	
Flow of events:	Actor	System
	1Request to pay bill	1.1 Confirm paying bill.
Exception Condition:	1.2 If system faces difficulties for paying bill.	

Figure No:2.5.3

System Analysis

Description of Use Case 4: Manage Registration:

Use Case Name:	Manage Registration	
Scenario:	Registrar can send info, add courses, limit enrollment, restrict courses for students.	
Brief Description:	When registrar wants to send info he/she has to click sendinfo button,select or add courses he/she has to click the add course button. And for limit courses has to click limit course button and restrict courses button to restrict courses.	
Actor:	User	
Precondition:	User must be authorized person.	
Post condition:	User can't add, limit enrollment , restrict courses if they can't click the right buttons.	
Flow of events:	Actor	System
	1 Request to send info .	1.1 Confirm sent info.
	2 Request to add courses.	2.1 Confirm added courses.
	3 Request to remove courses.	3.1 Confirm remove courses
	4 Request to restrict courses.	4.1 Confirm restrict courses.
Exception Condition:	1.2 If system denies to send info. 2.1 If system can't add courses. 3.1 If system can't remove courses. 4.1 If system can't restrict courses.	

Figure No:2.5.4

System Analysis

Description of Use Case 5: View courses and Sign Up Students

Use Case Name:	View courses and Sign Up Students	
Scenario:	Professors can view courses and view sign up students for their courses.	
Brief Description:	To view the courses has to click view courses button and for view students has to click sign up stuent.	
Actor:	User	
Precondition:	User must be authorizes person.	
Post condition:	User can't view courses and sign up students if they can't click the right buttons.	
Flow of events:	Actor	System
	1 Request to view courses	1.1 Confirm view courses.
	2 Request to view sign up students	2.1 Confirm view sign up students
Exception Condition:	1.2 If system denies to view courses. 2.2 If system can't show the sign up students.	

Figure No:2.5.5

System Analysis

2.6 System Sequence Diagram

SSD for View Course Catalog:

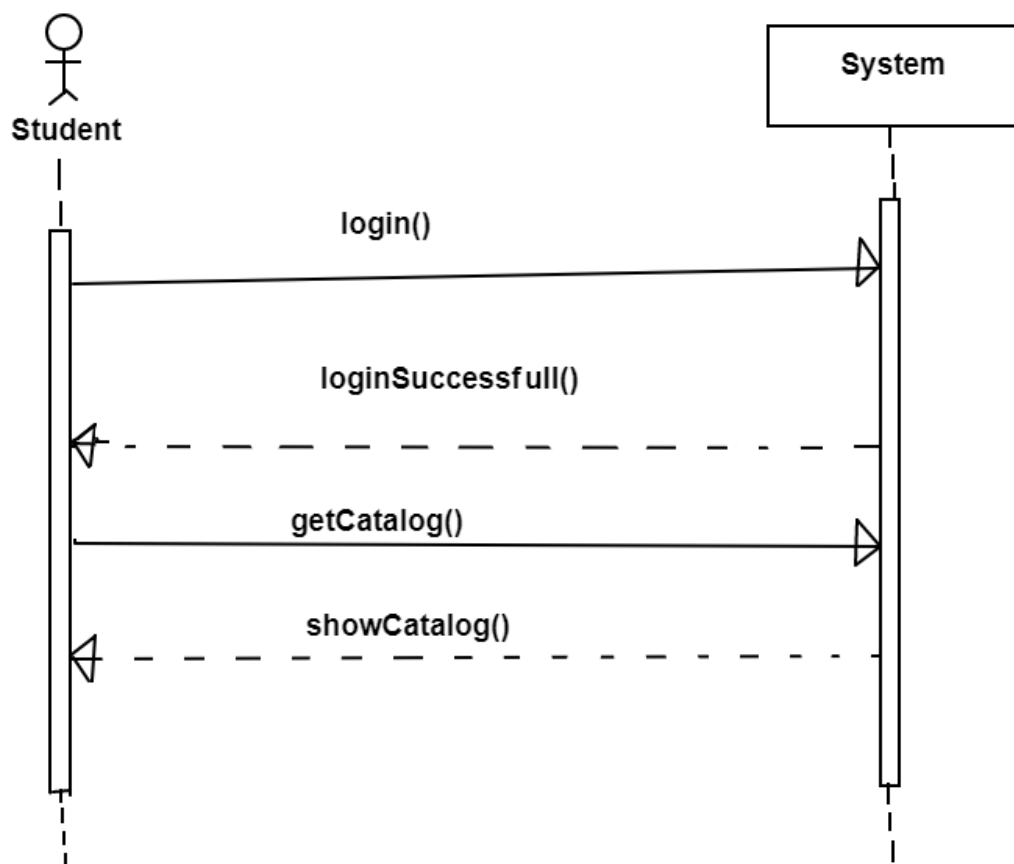


Figure No:2.6.1

System Analysis

SSD for Register Courses:

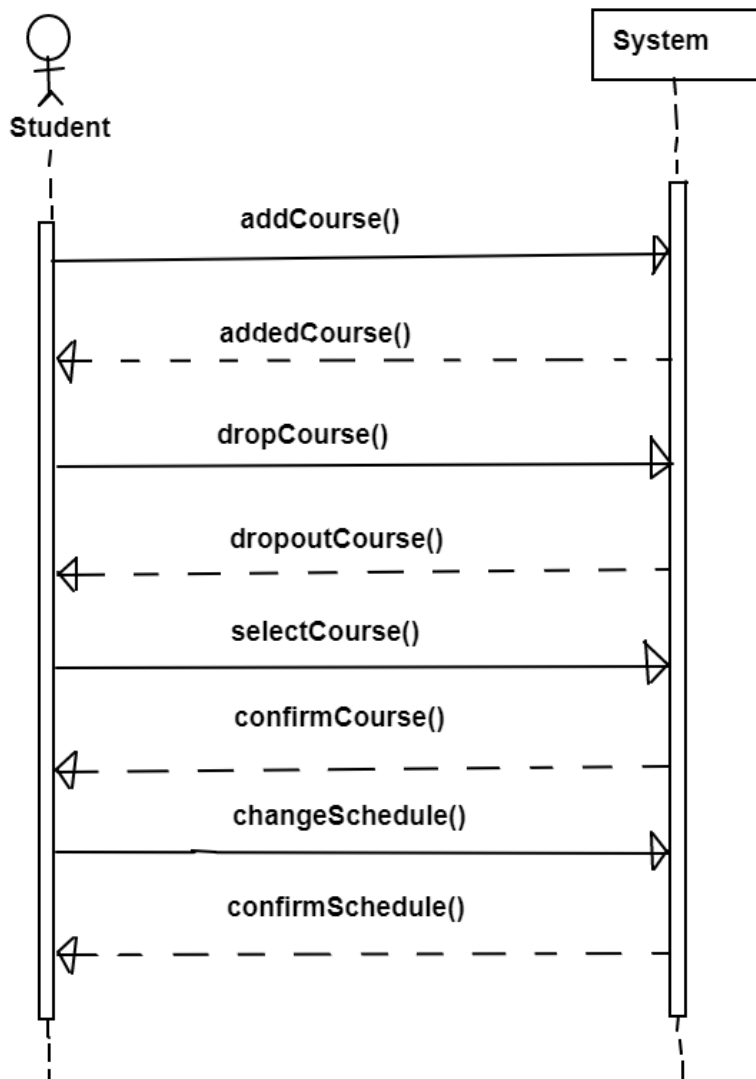


Figure No:2.6.2

System Analysis

SSD for Pay Bill:

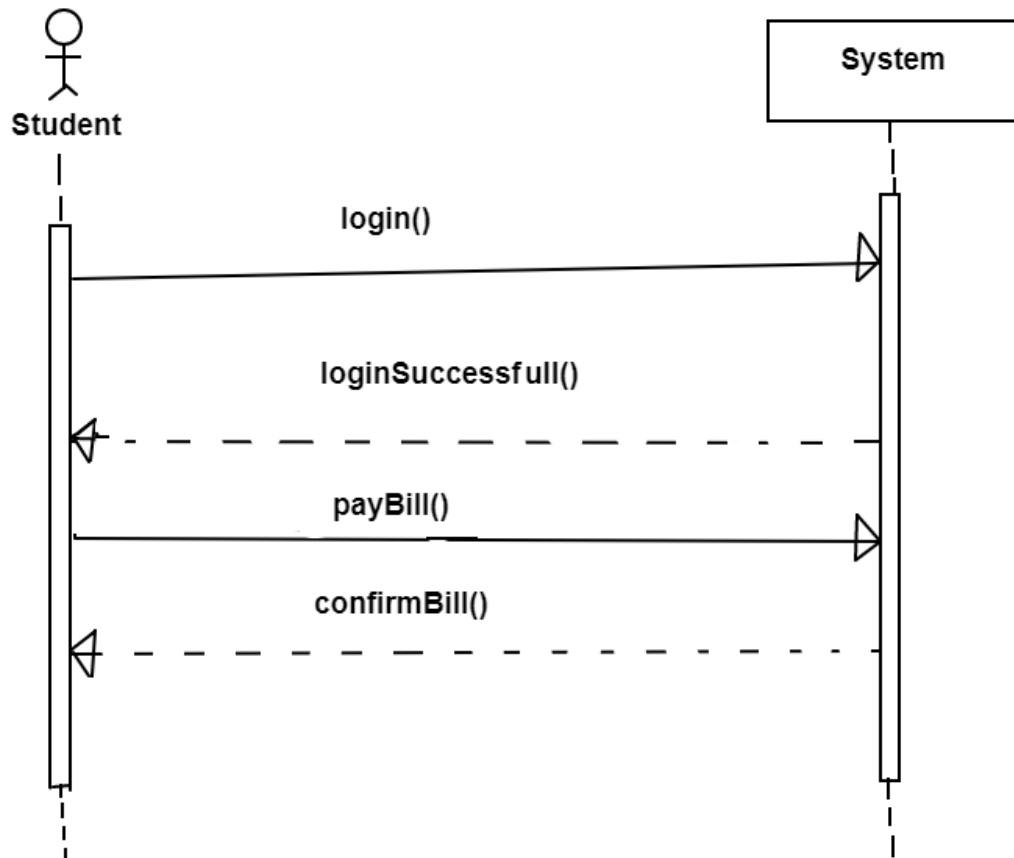


Figure No:2.6.3

System Analysis

SSD for Manage Registration:

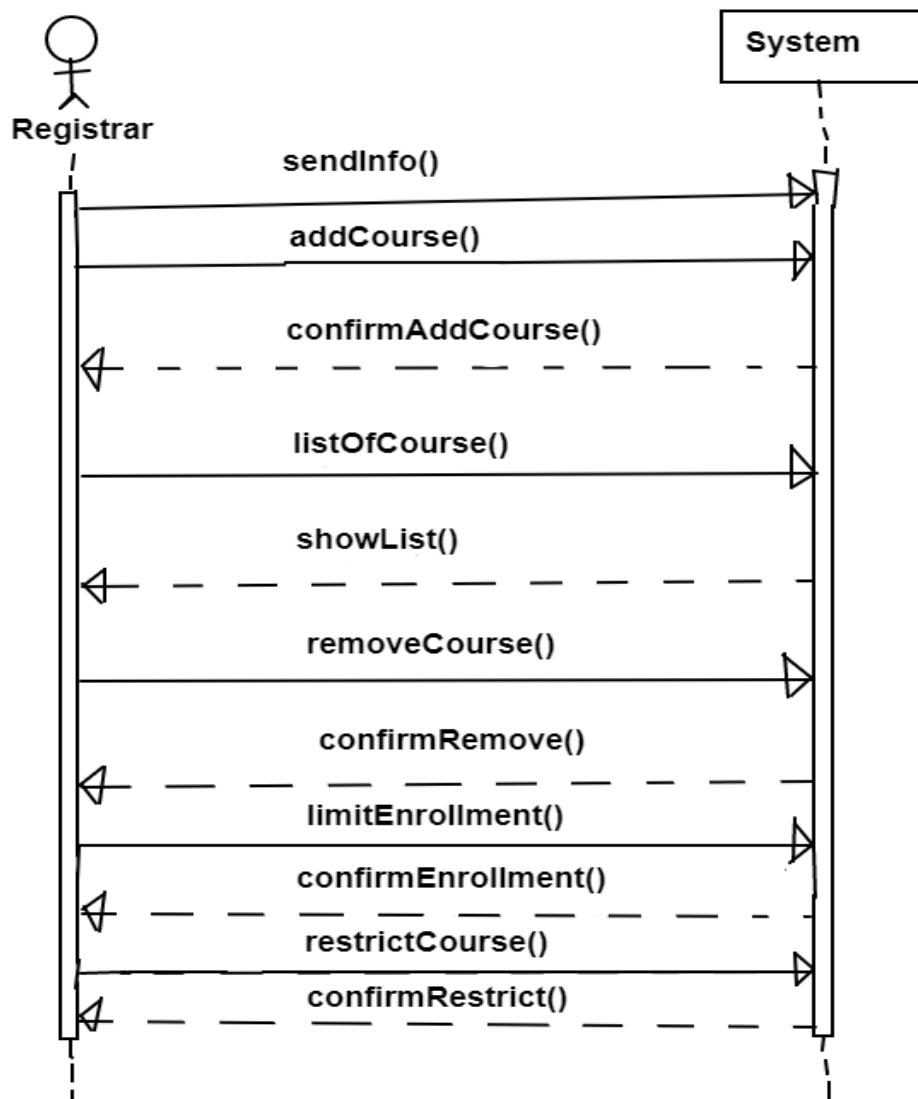


Figure No:2.6.4

System Analysis

SSD for View Course and Sign Up Students:

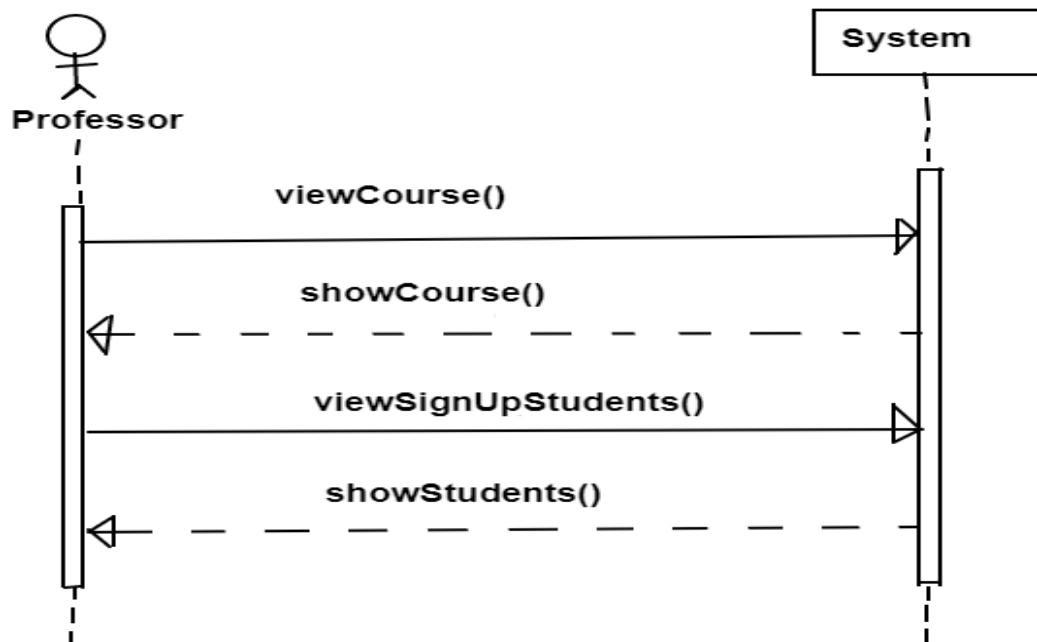


Figure No:2.6.5

System Analysis

2.7 Domain Model:

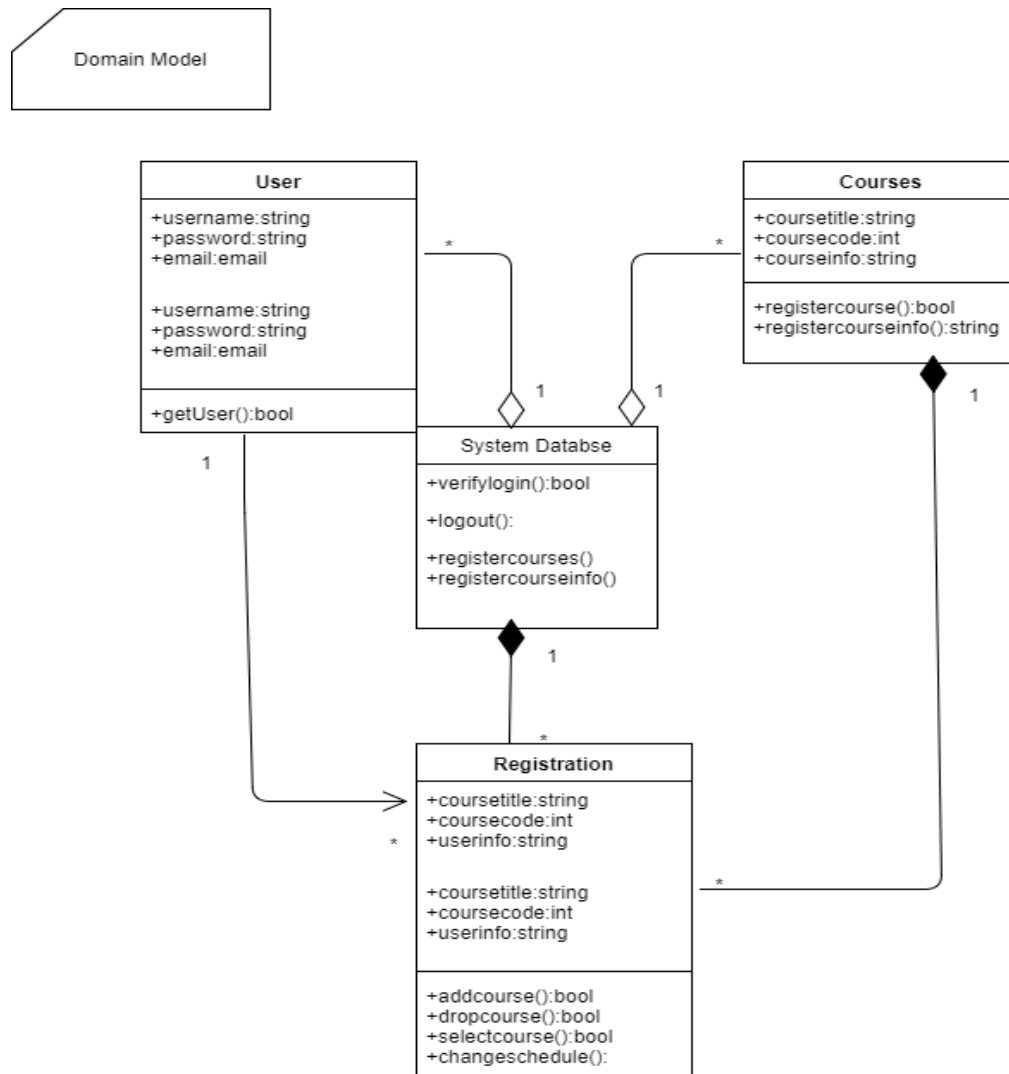


Figure No:2.7.1

System Design

3.1 Sequence Diagram:

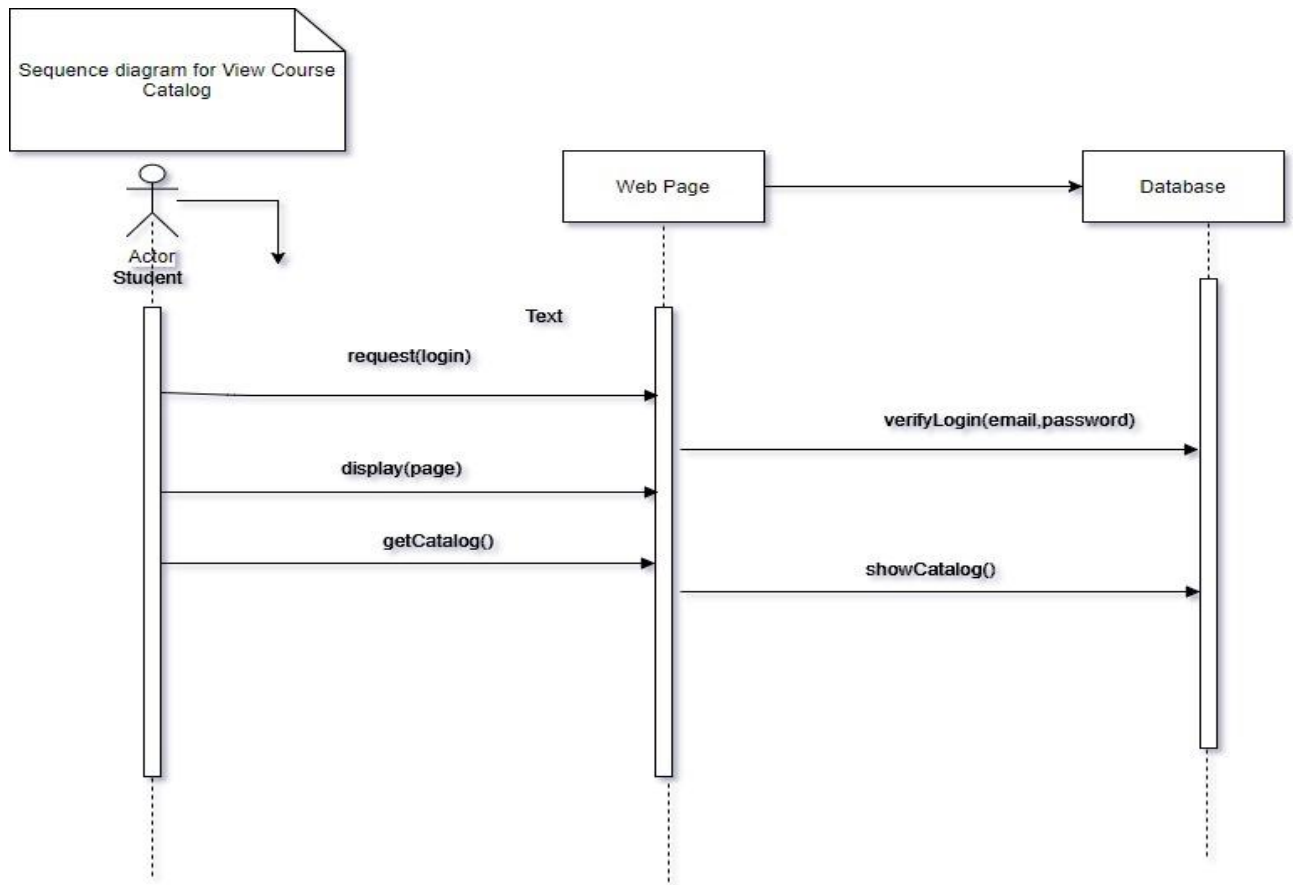


Figure No:3.1.1

System Design

3.1 Sequence Diagram

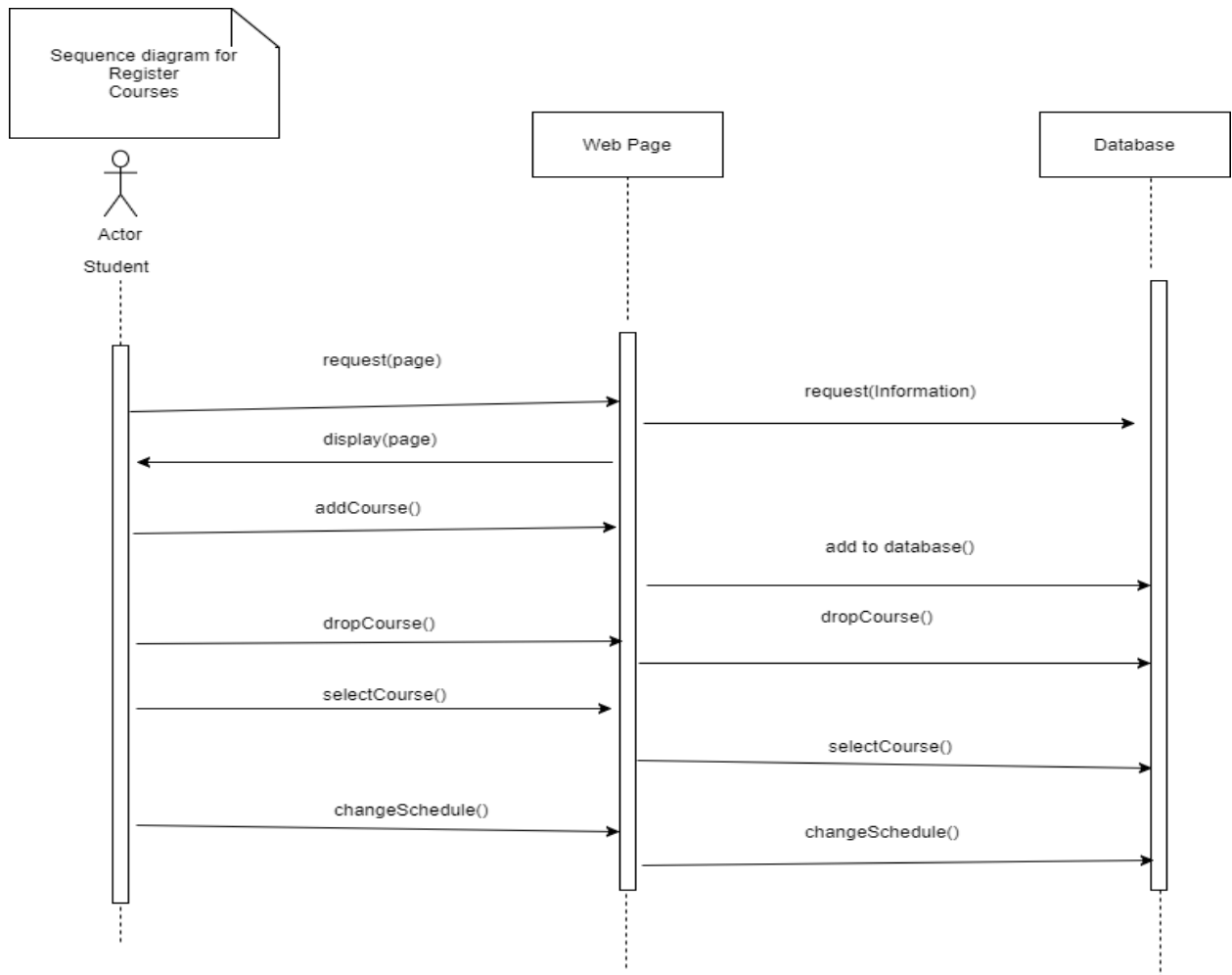


Figure No:3.1.2

System Design

3.1 Sequence Diagram

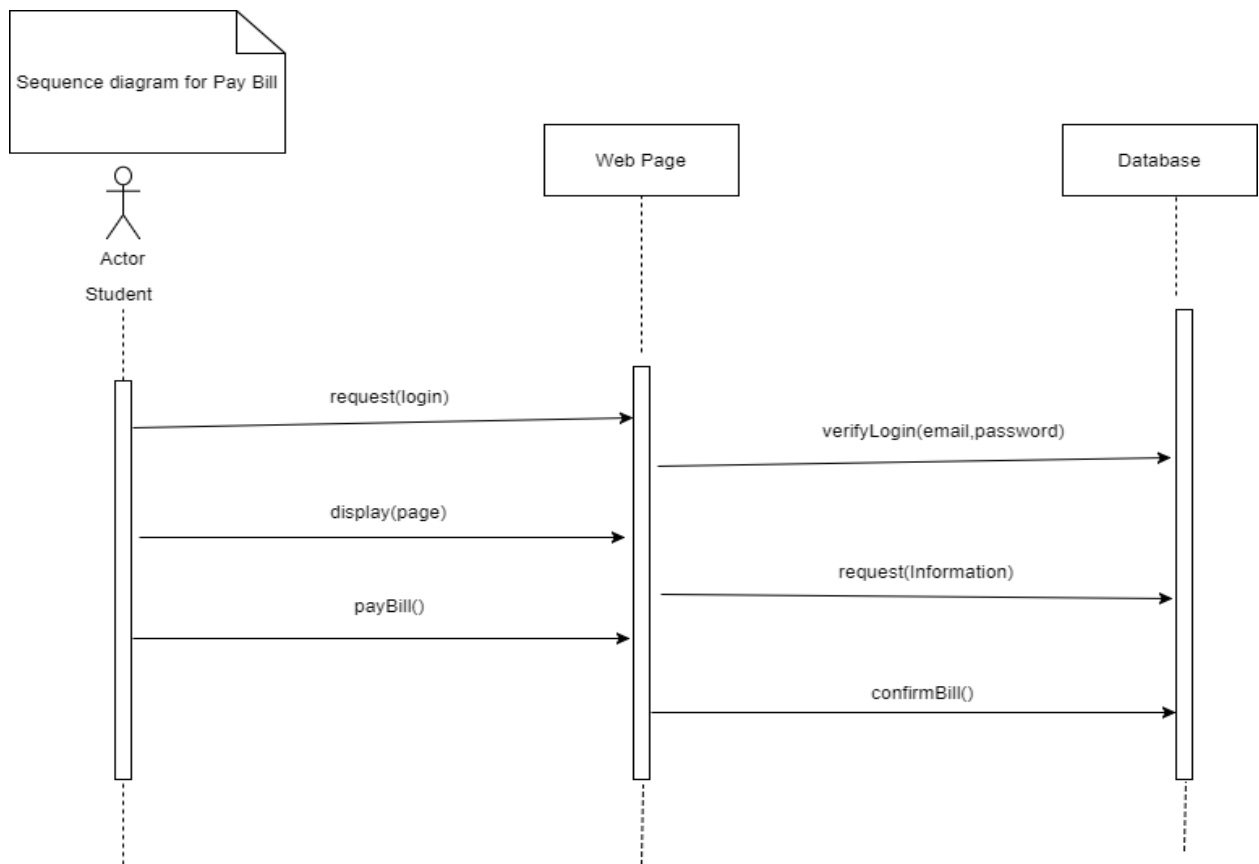


Figure No:3.1.3

System Design

3.1 Sequence Diagram

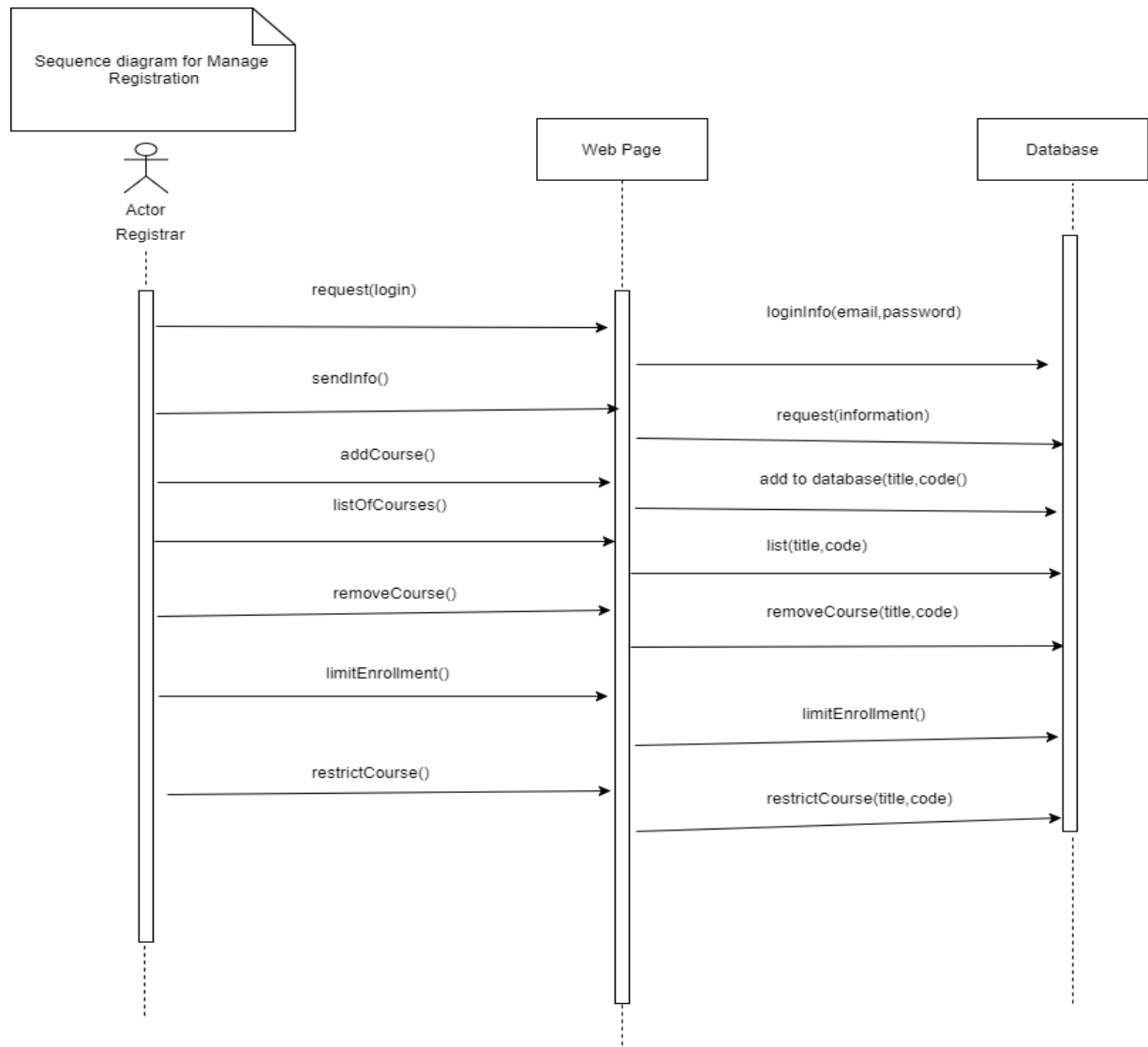


Figure No:3.1.4

System Design

3.1 Sequence Diagram:

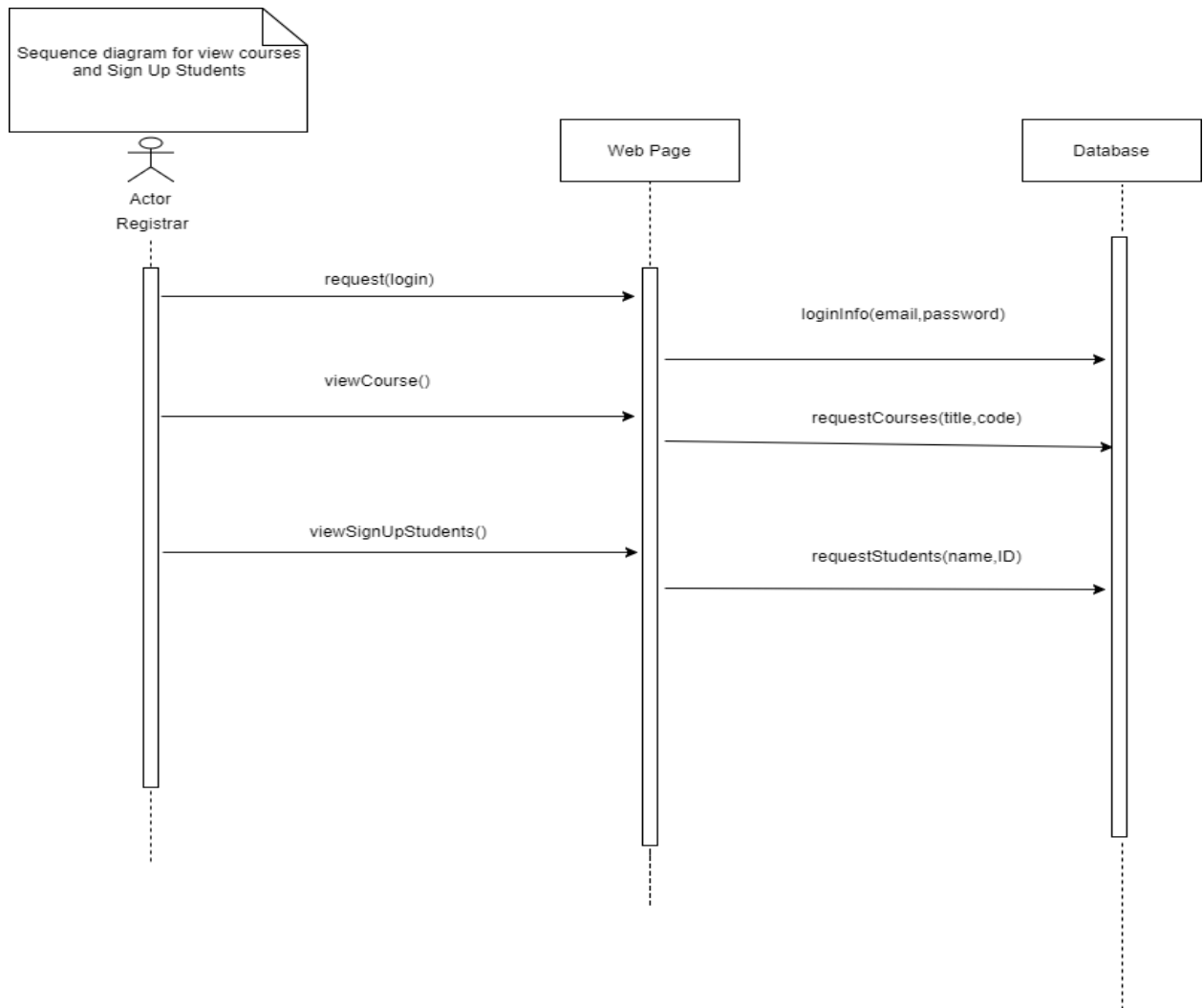


Figure No:3.1.5

System Design

3.2 Class Diagram:

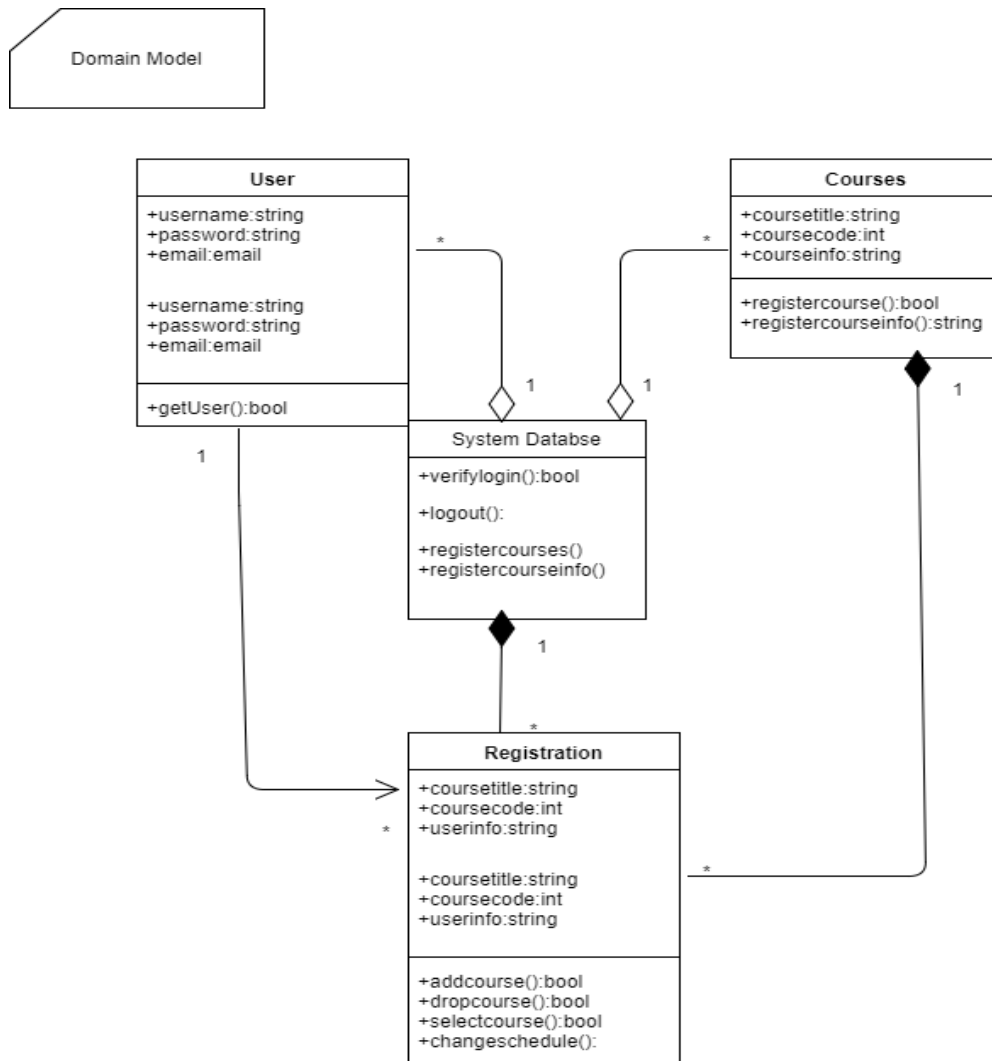


Figure No:3.2.1