

# **OOAD**

## **Section B**

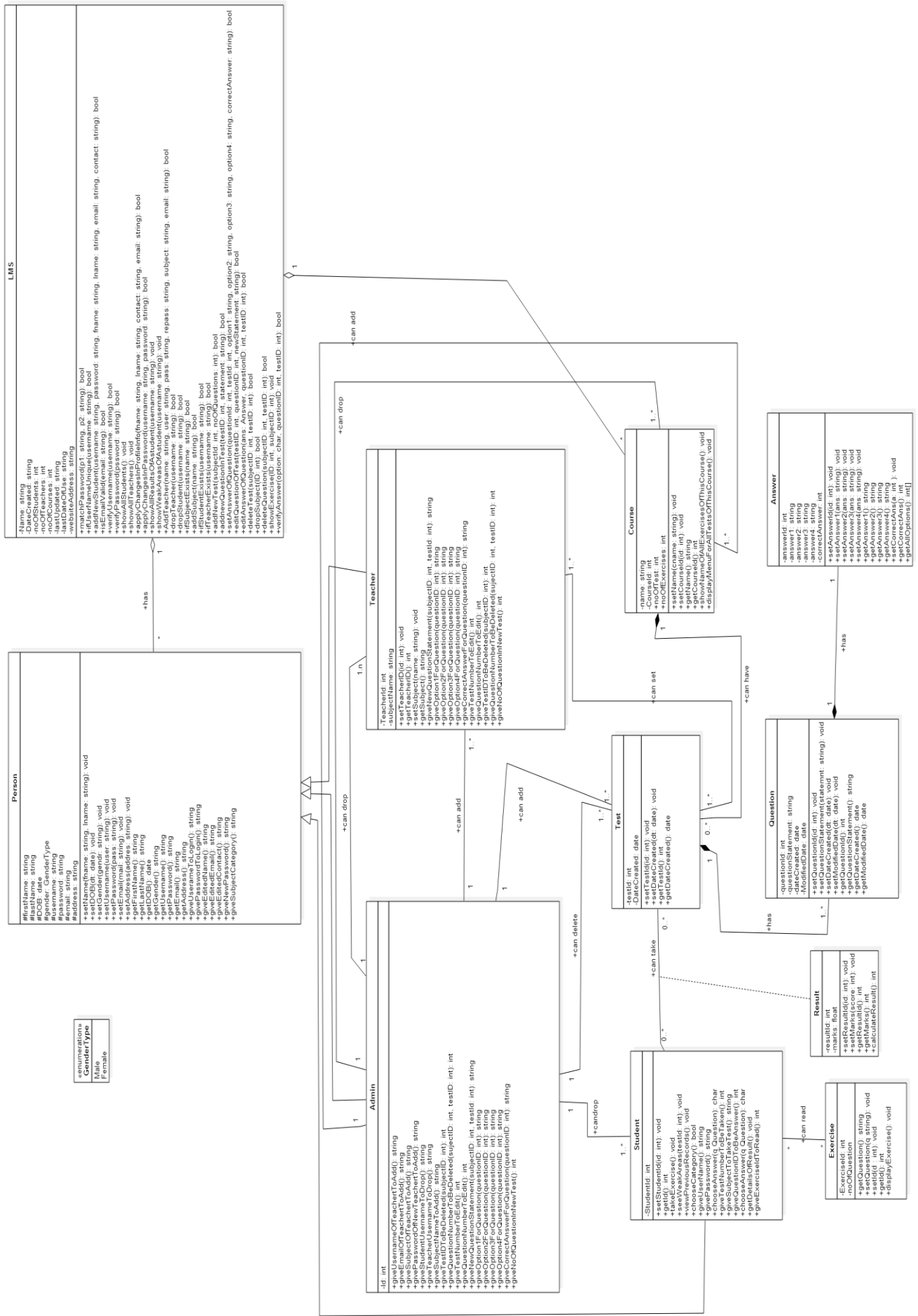
### **“Learning Management System”**

#### **Phase 2**

#### **Team# 6**

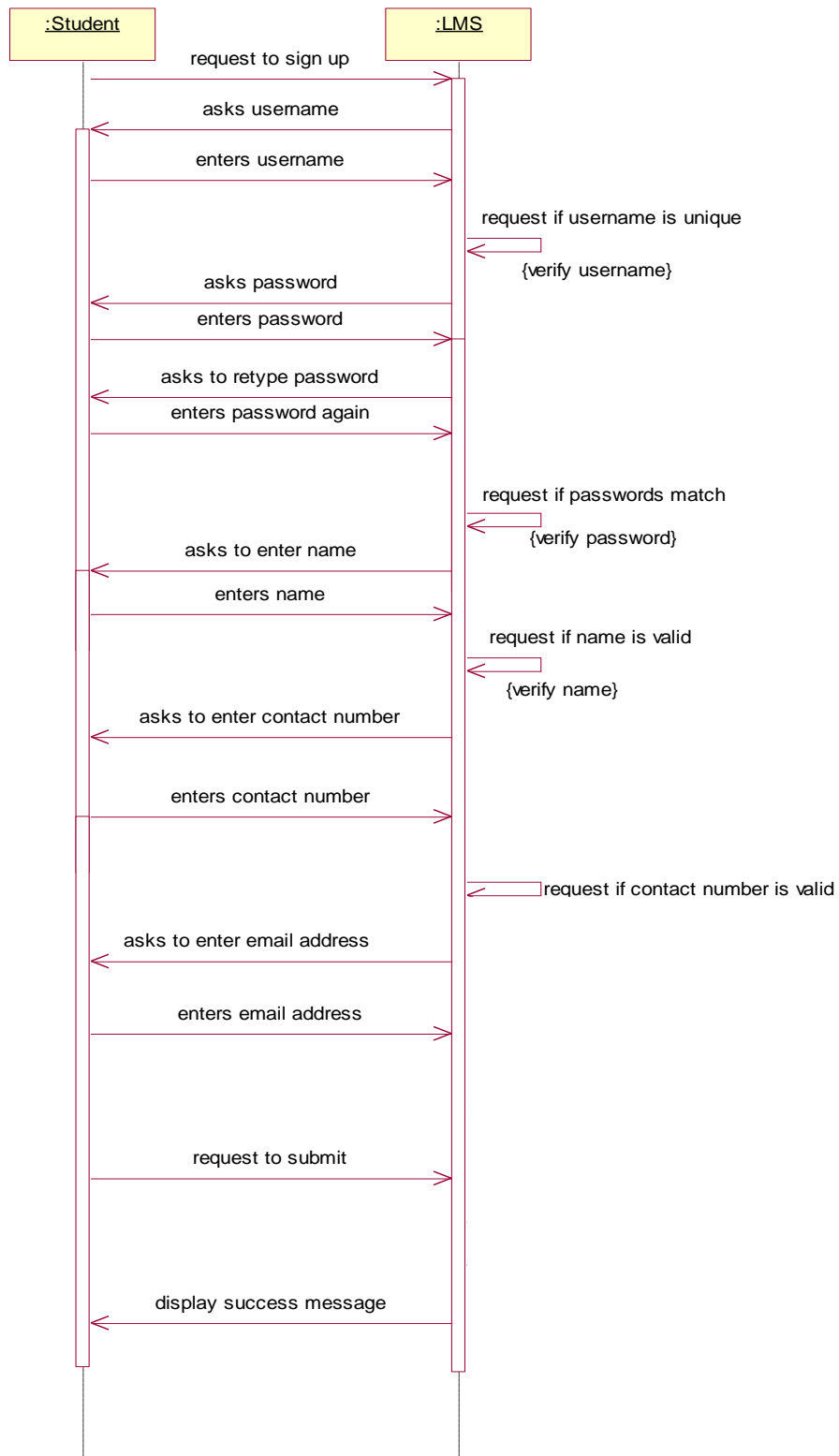
**Members Name : Anam Sadiq**  
**Janeeta Raj**  
**Atiqa Mumtaz**  
**Areeba Zahid**  
**Furqan Nadeem**

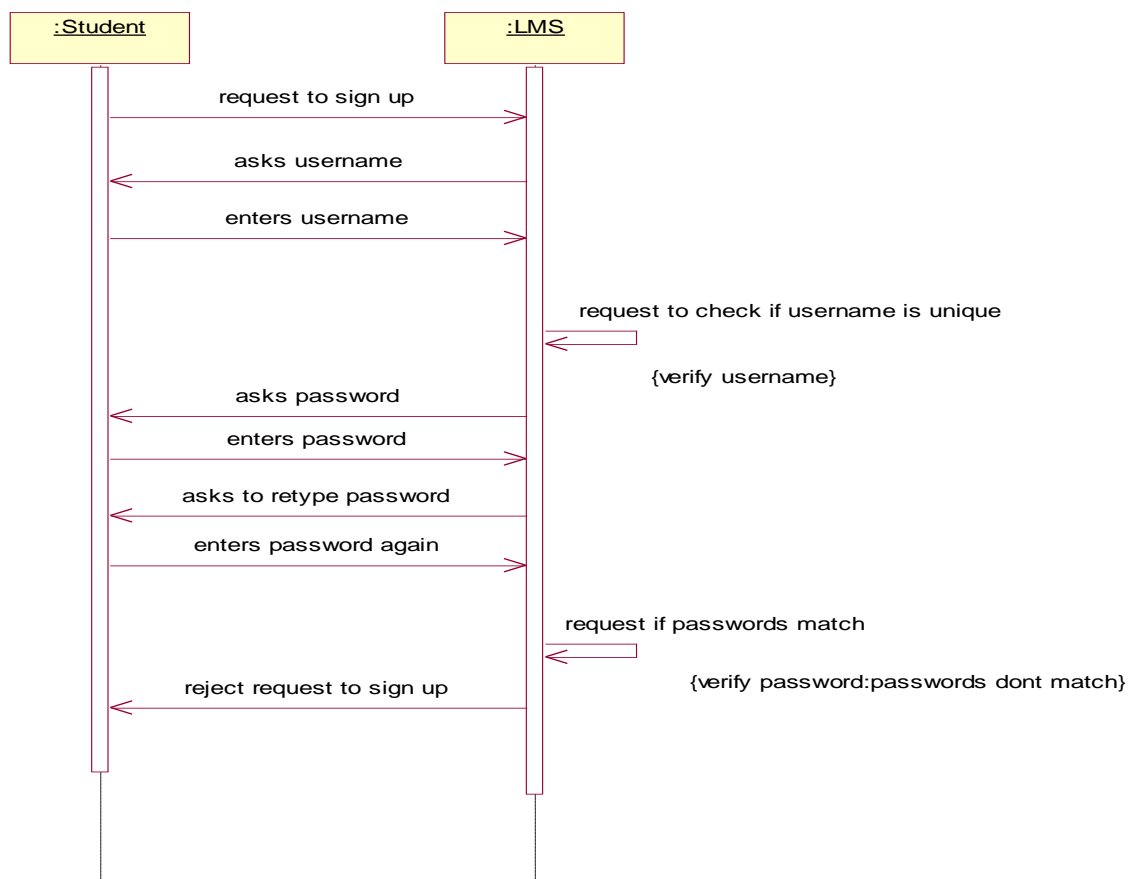
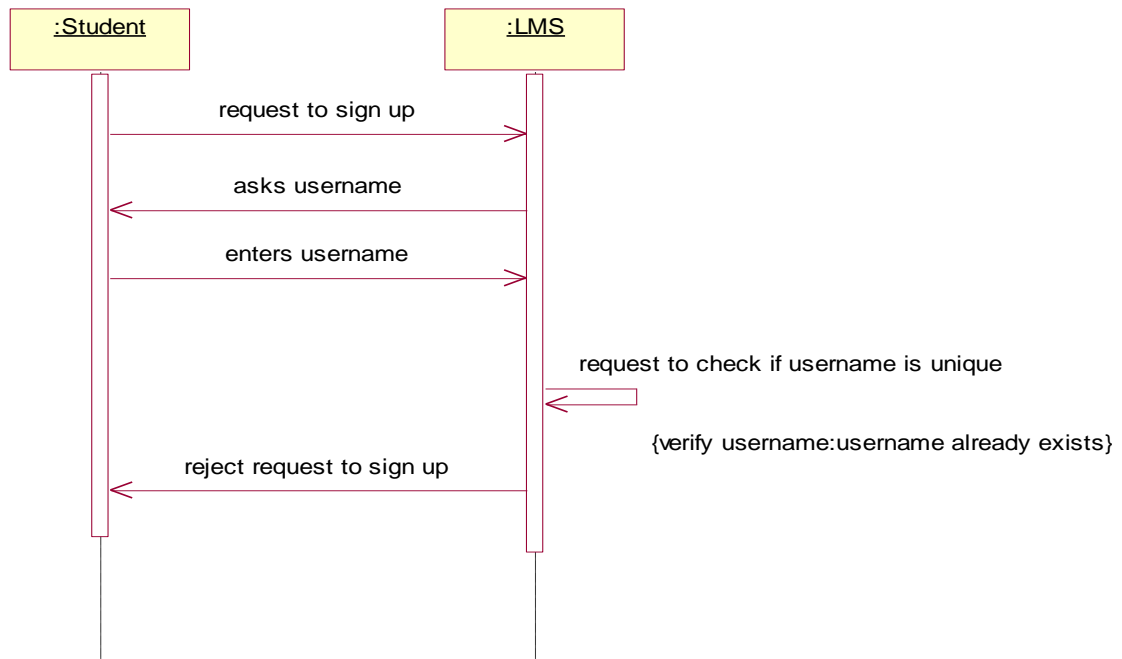
# **Design Class Diagram**

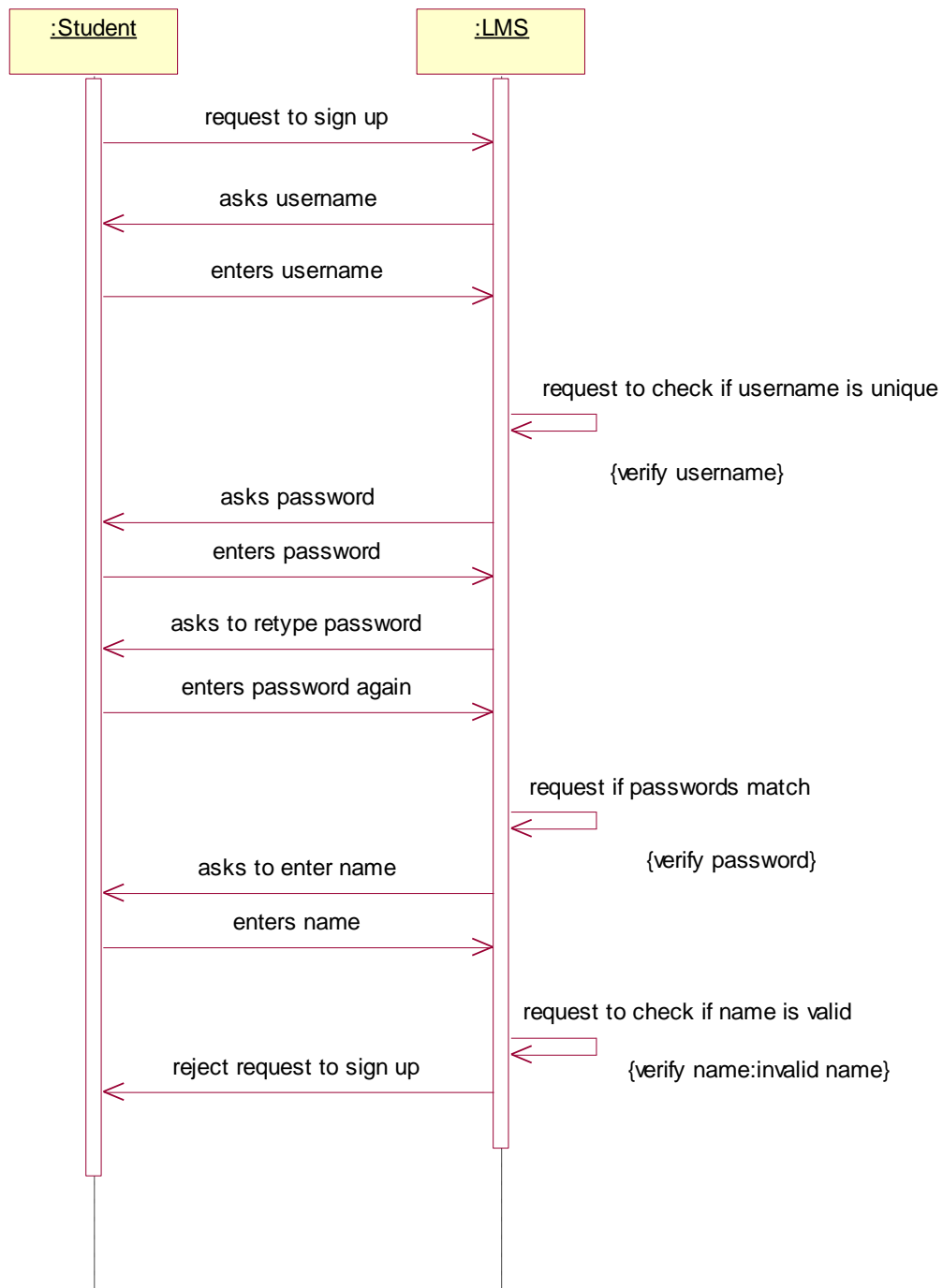


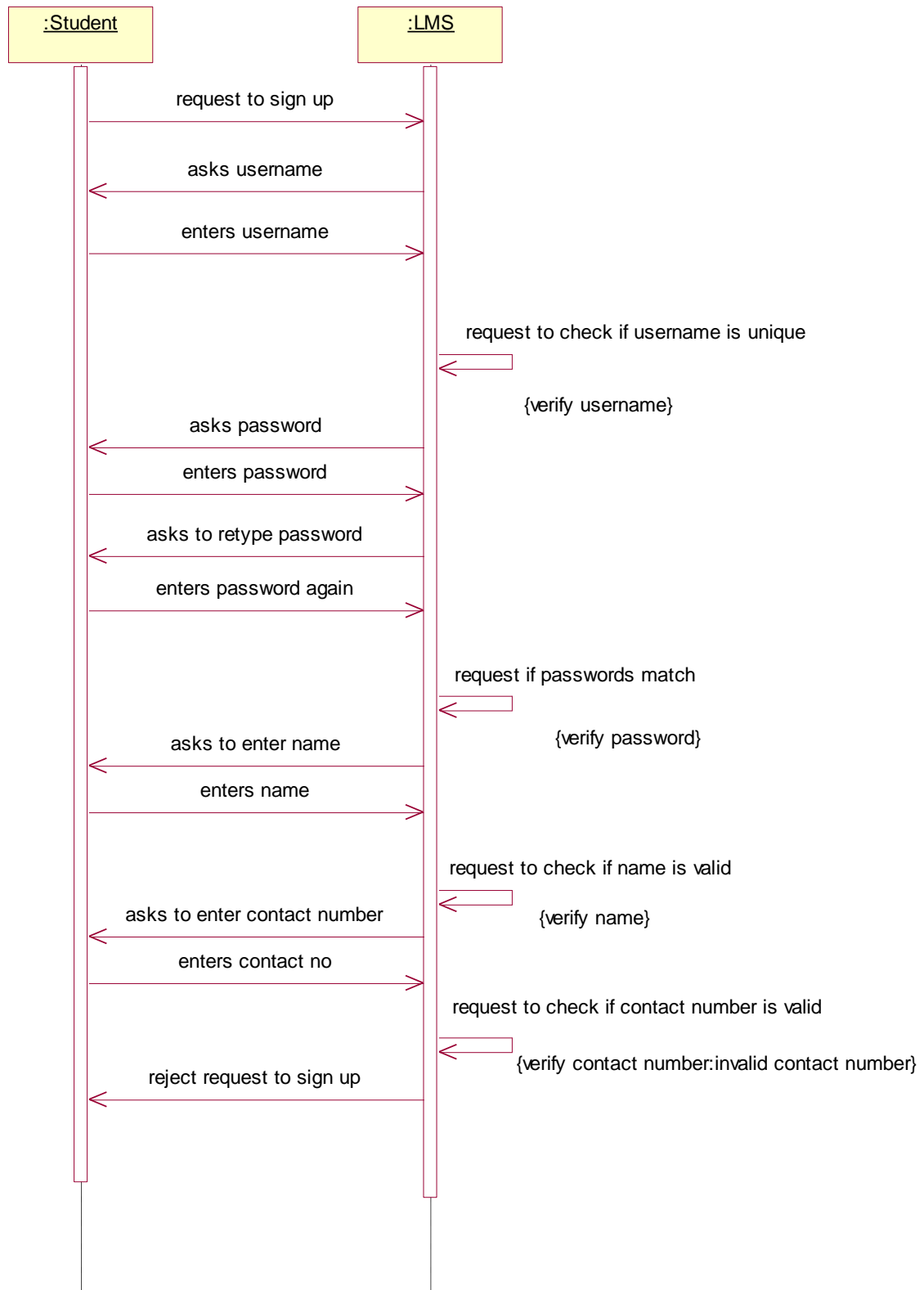
# **Sequence Diagrams**

## UC-1(Sign Up)

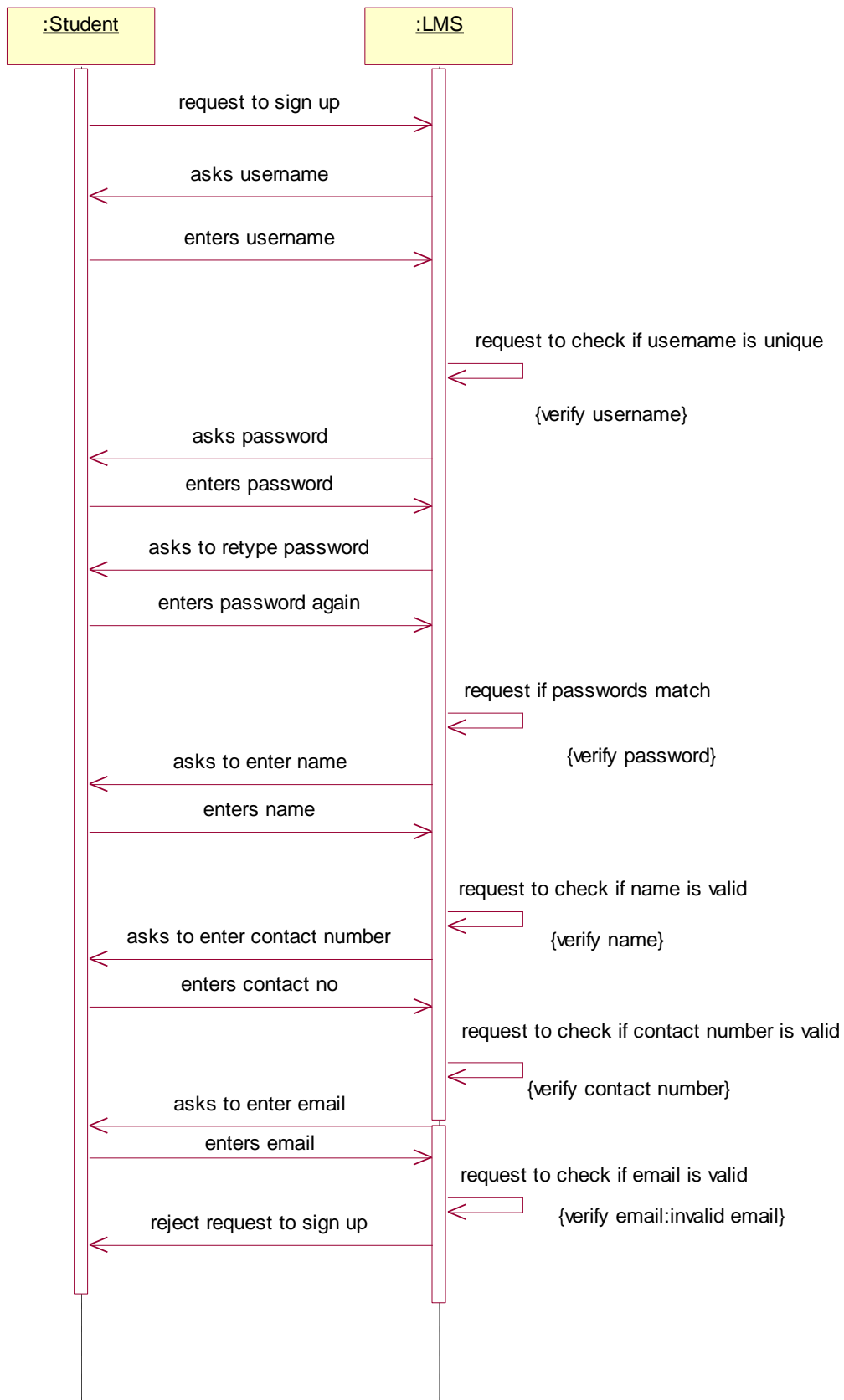




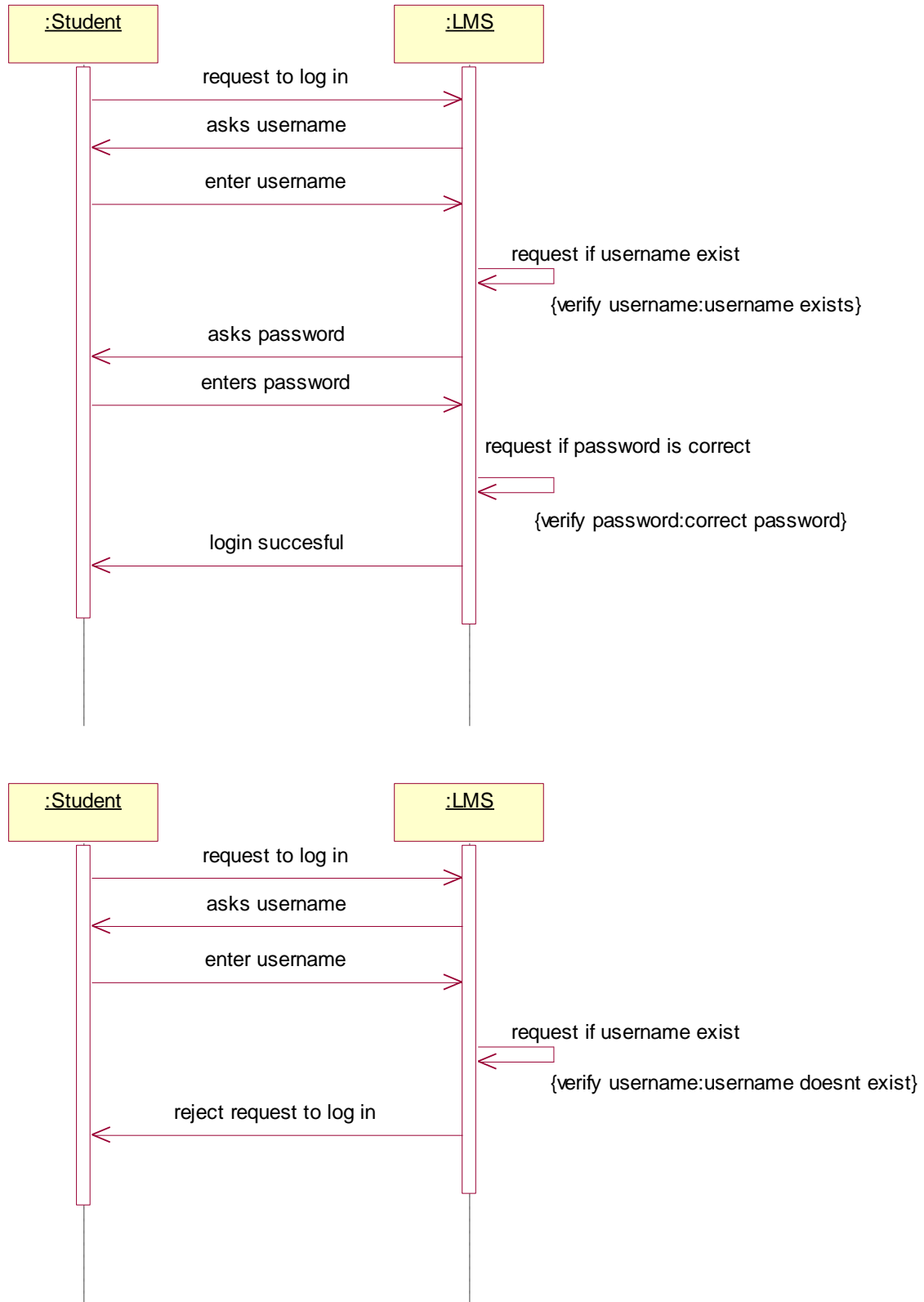


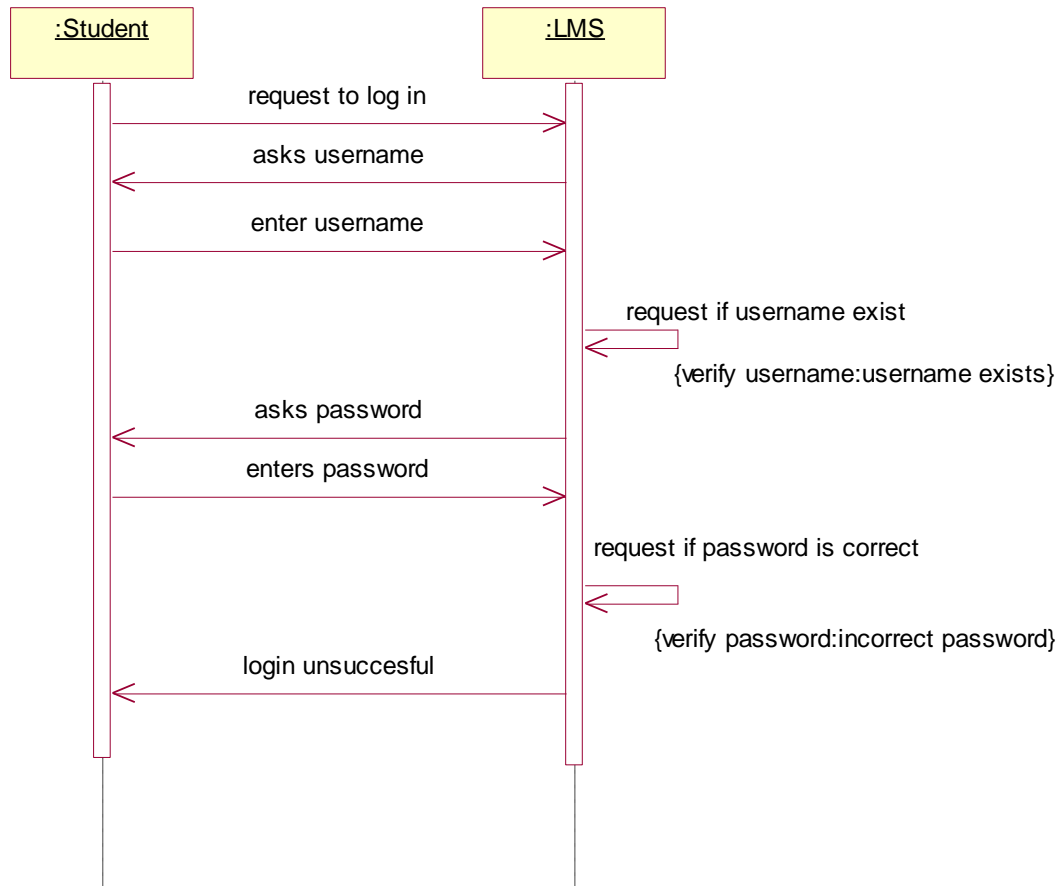




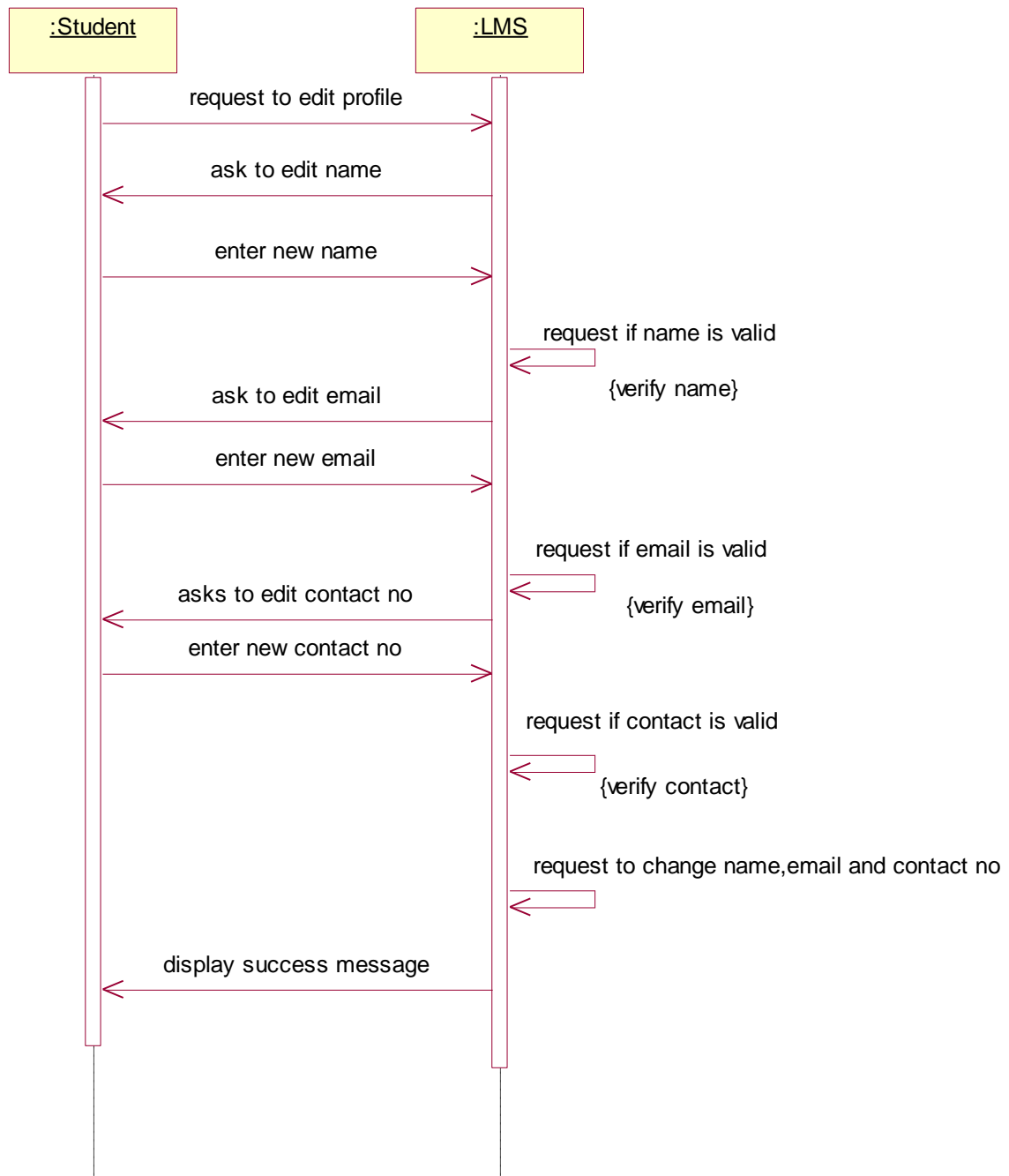


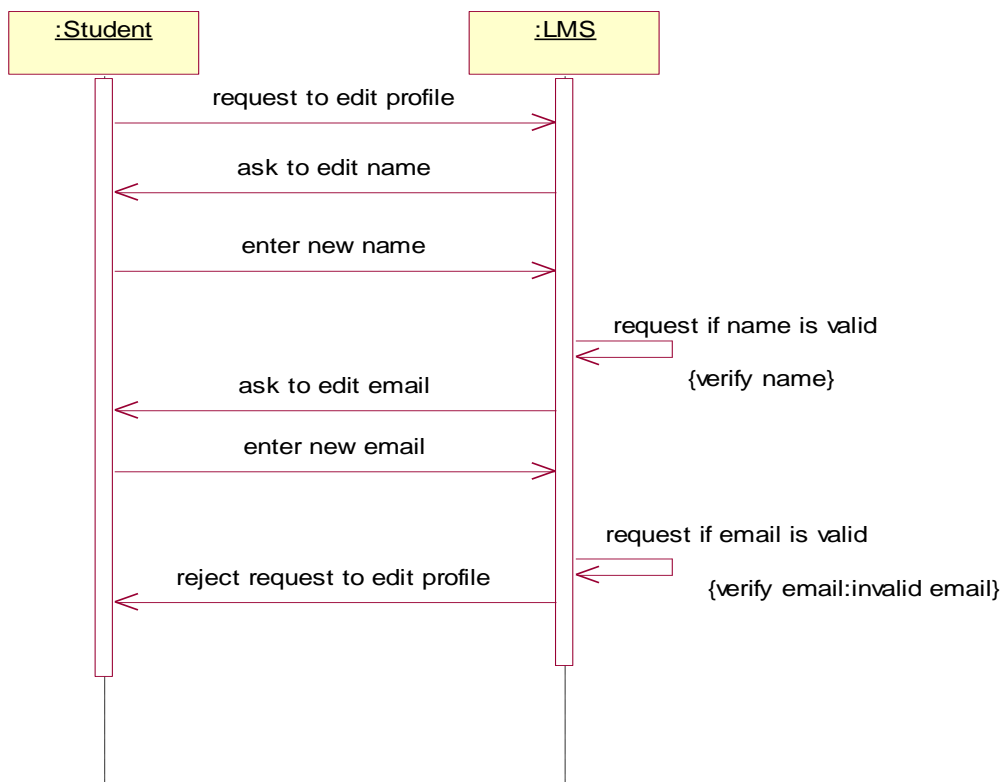
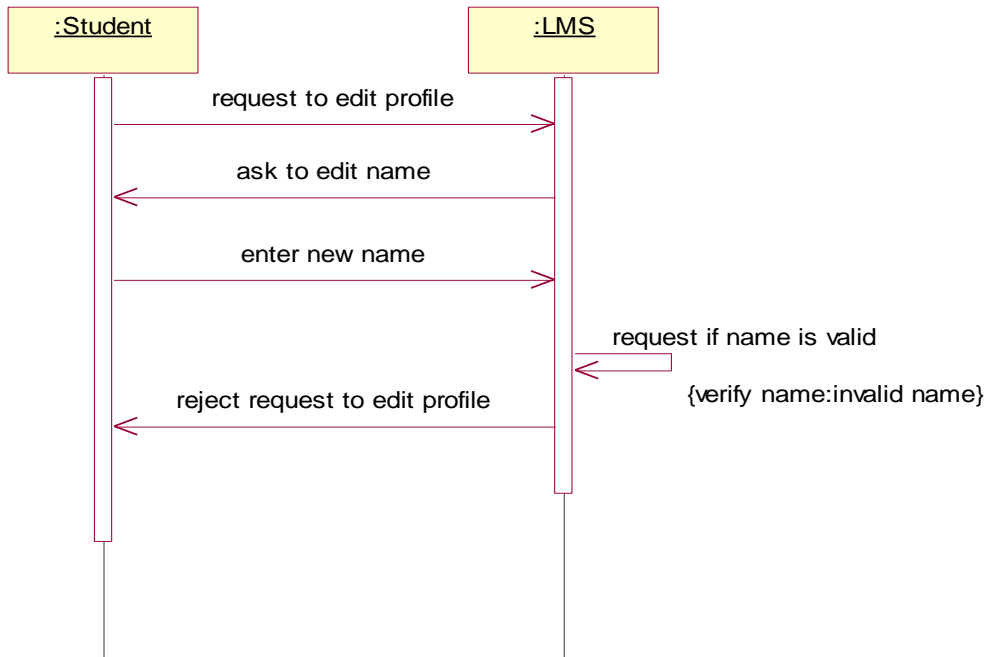
## UC-2(Log In)

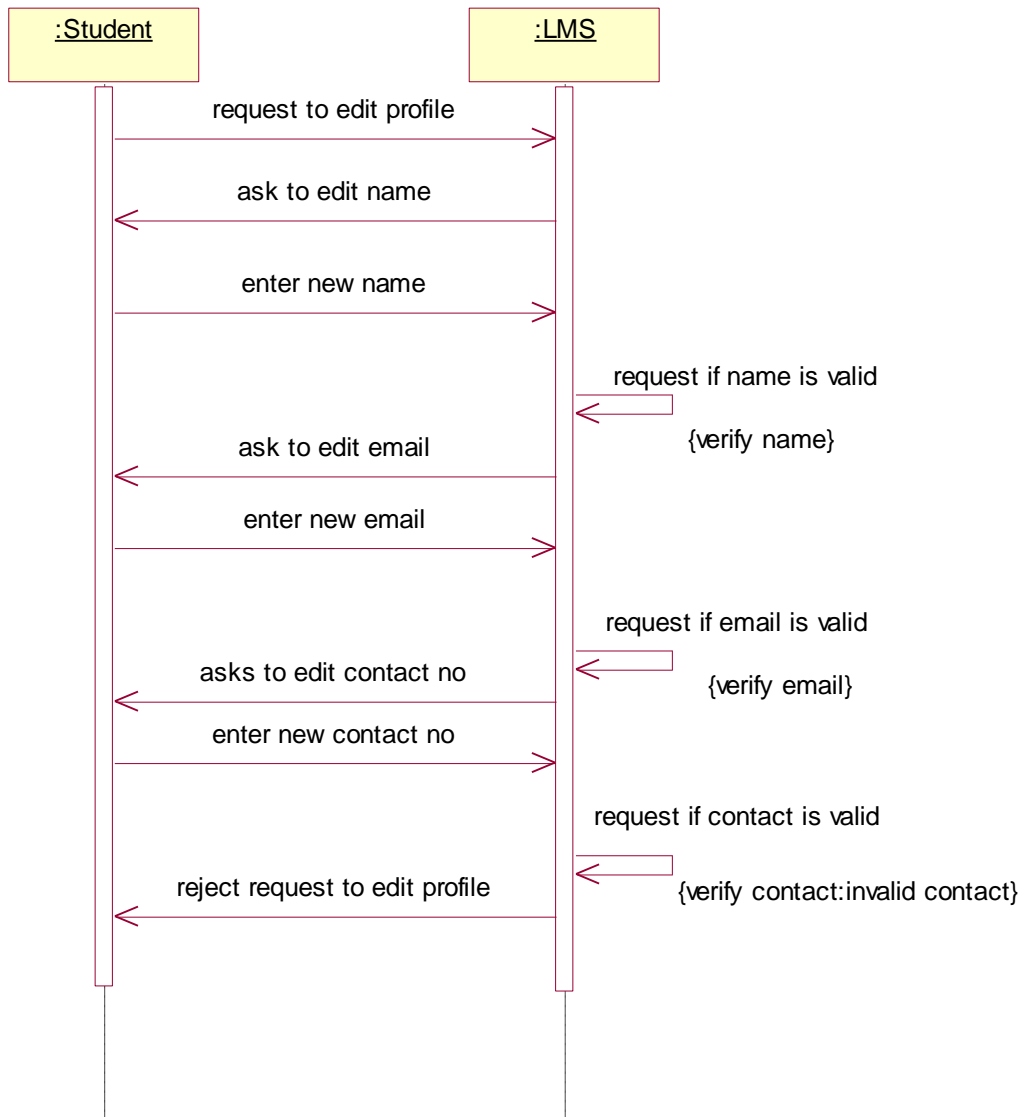




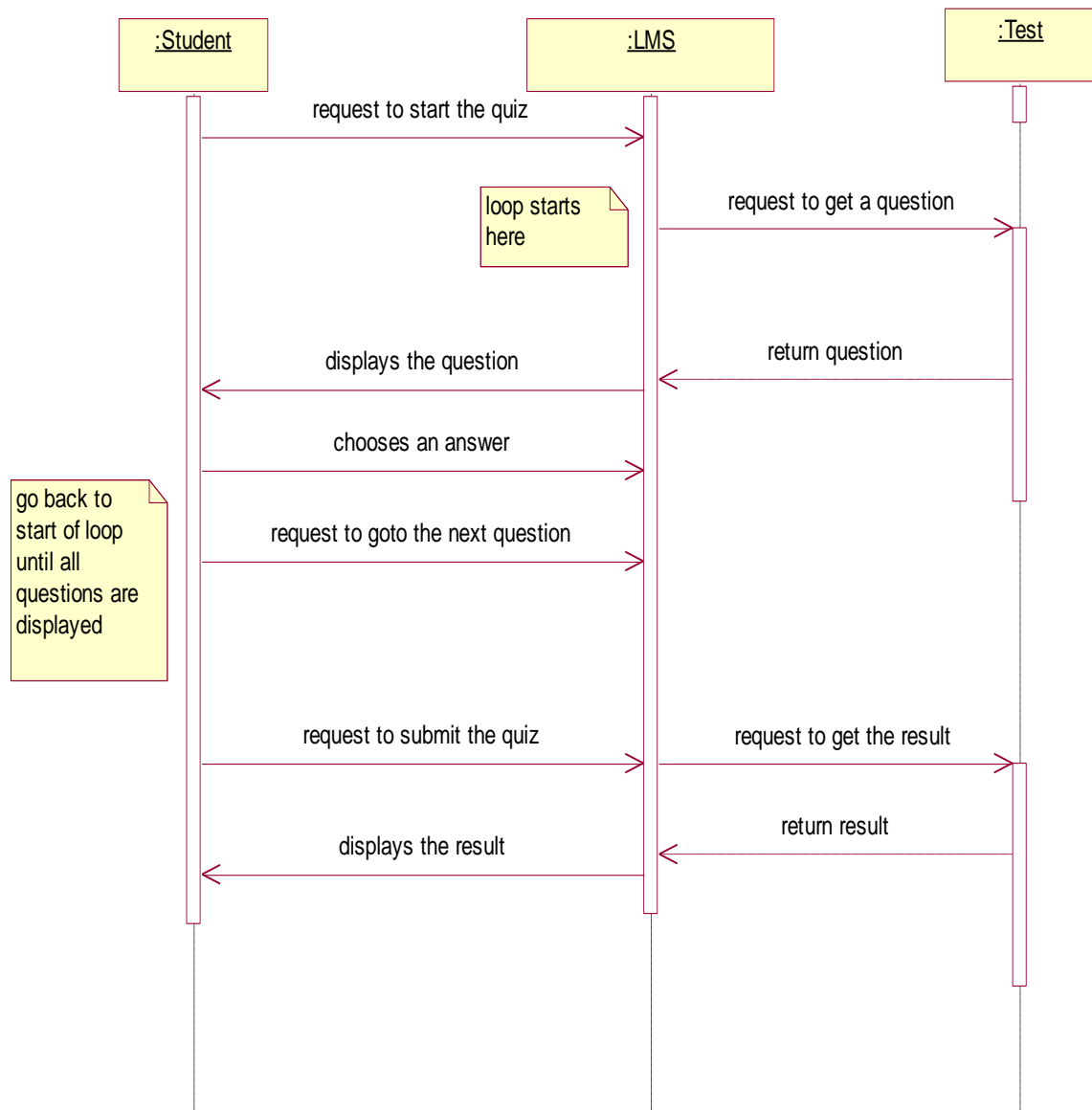
### UC-3(Edit Profile)

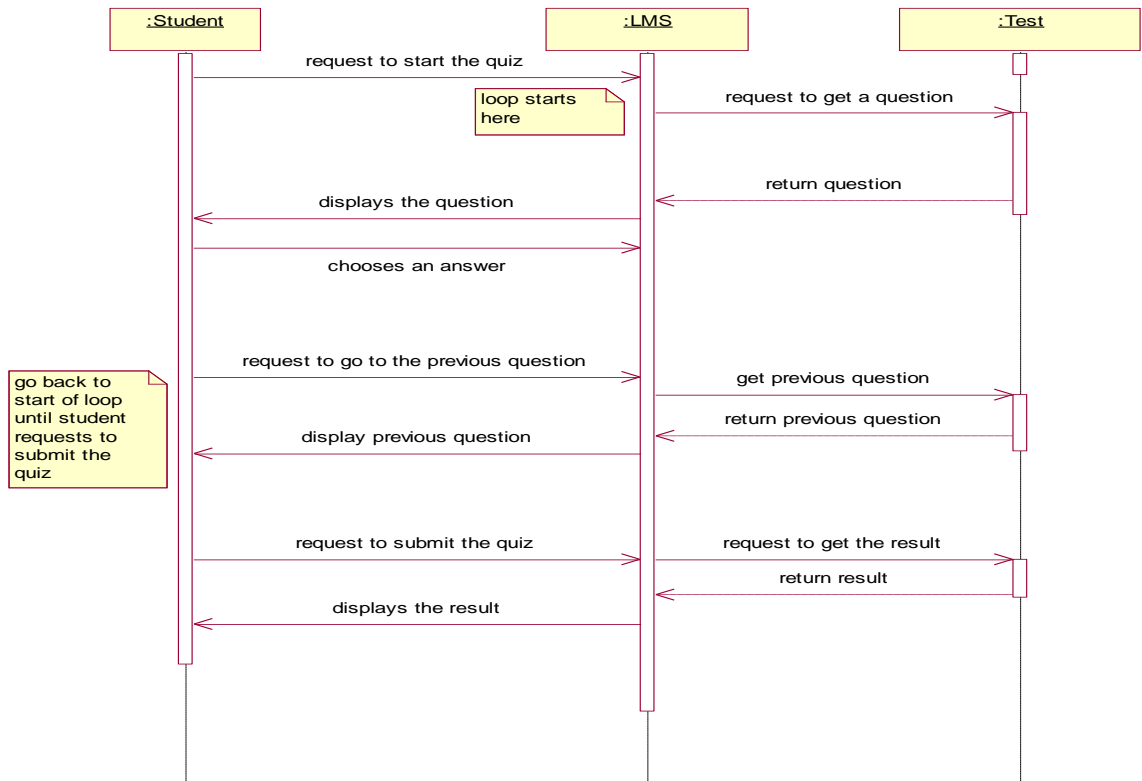
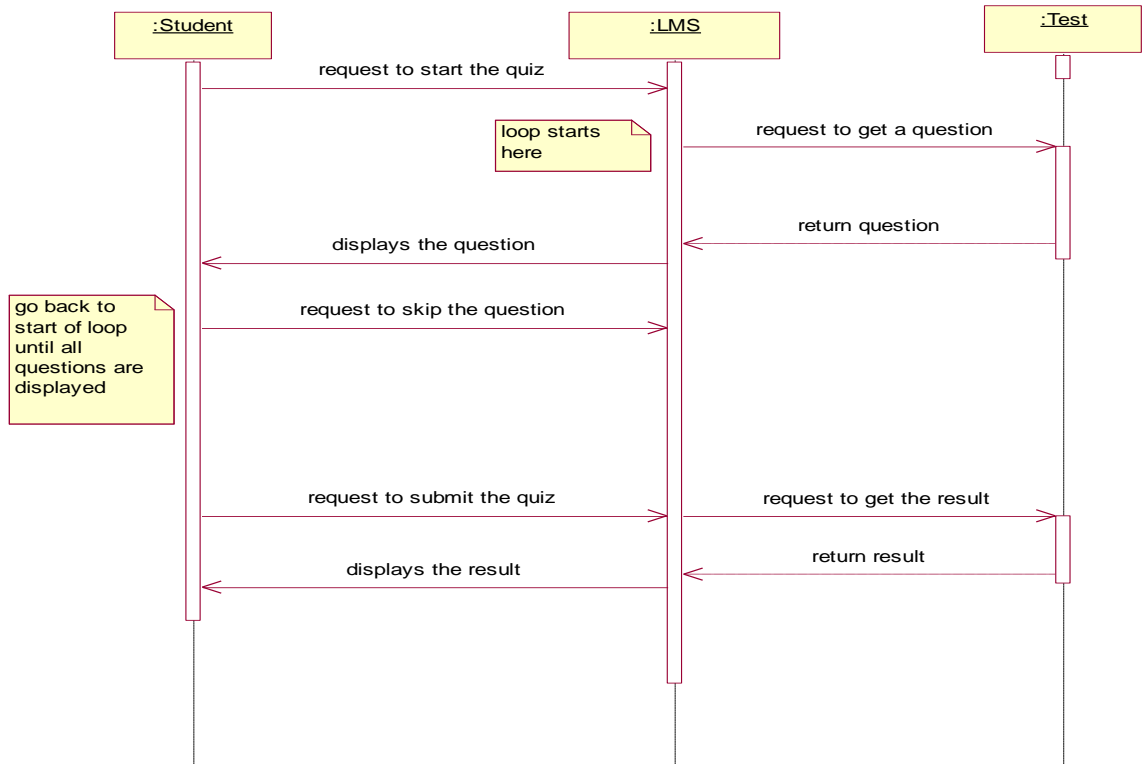




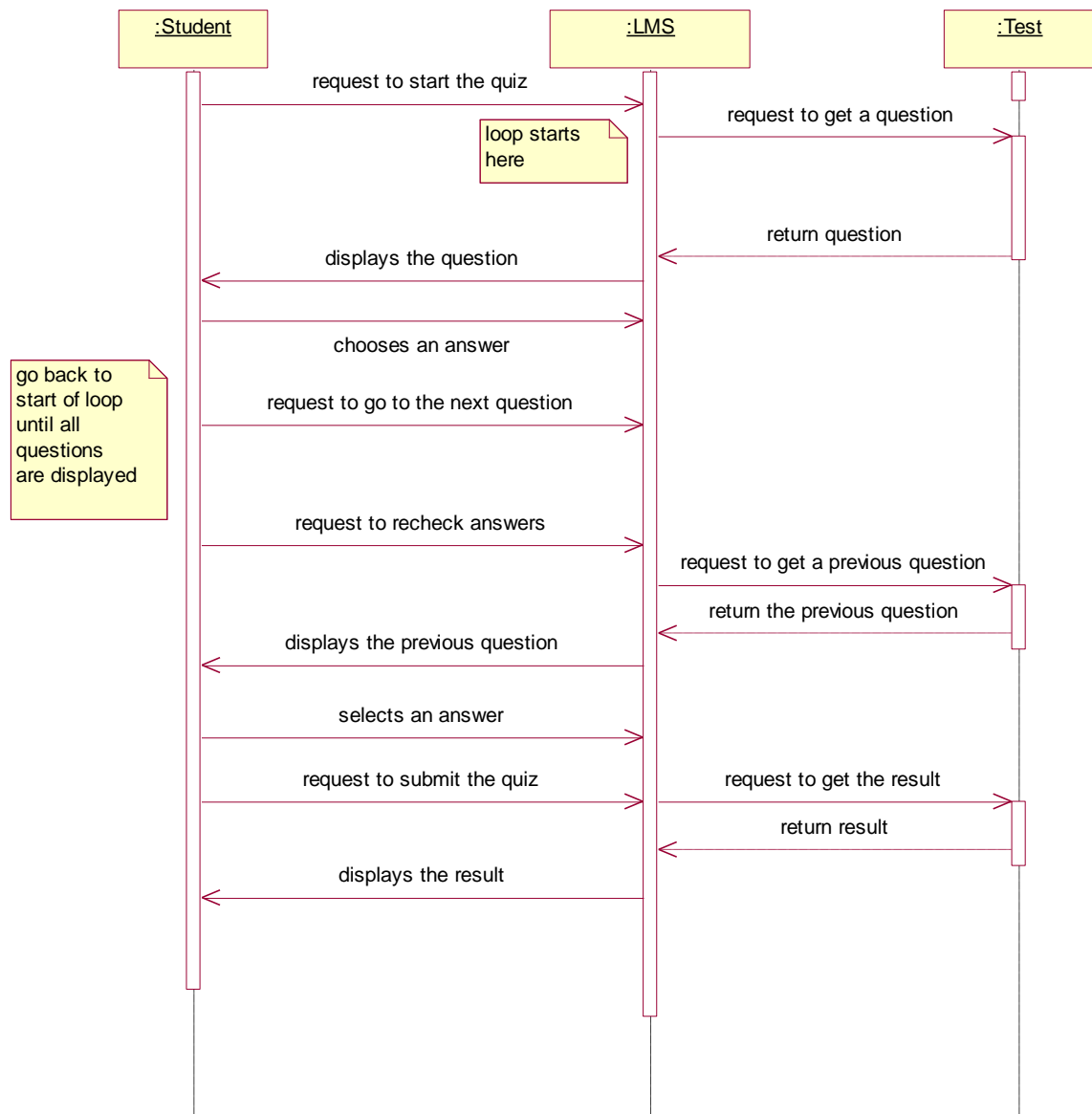


## UC-4(Take Quiz)

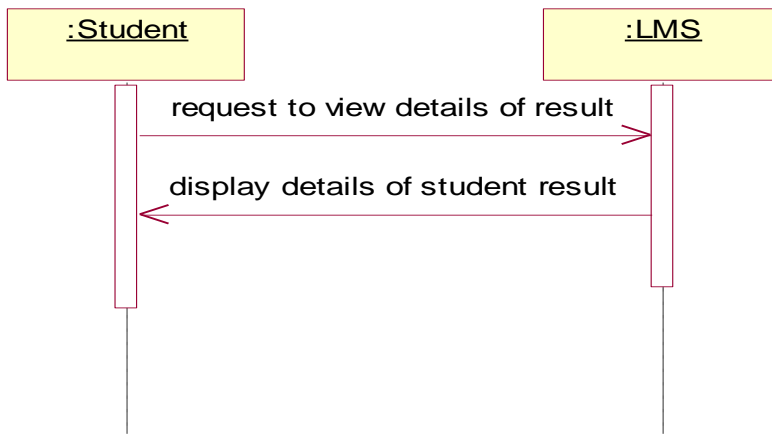




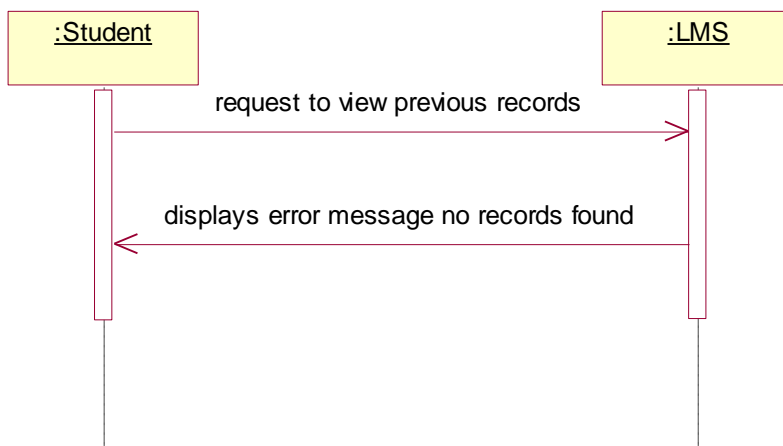
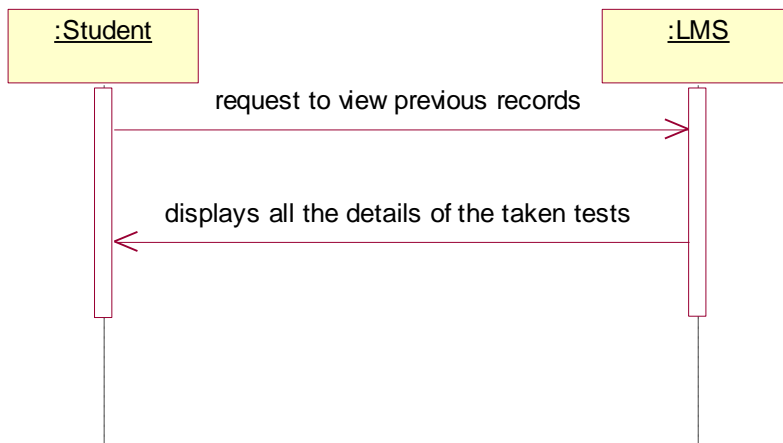




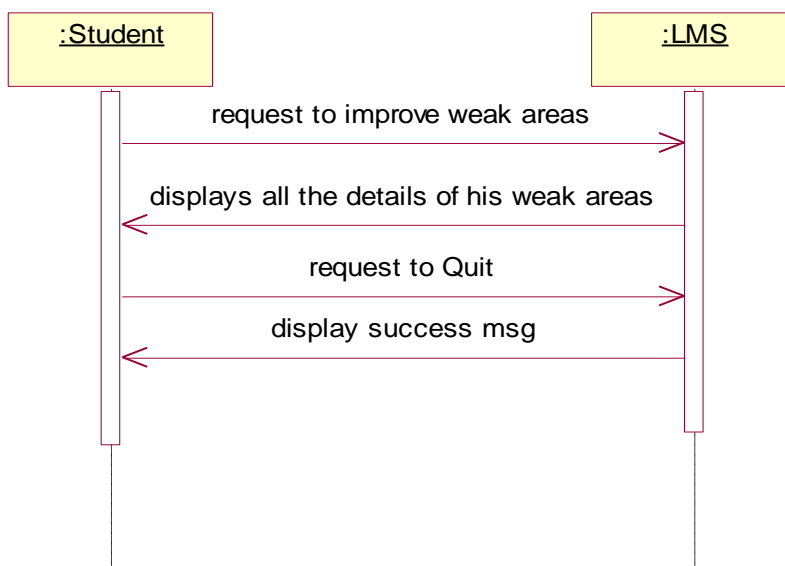
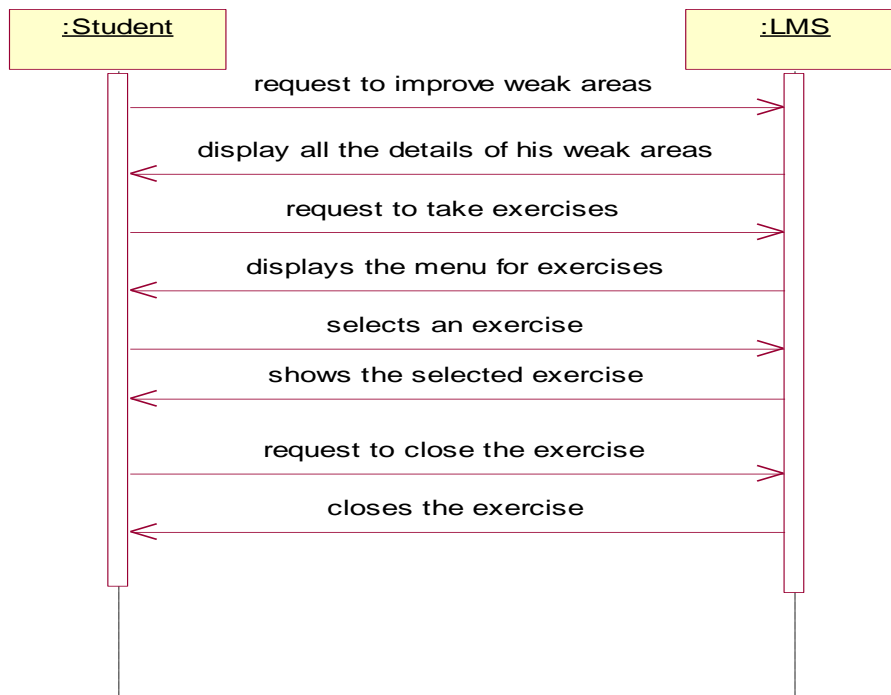
## UC-5(View Details of result)



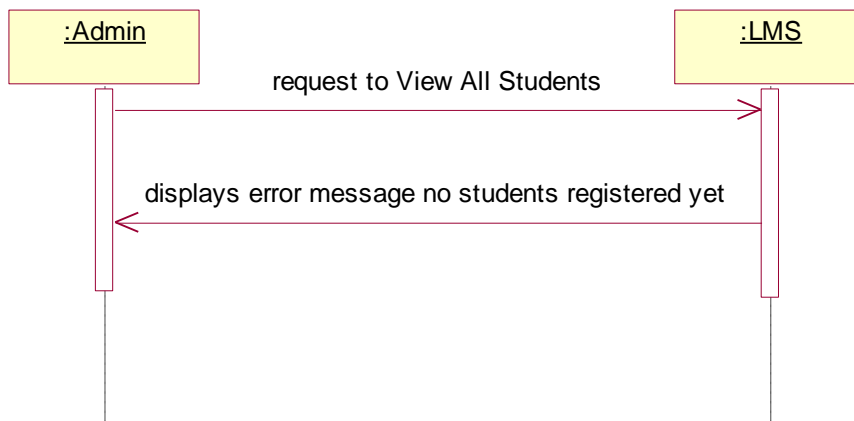
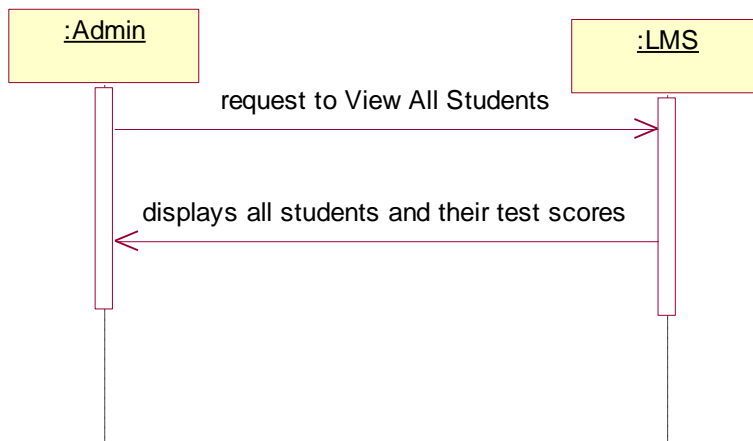
## UC-6 (View Details of result)



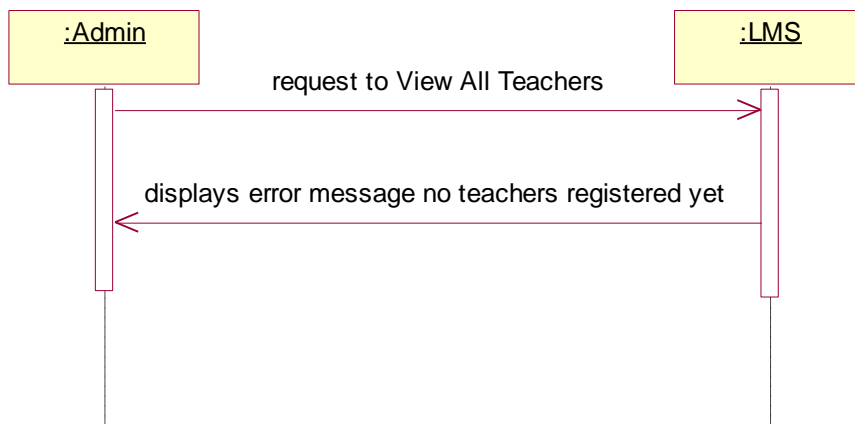
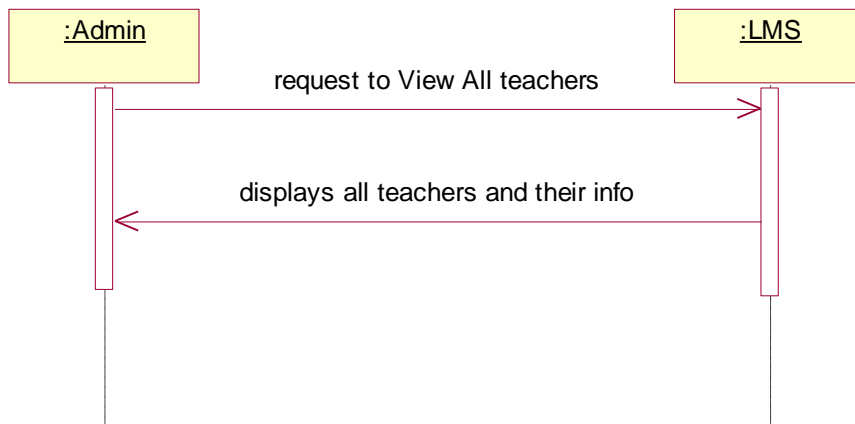
## UC-7 (Improve weak Areas)



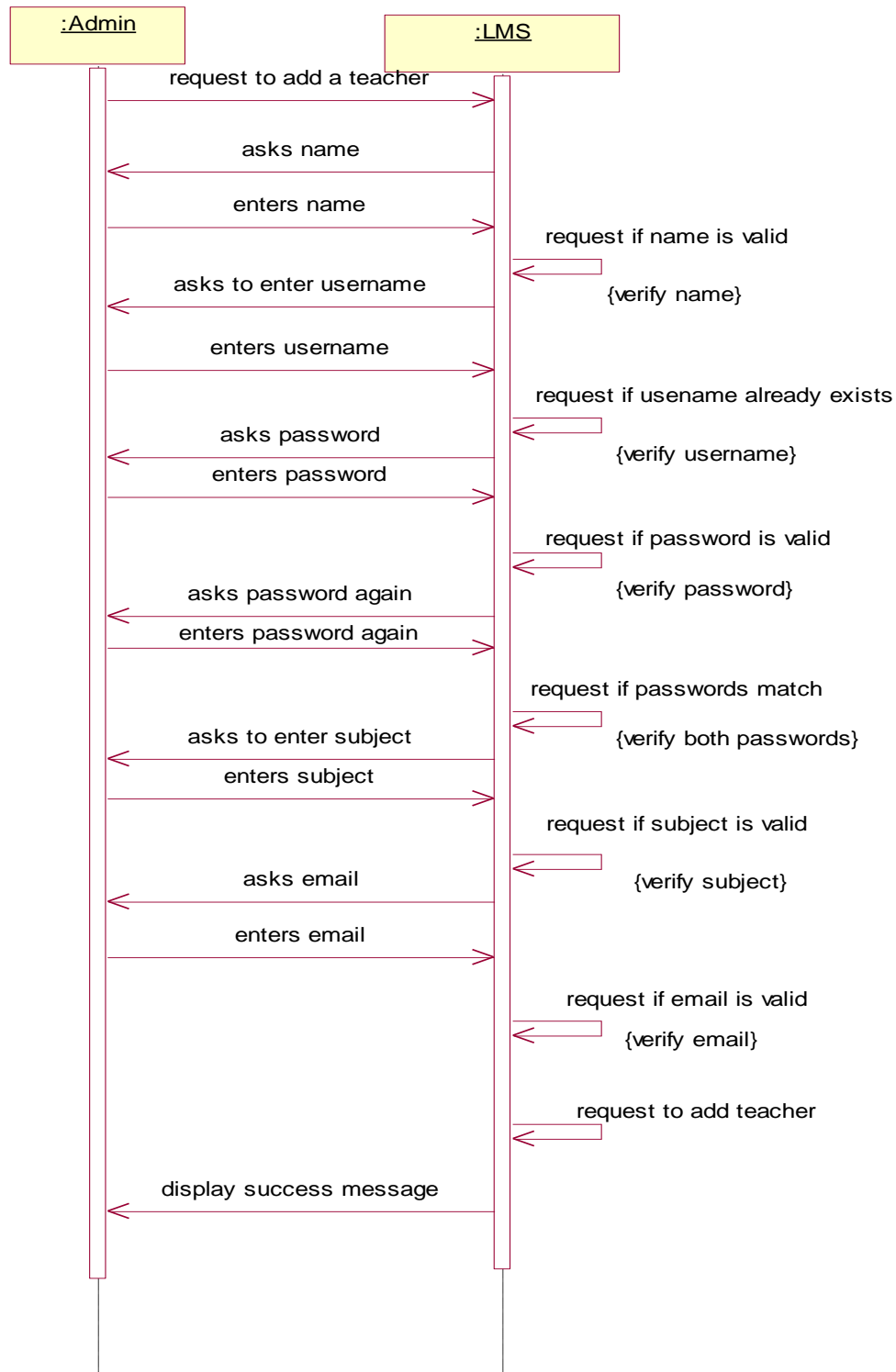
## UC-8 (View all students)

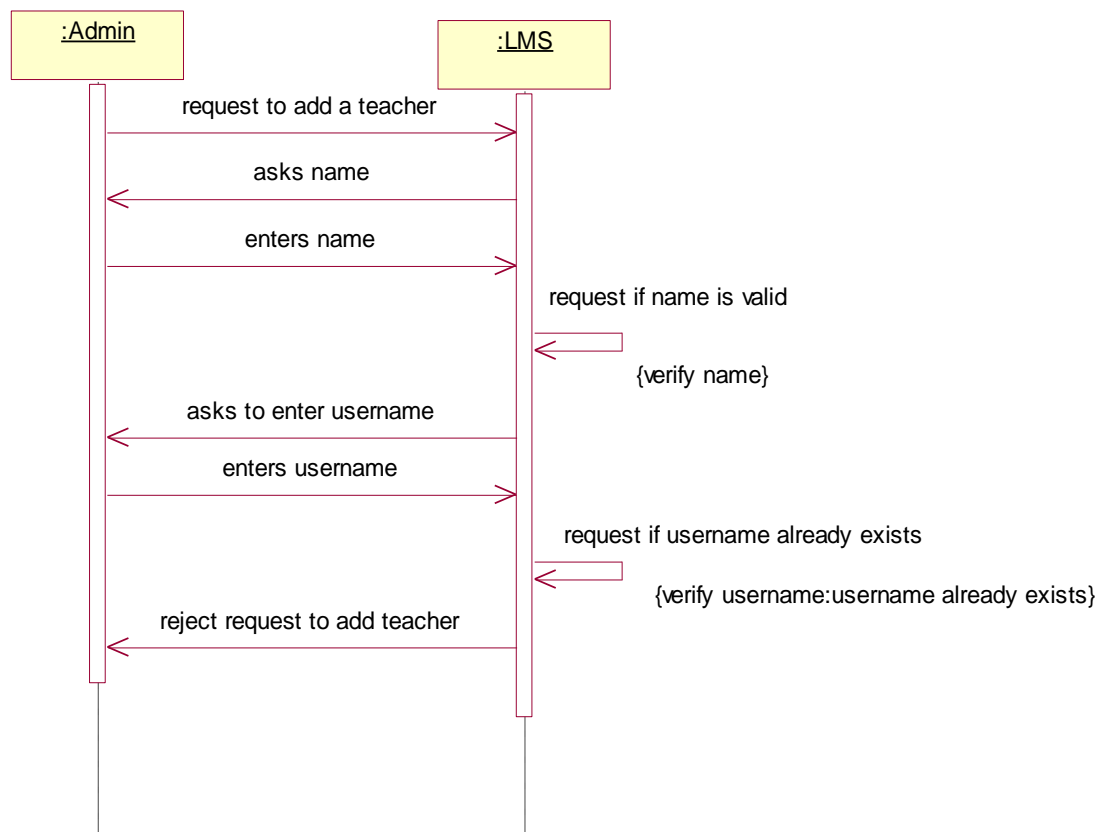
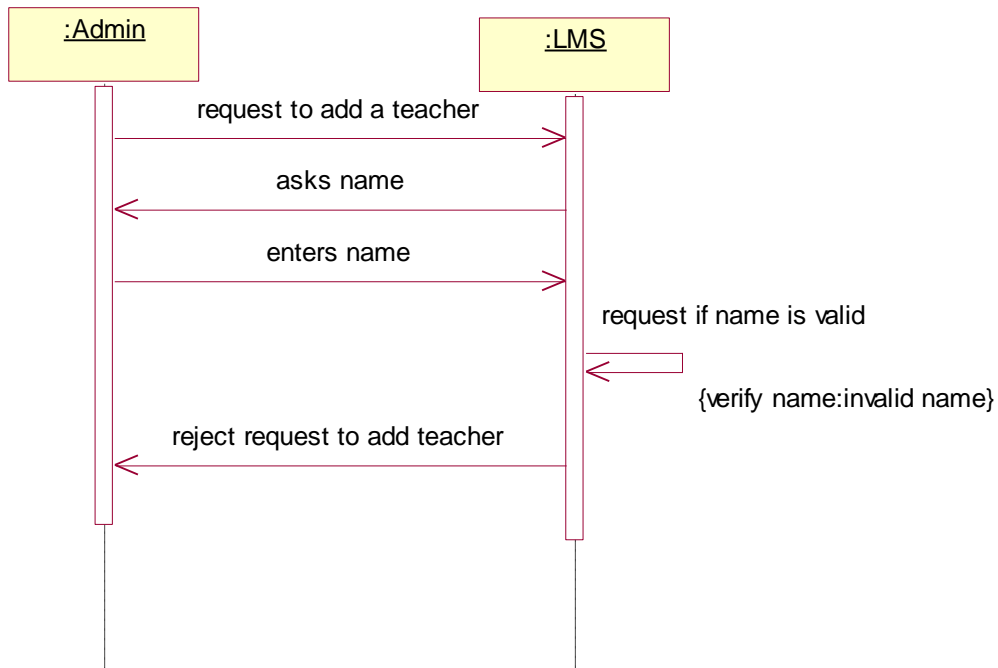


## UC-9 (View teachers)

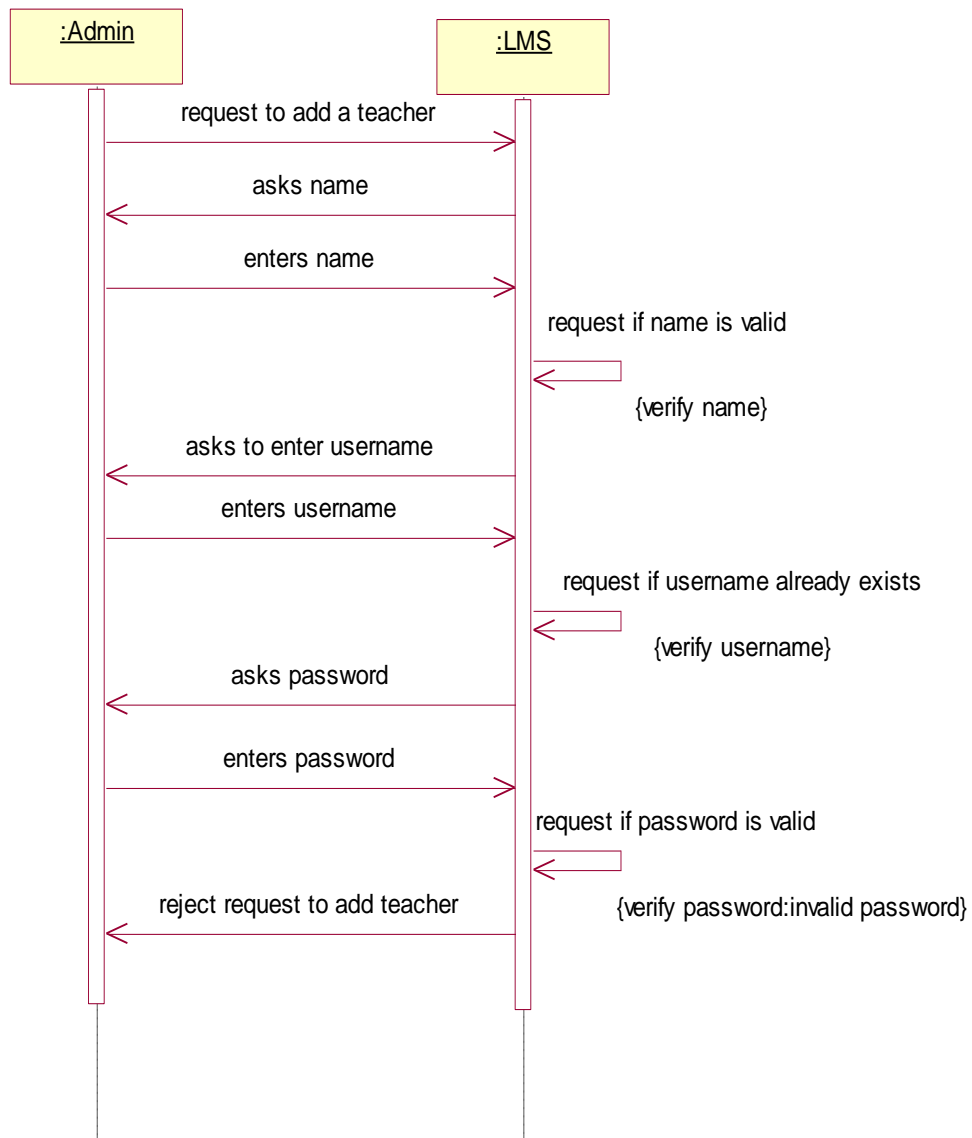


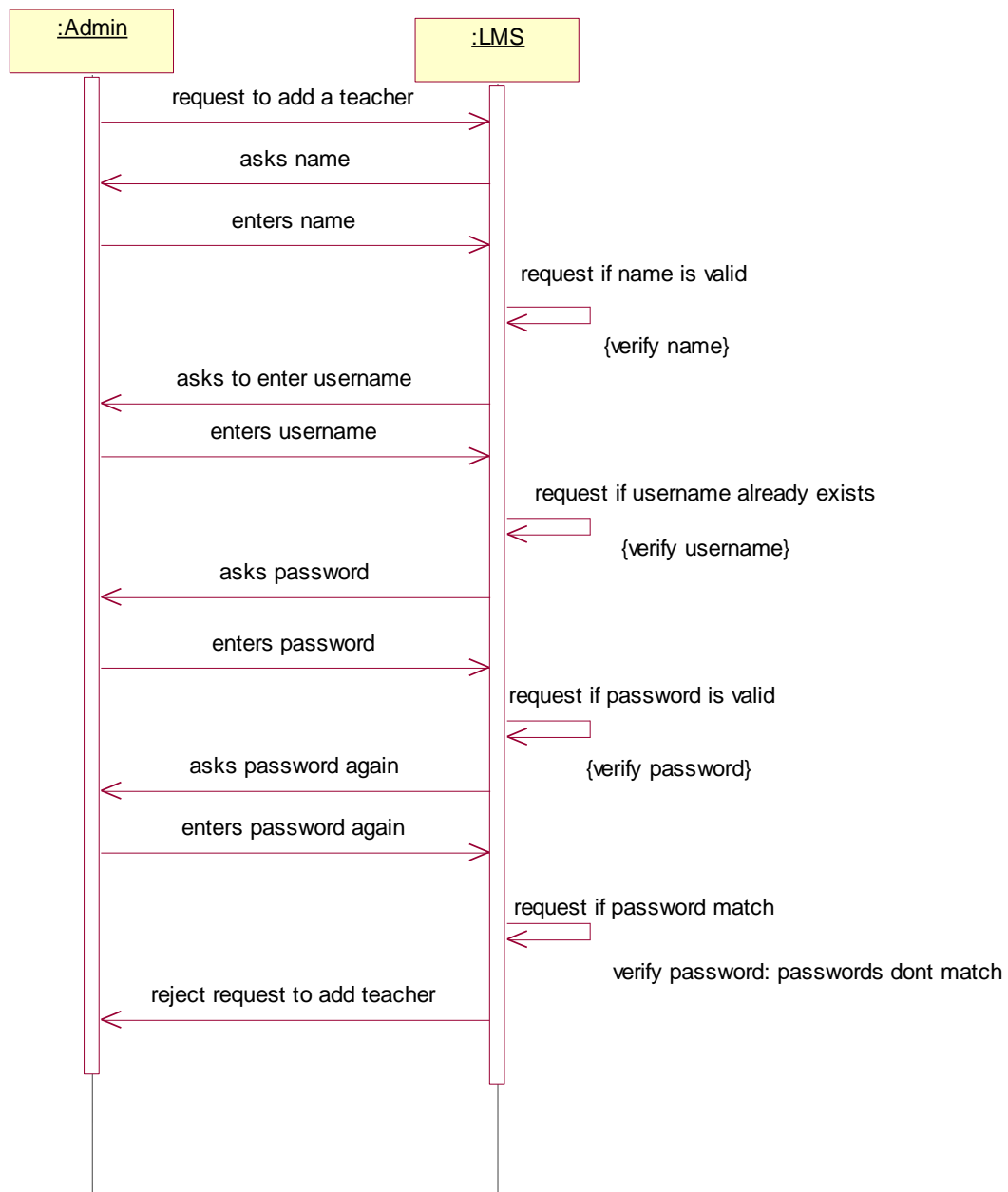
## UC-10 (Add teacher)

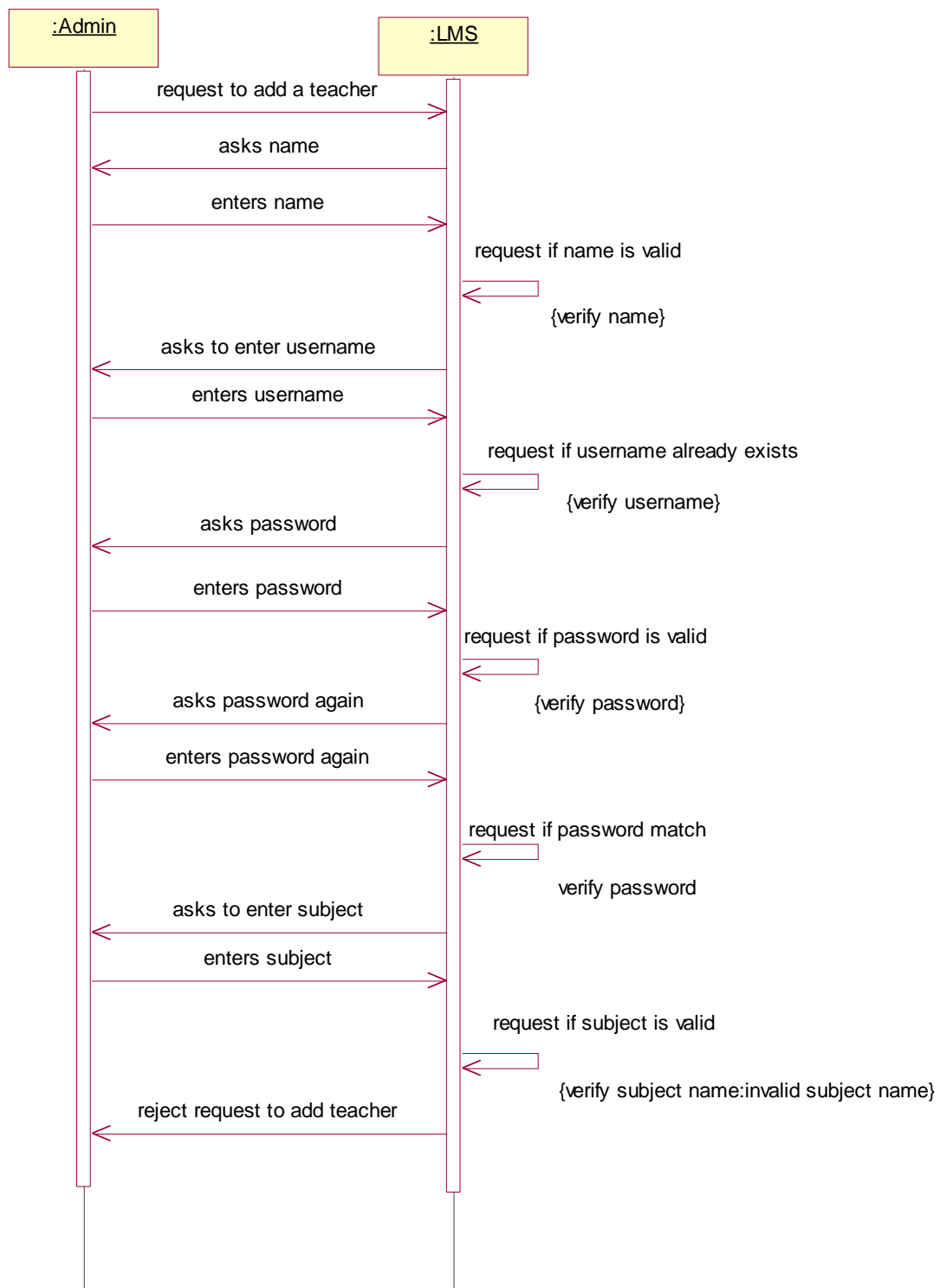


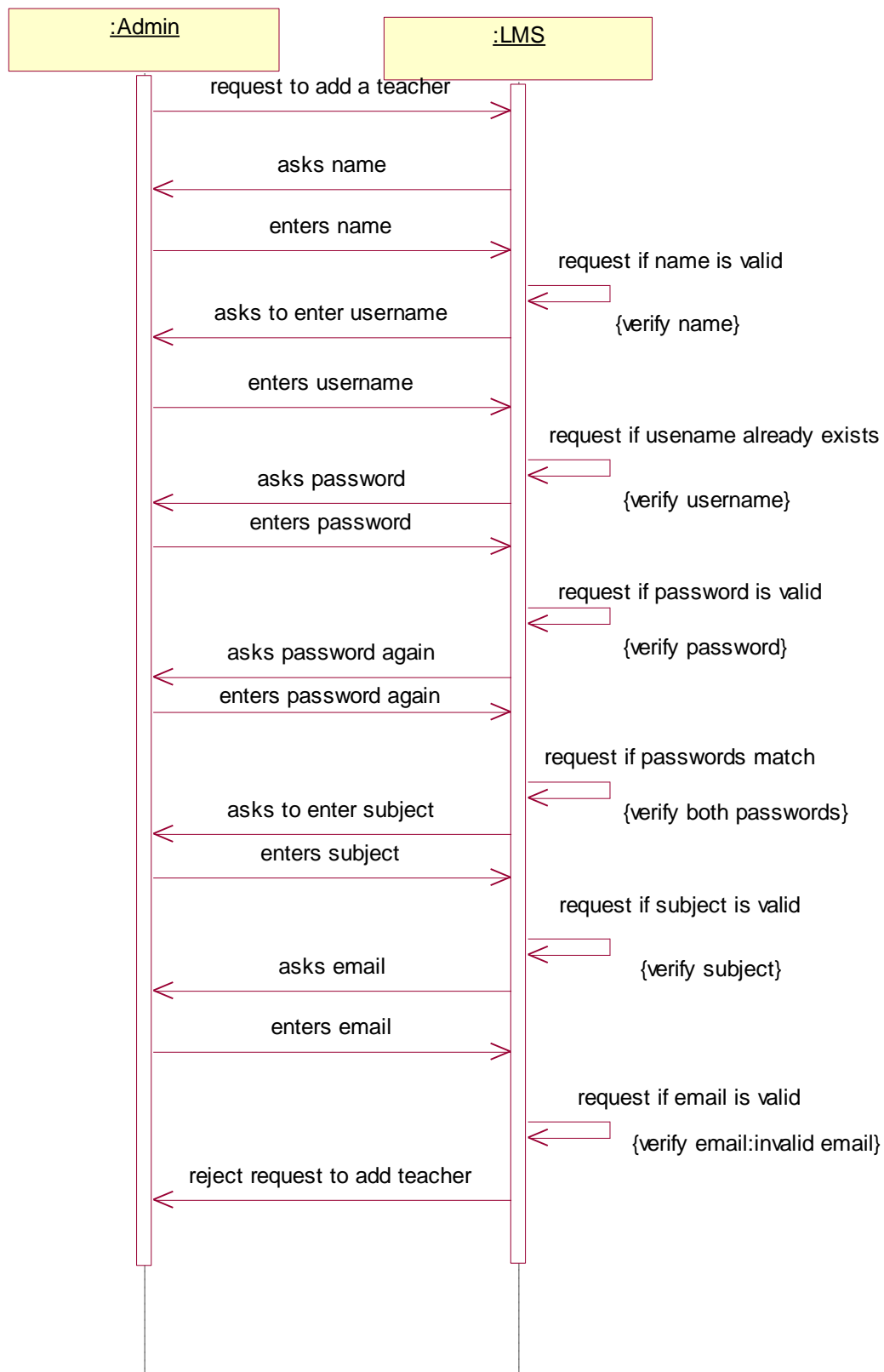




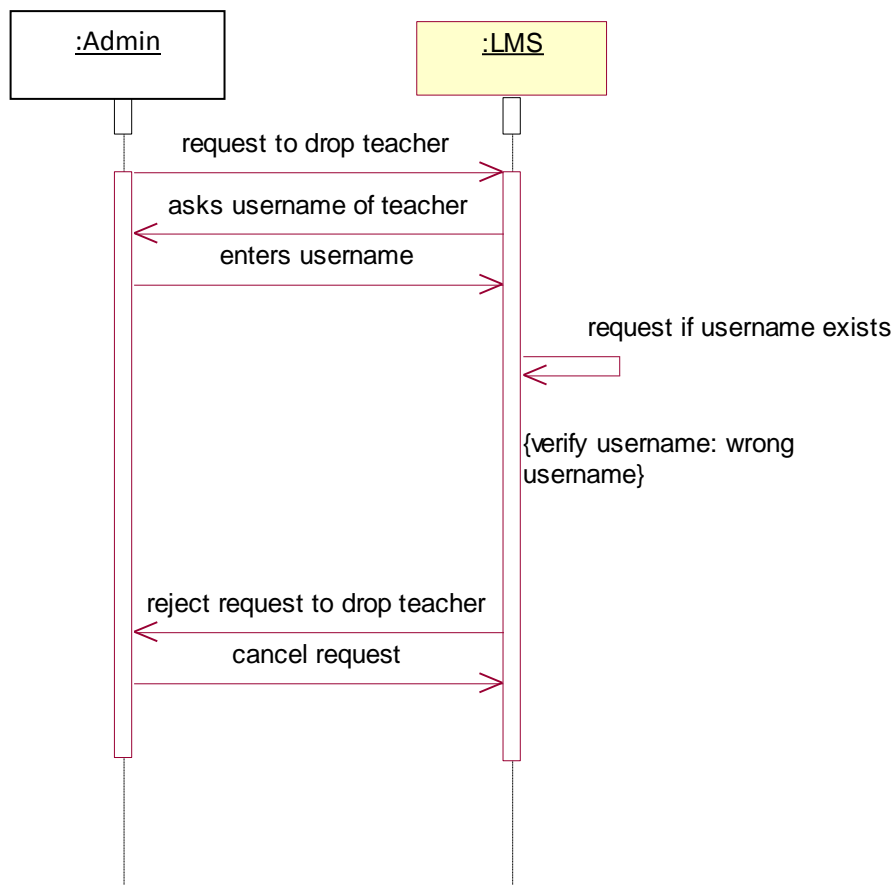
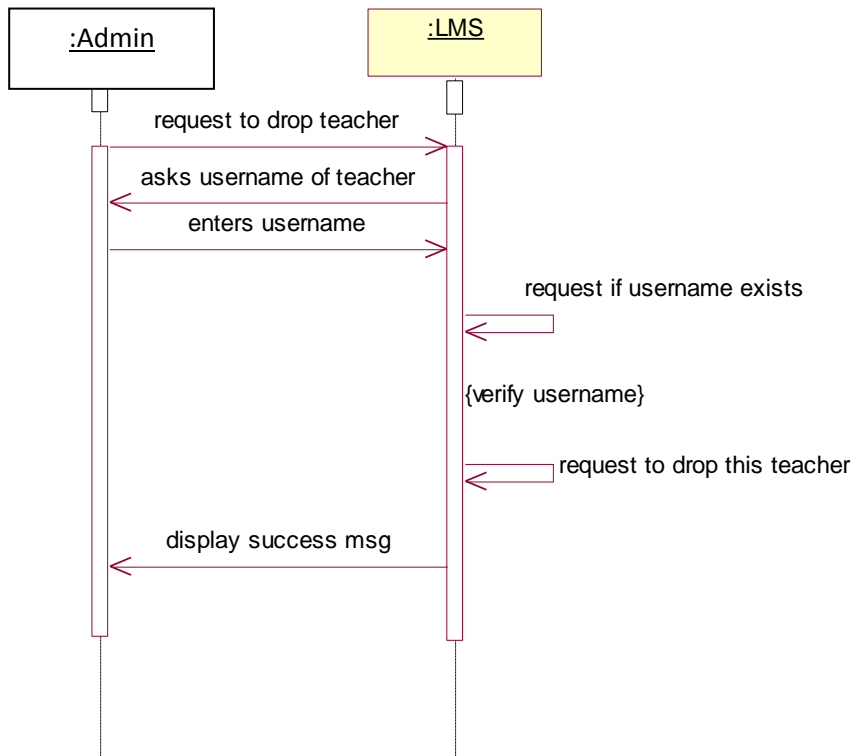




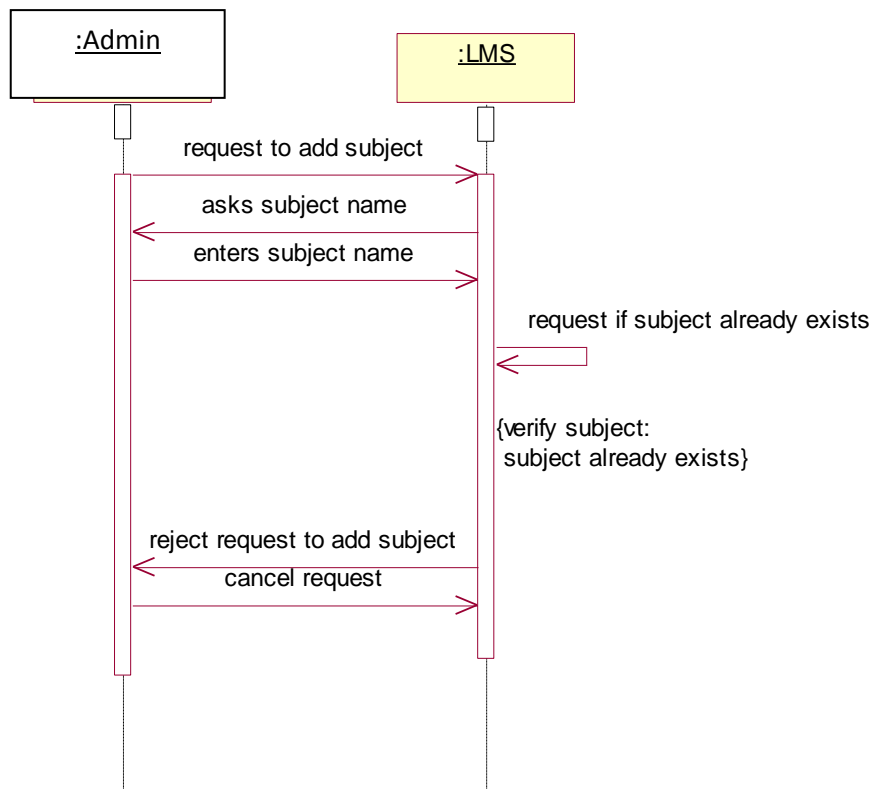
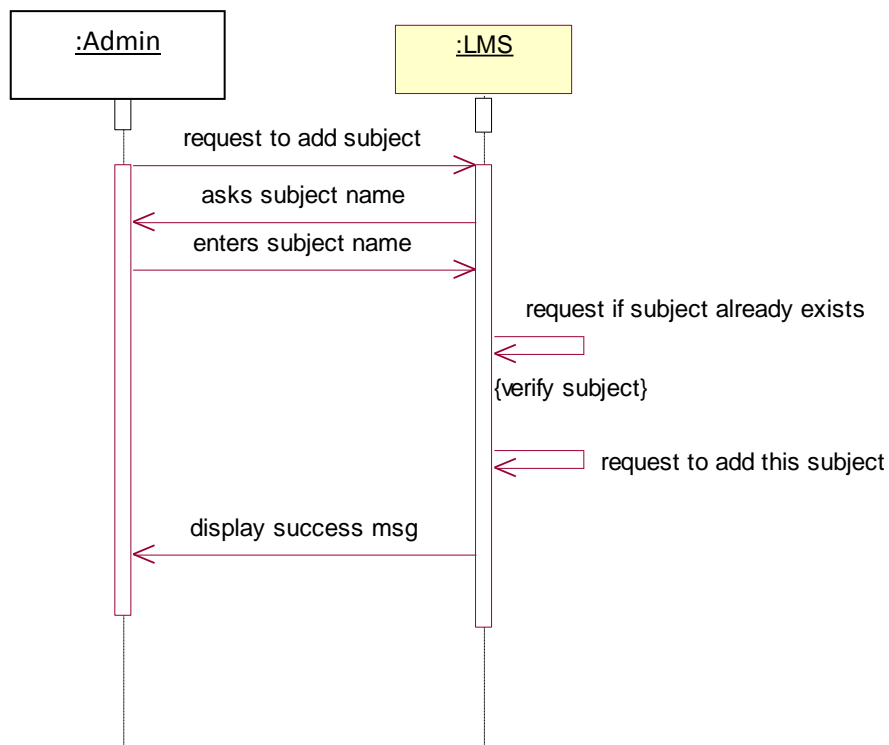




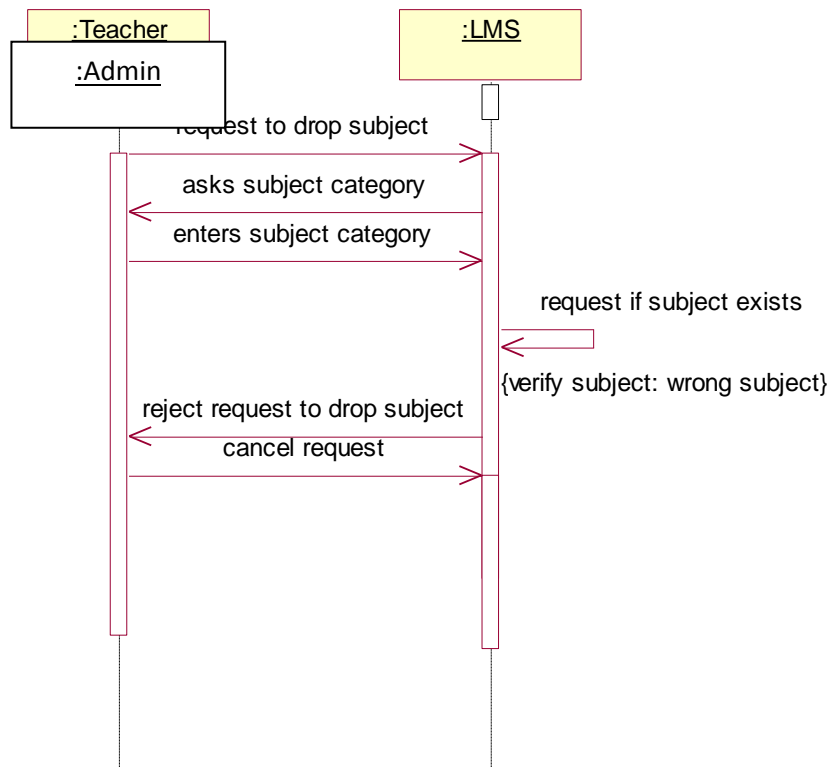
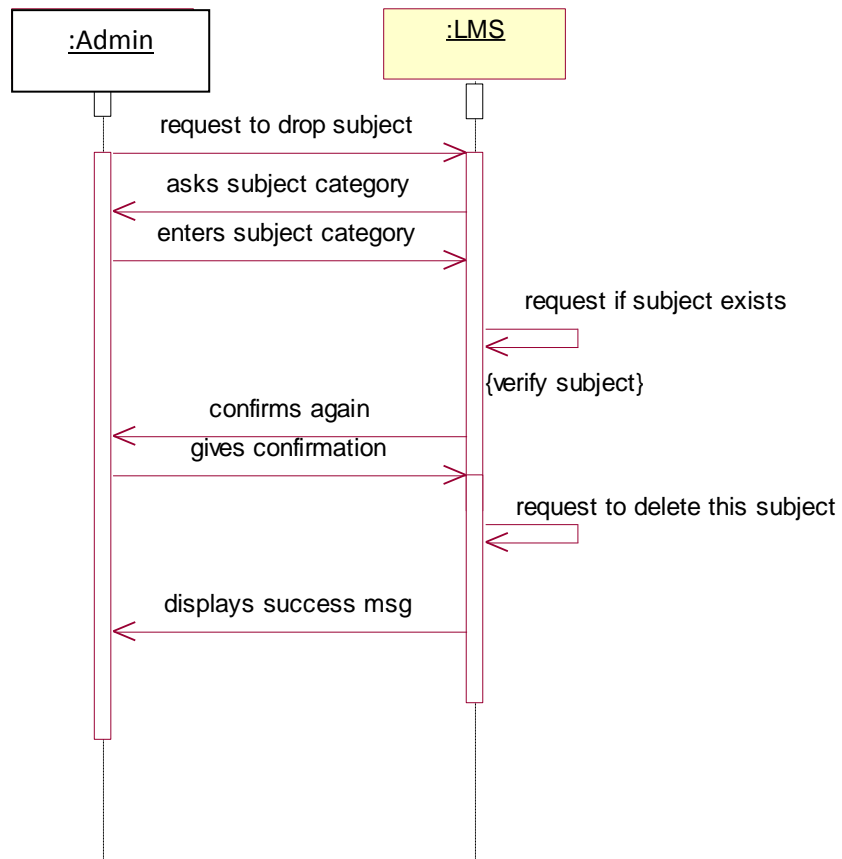
## UC-11(Drop Teacher)



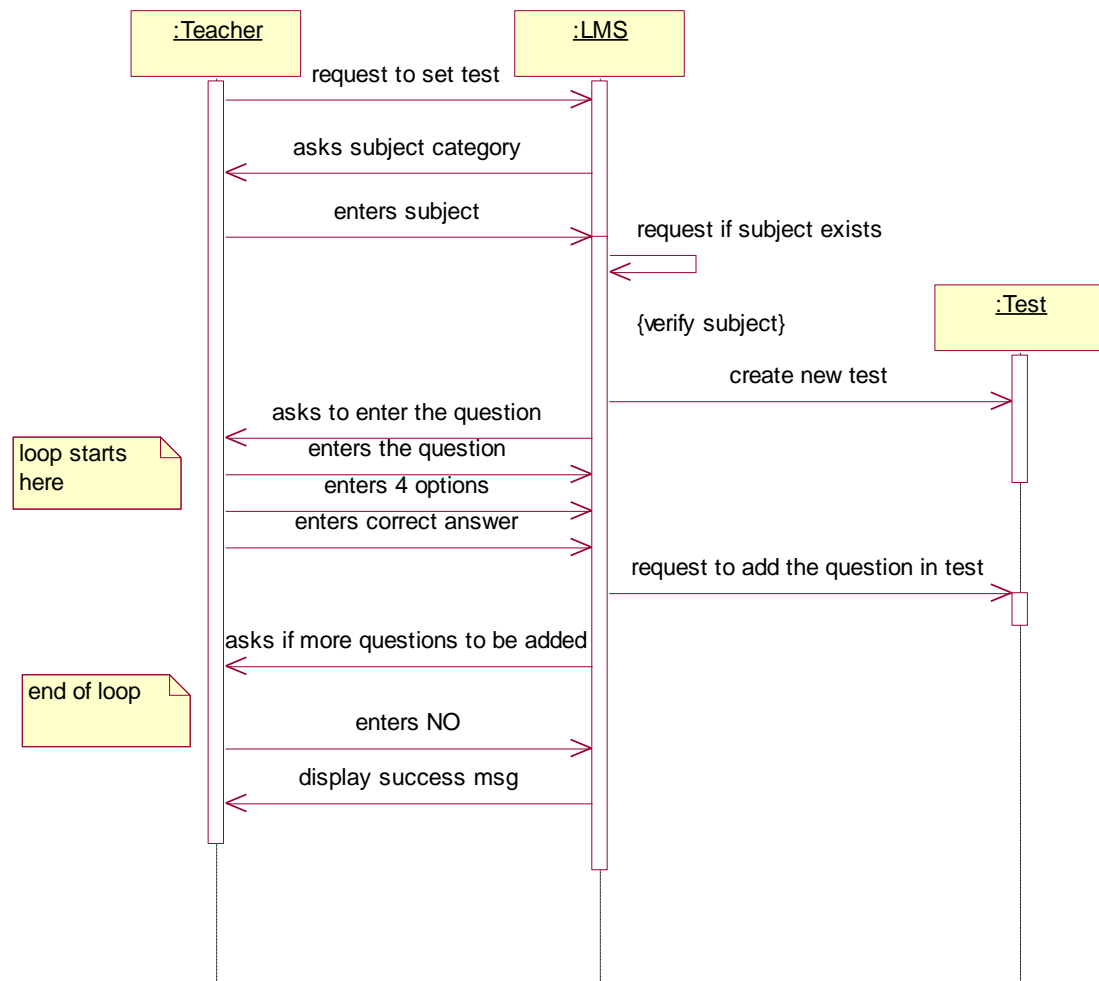
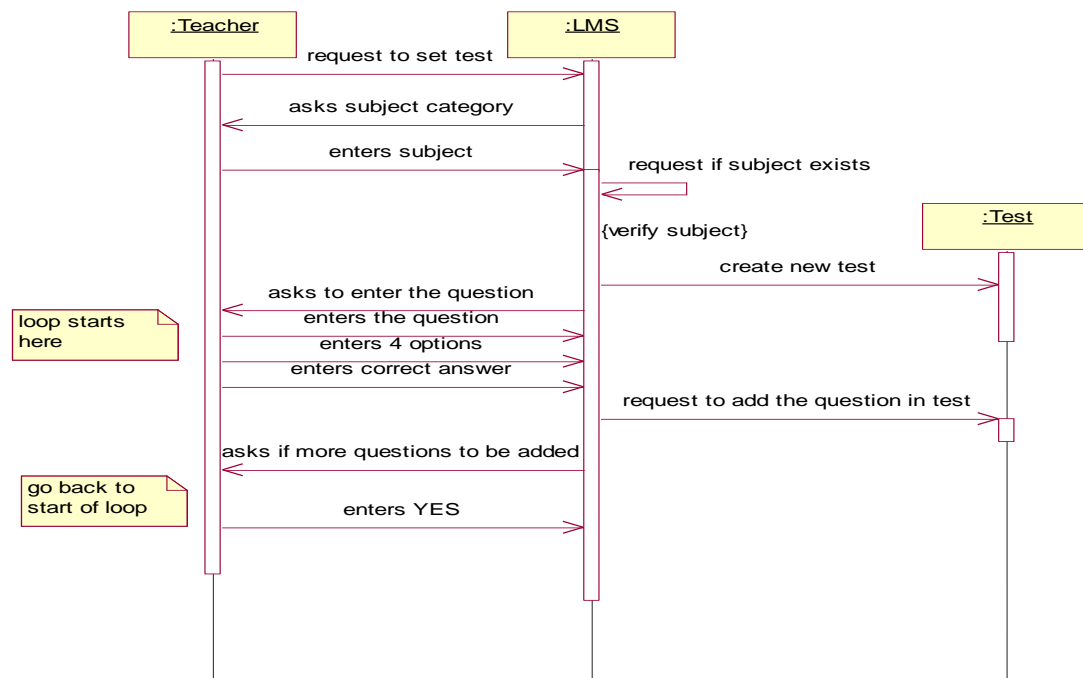
## UC-12(Add Subject)



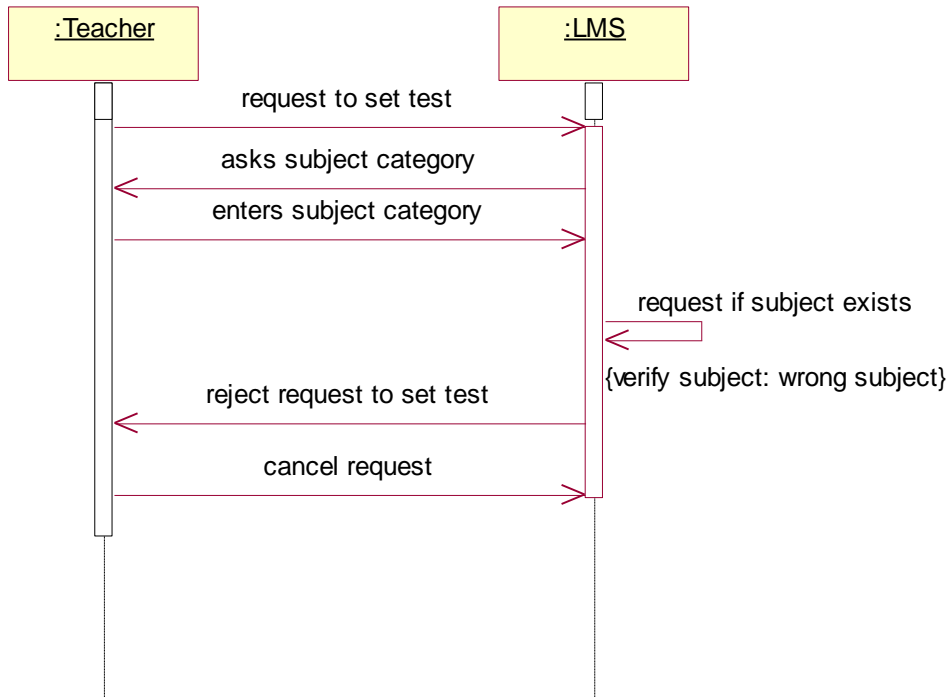
## UC-13(Drop Subject)



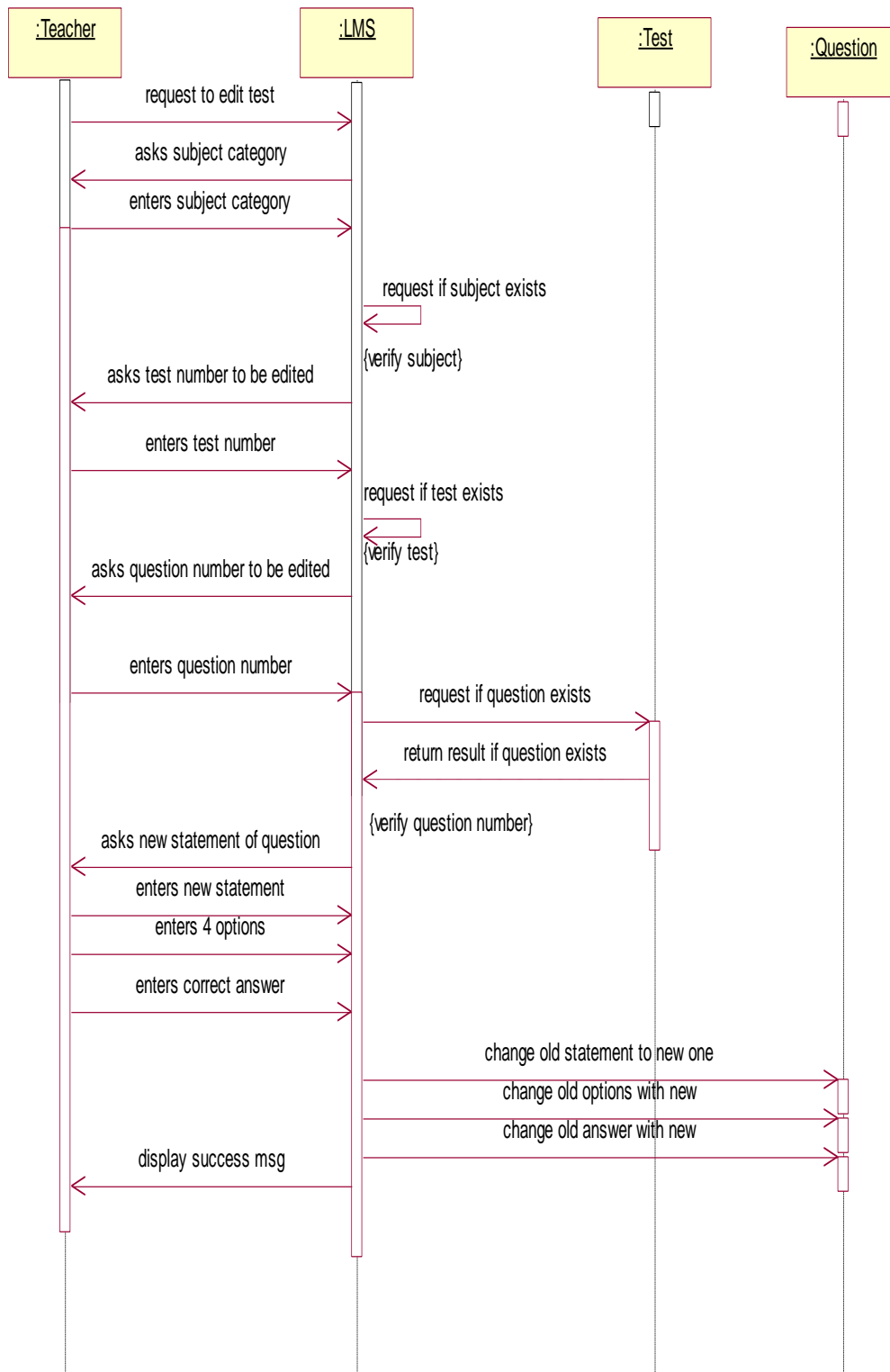
## UC-14(Set Test)

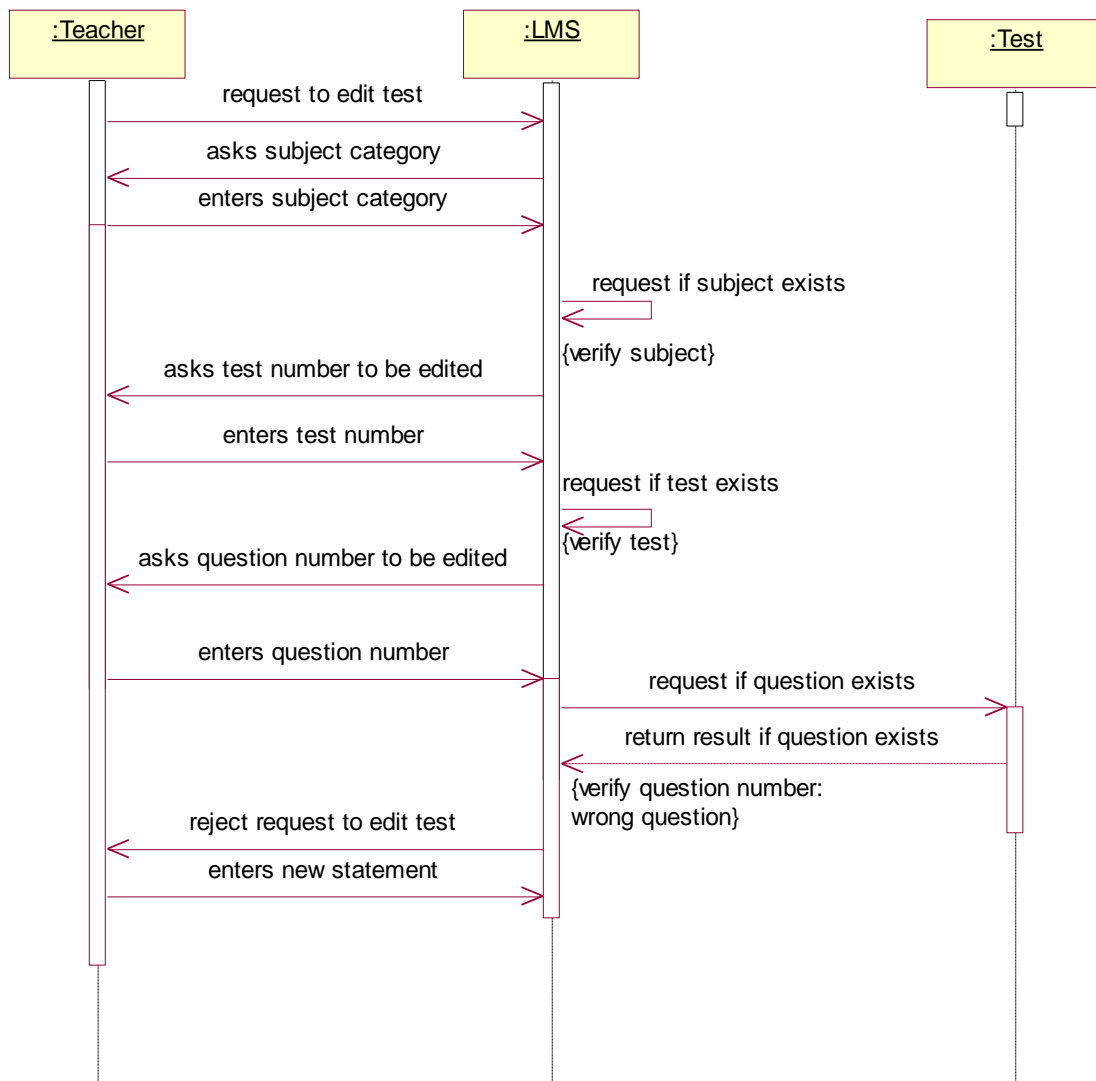


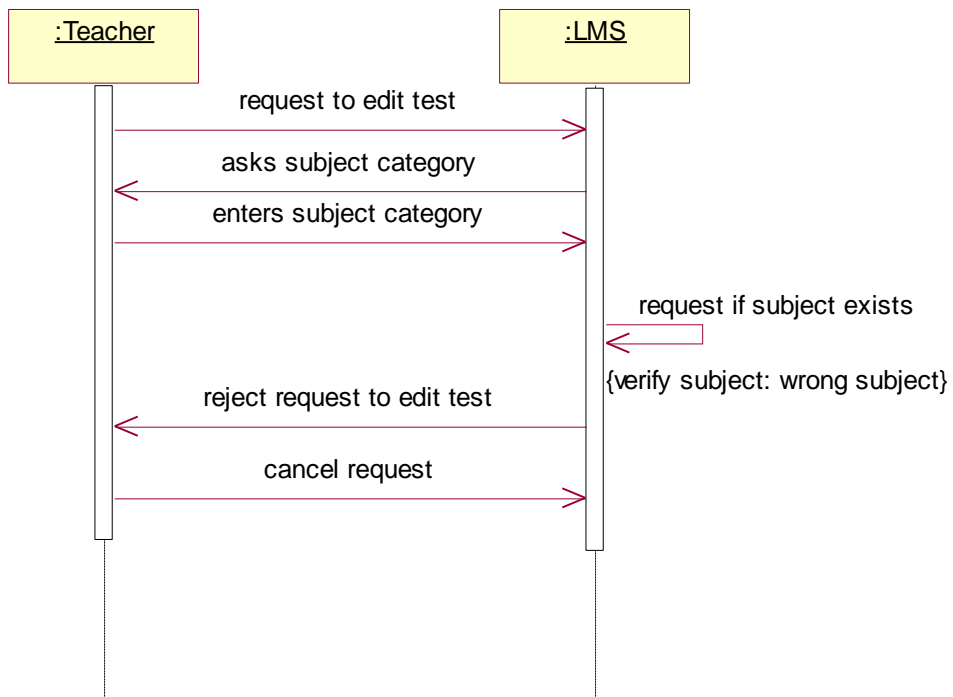
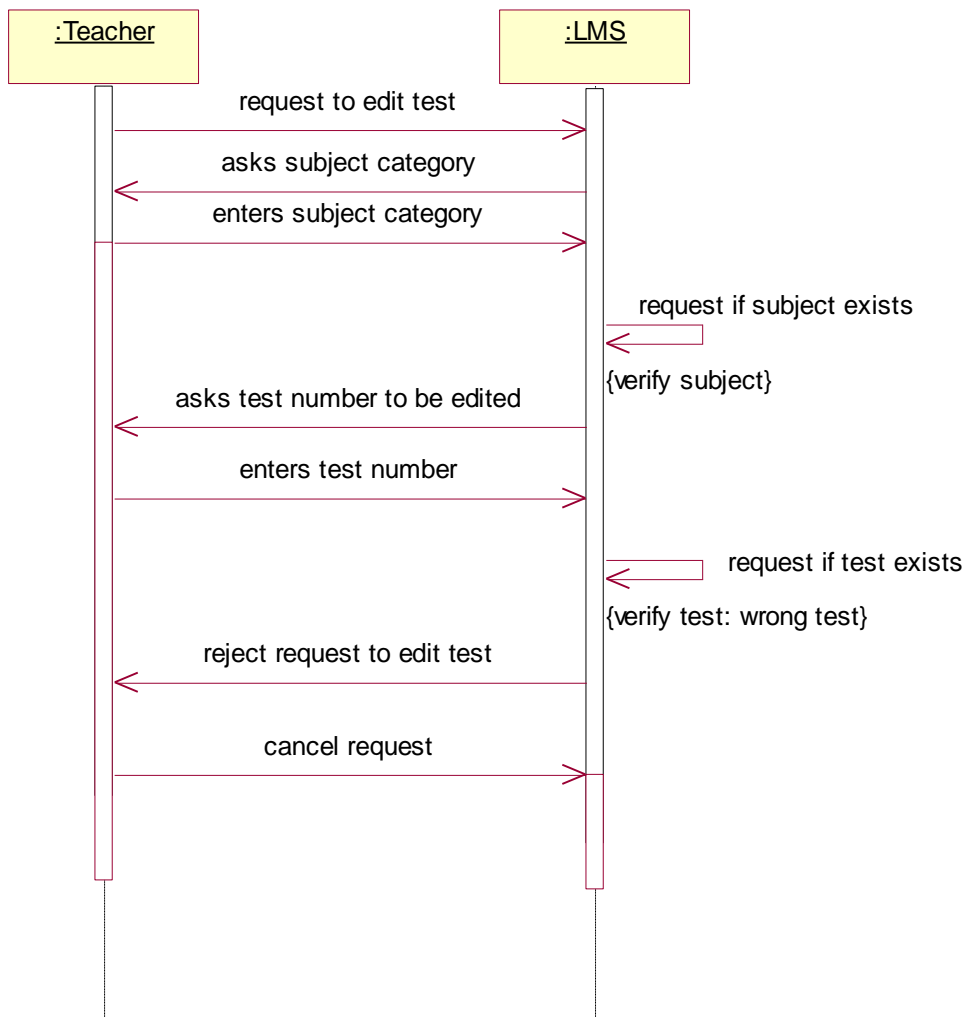




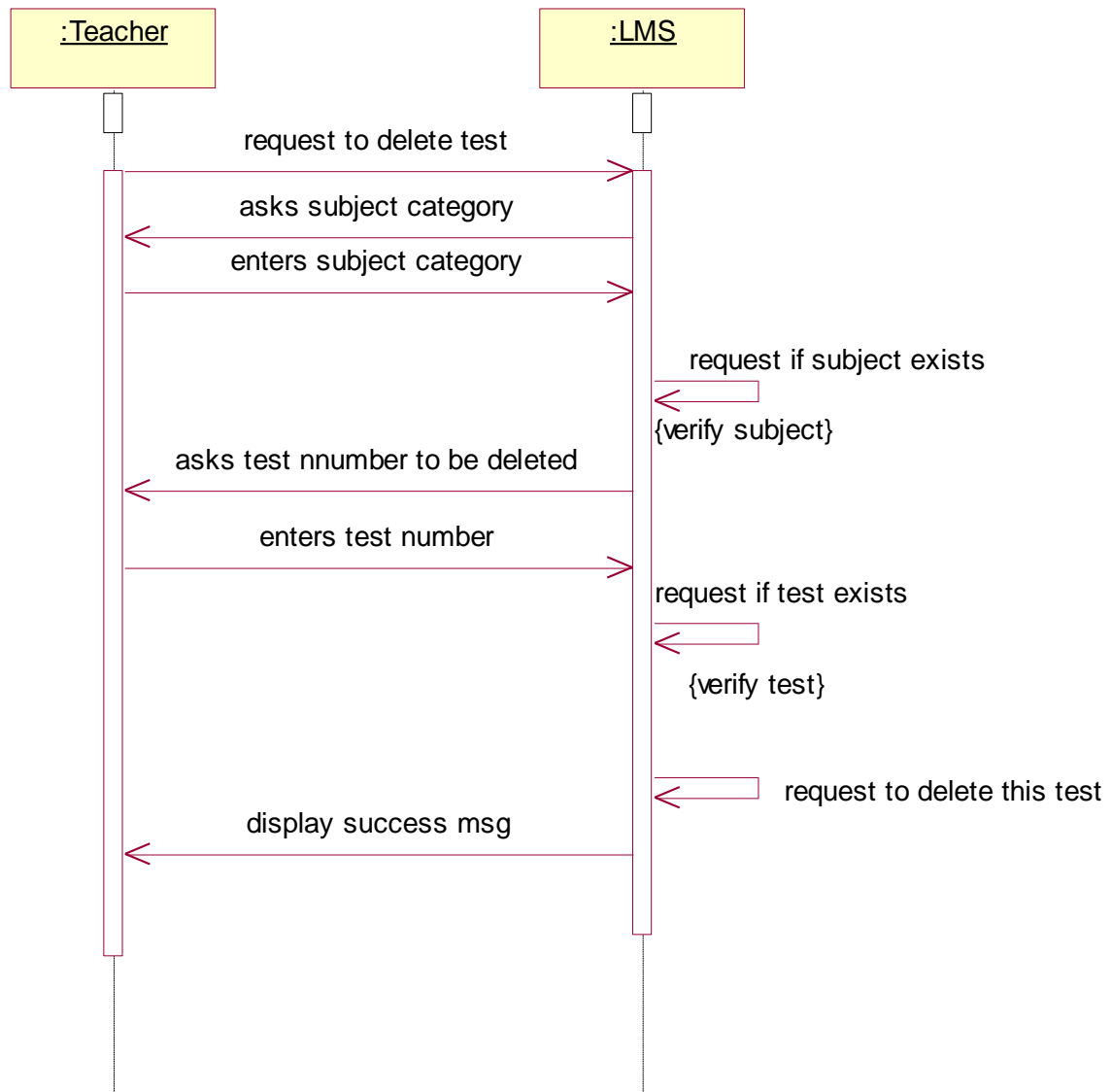
## UC-15(Edit Test)

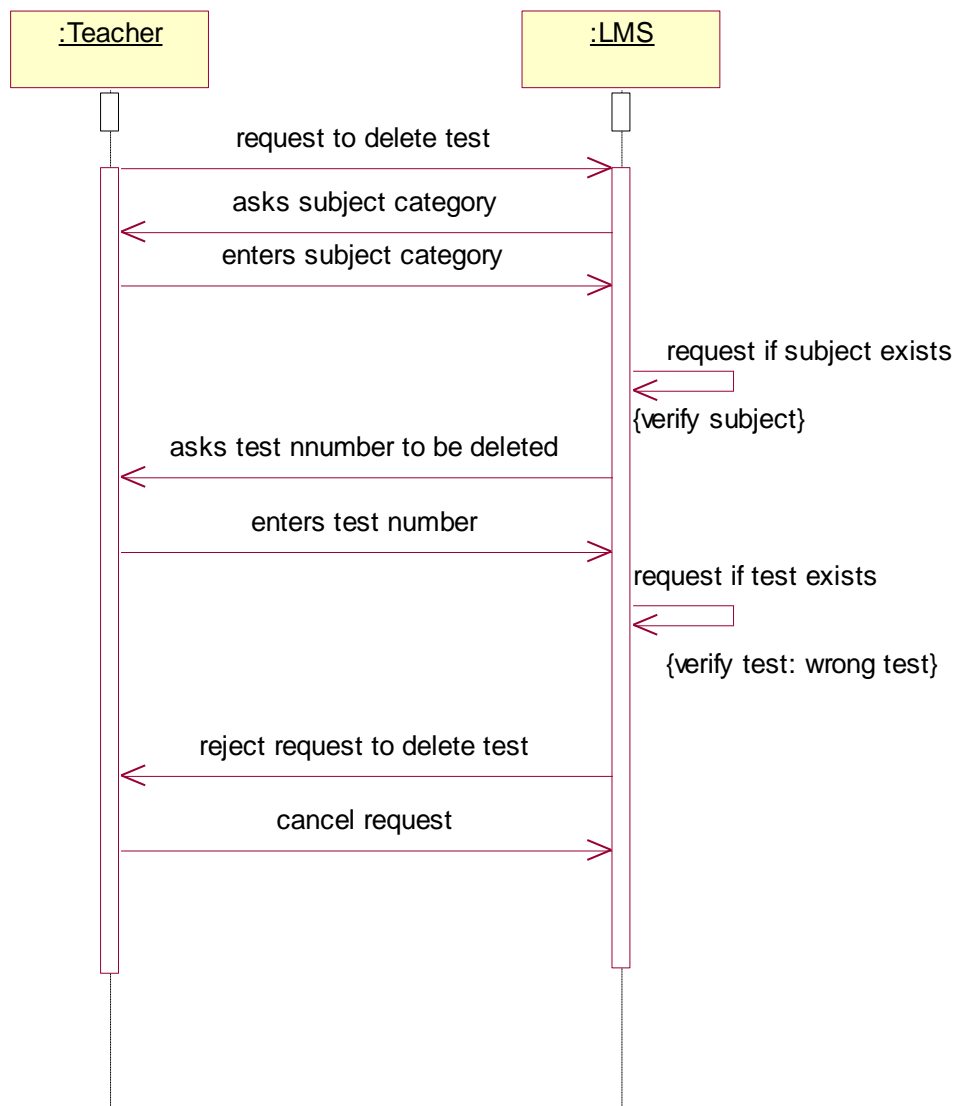




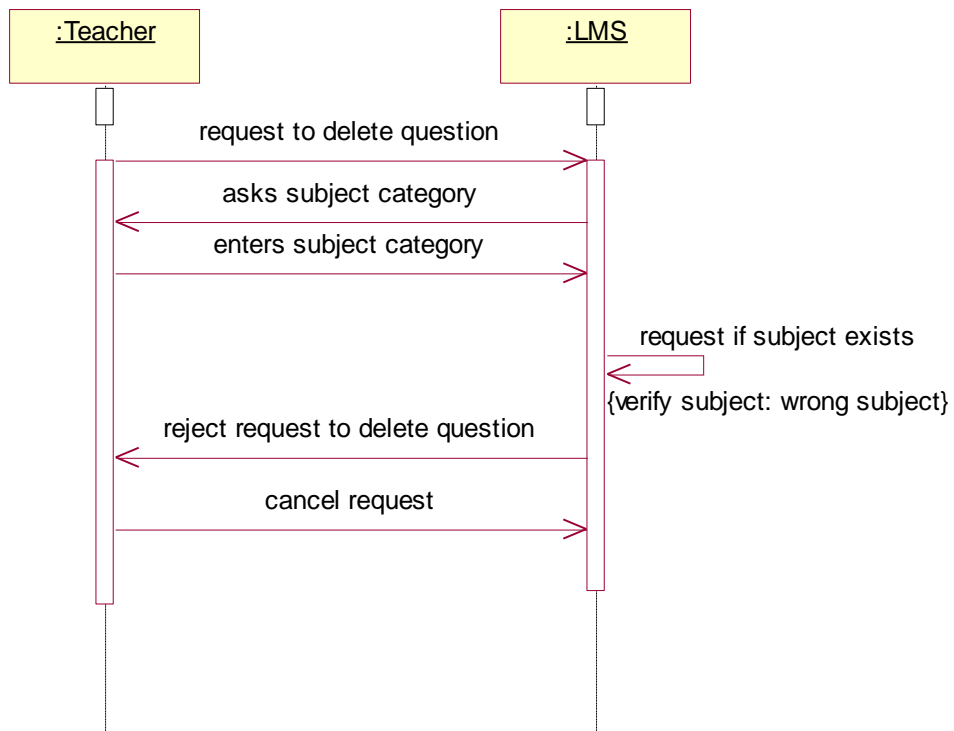


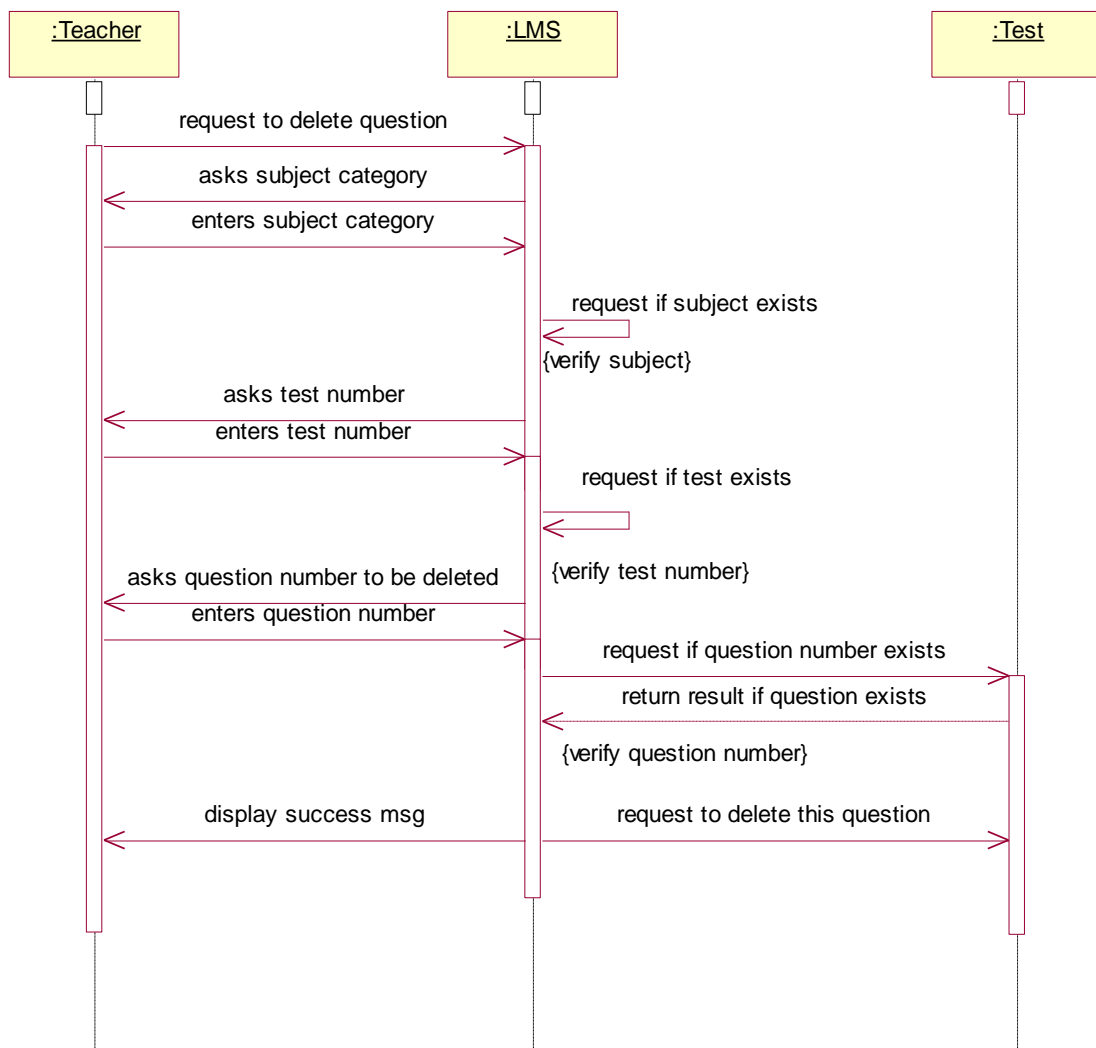
## UC-16(Delete Test)



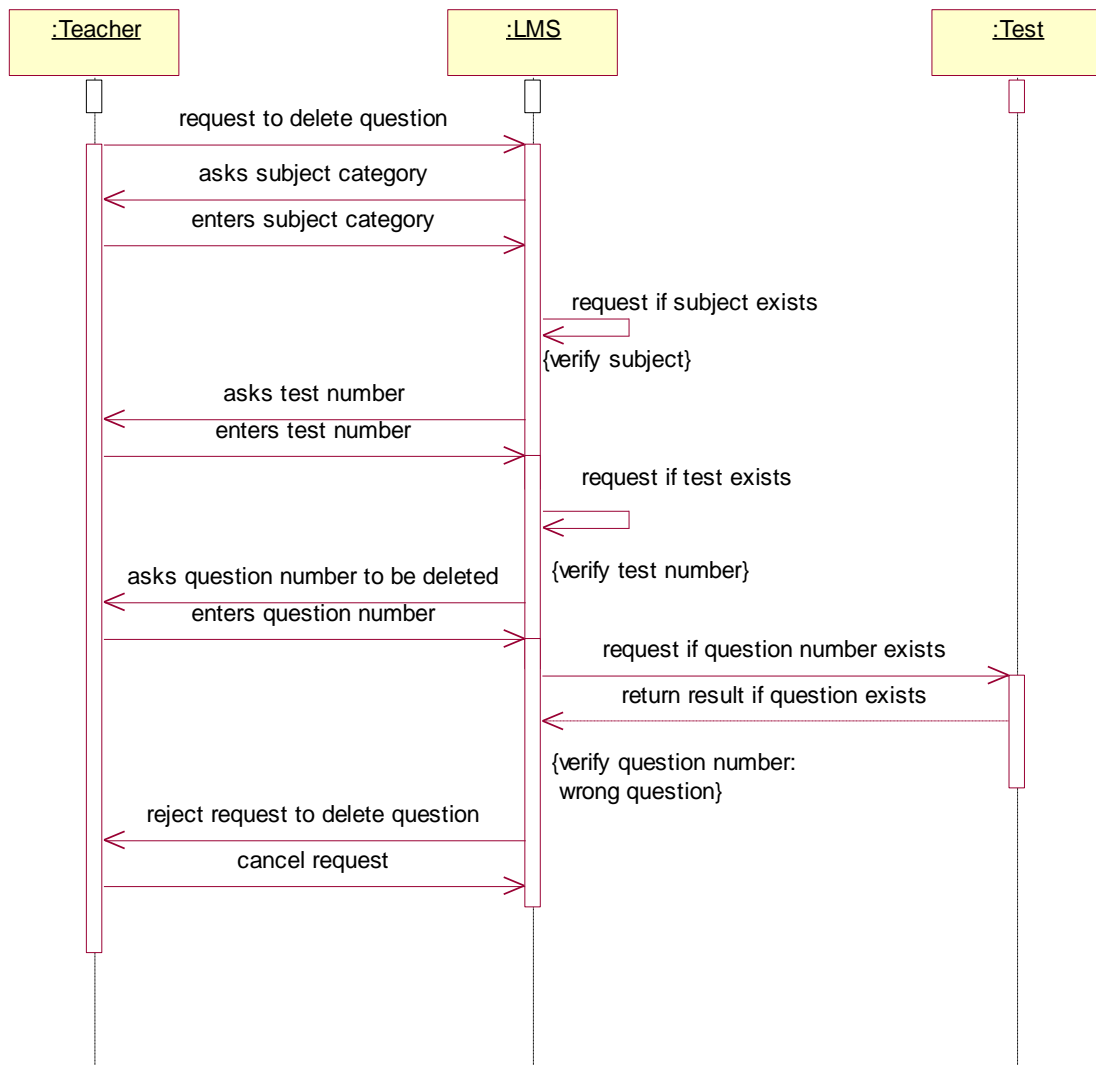


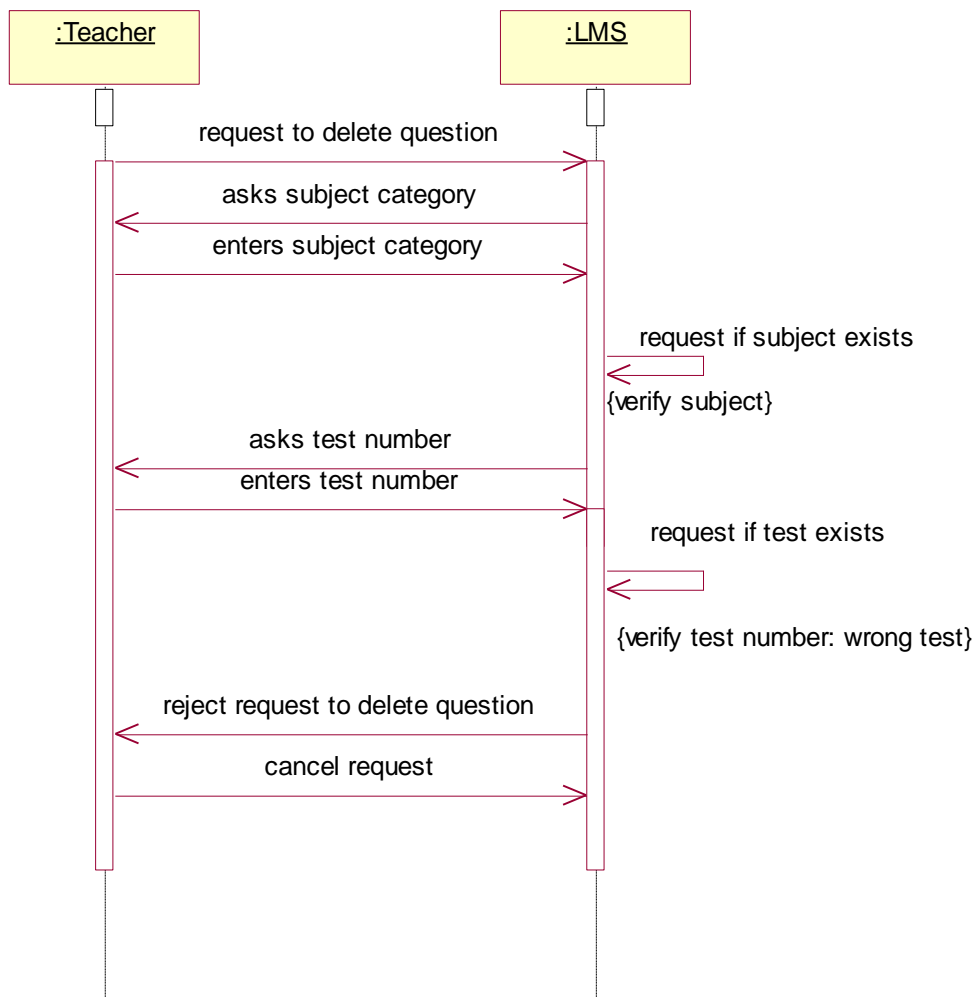
## UC-17(Delete Question)

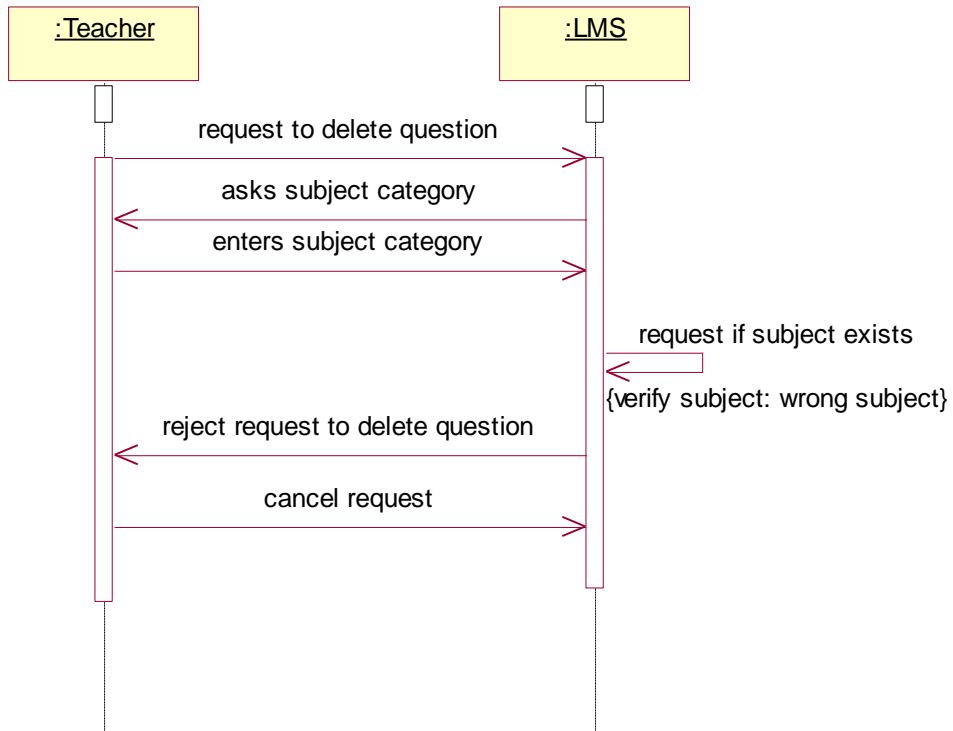




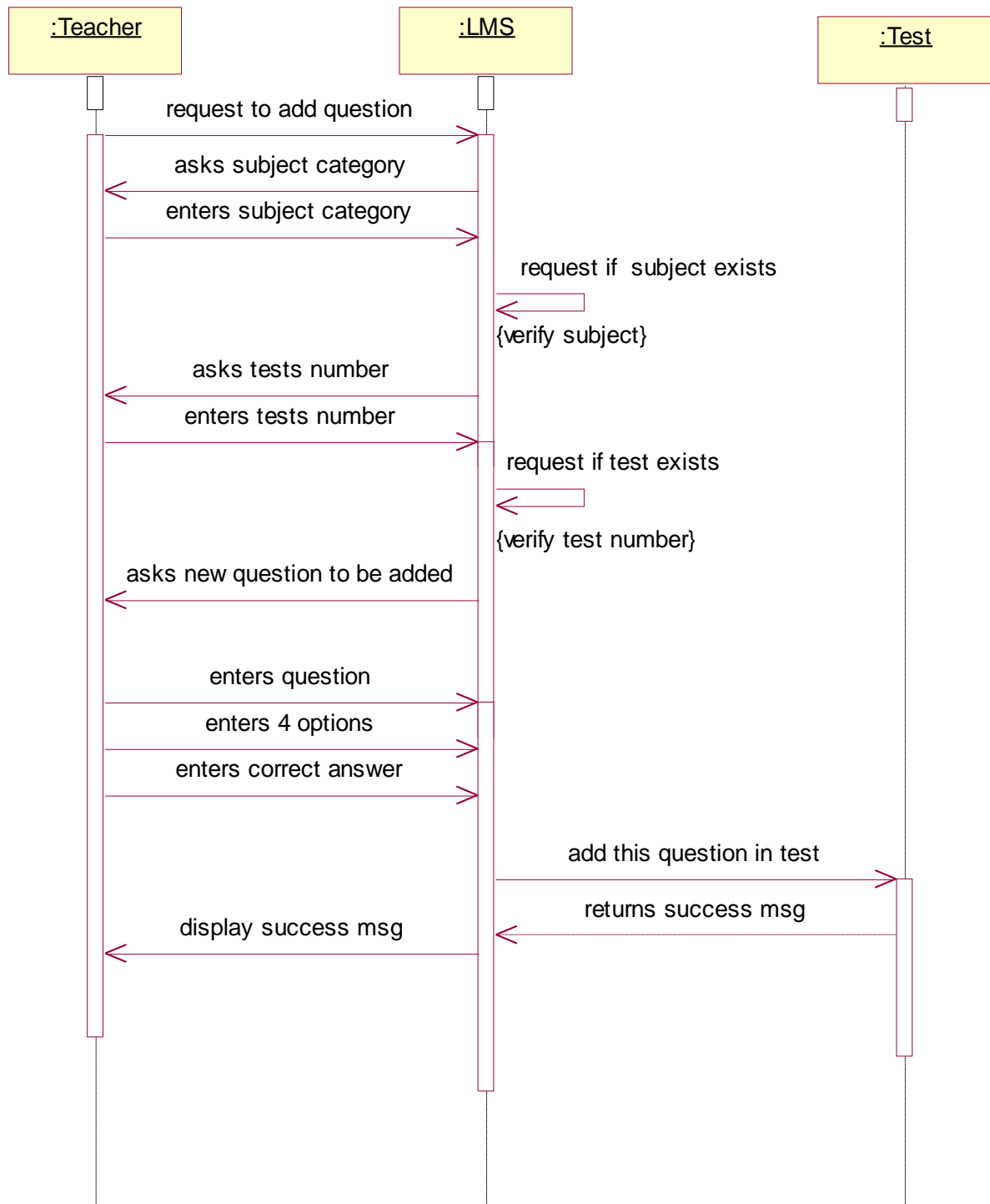


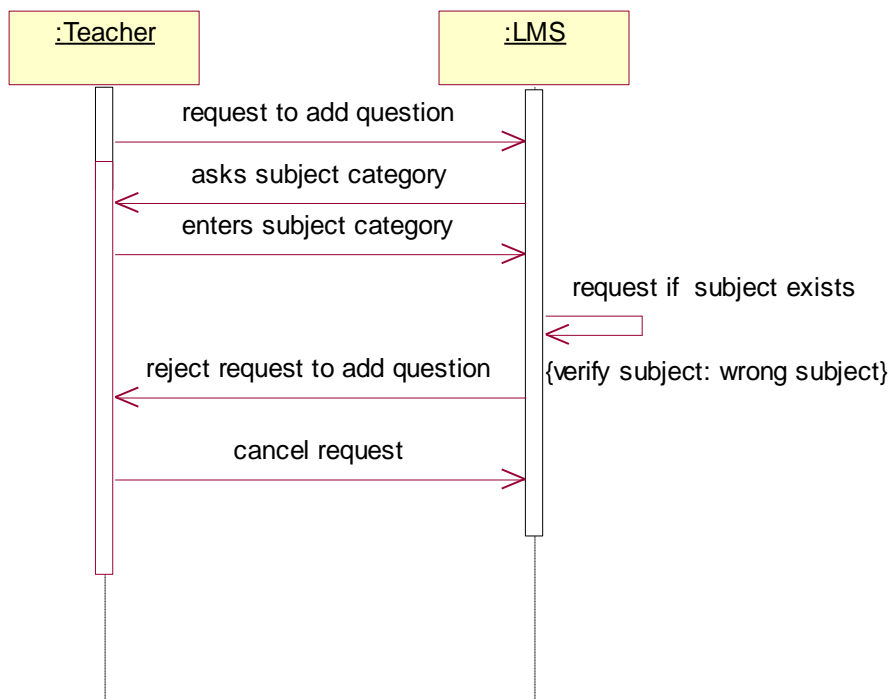
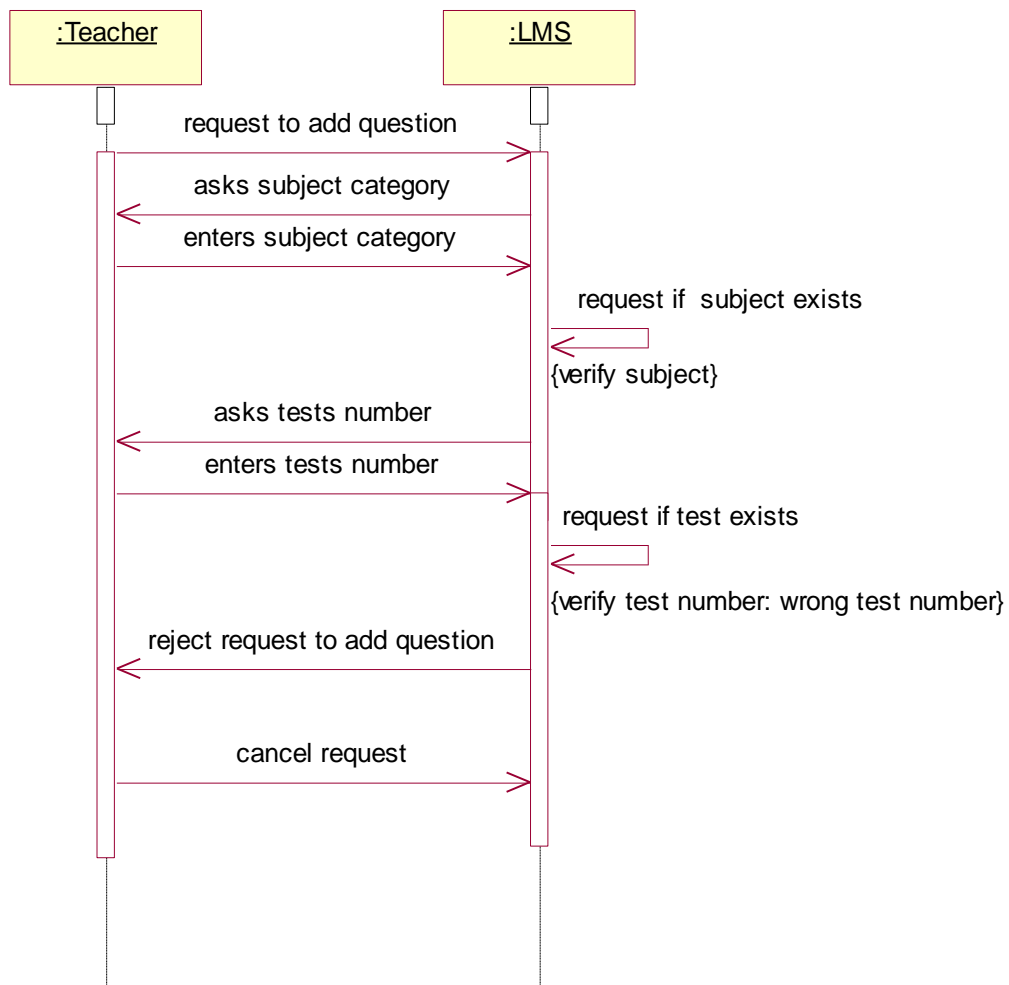




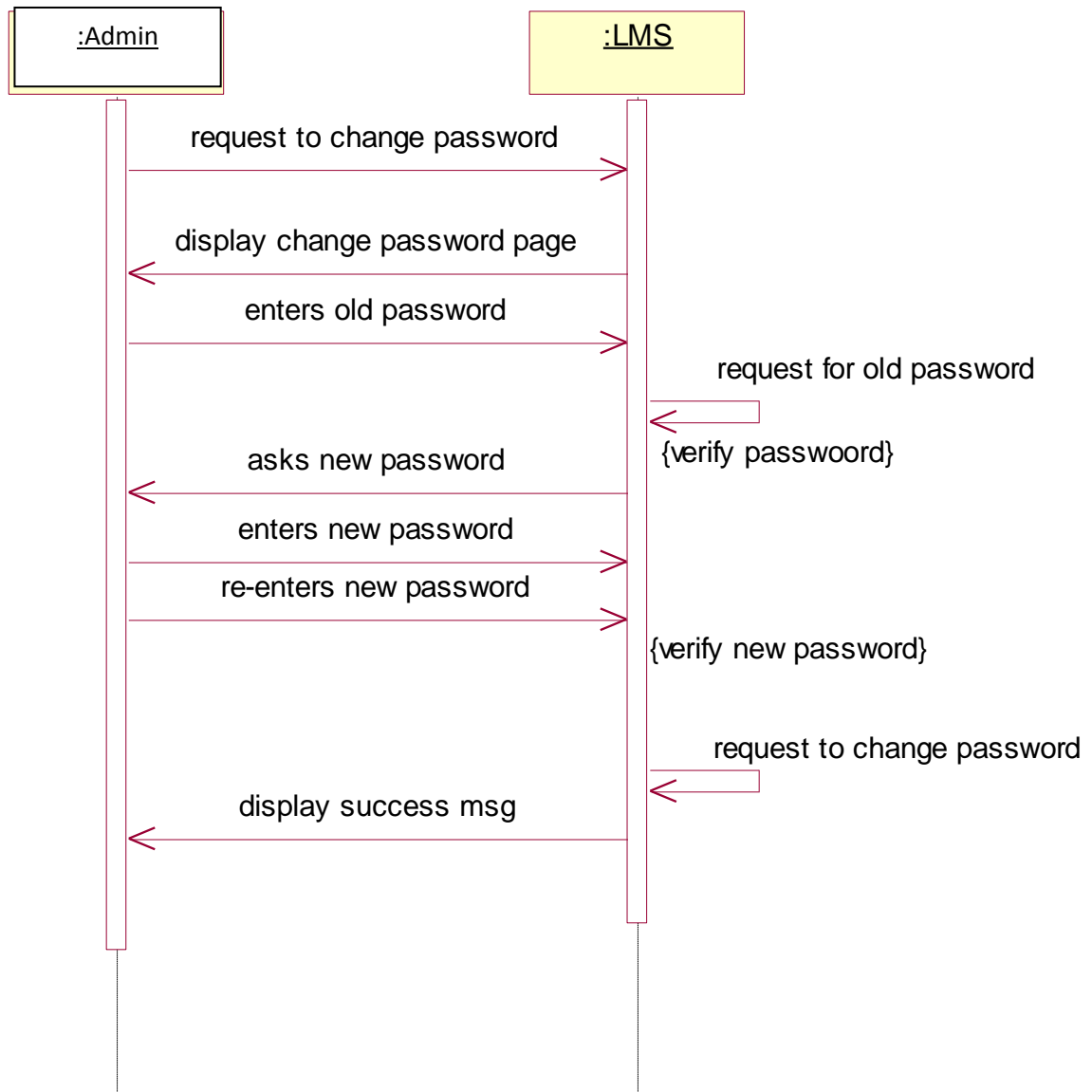


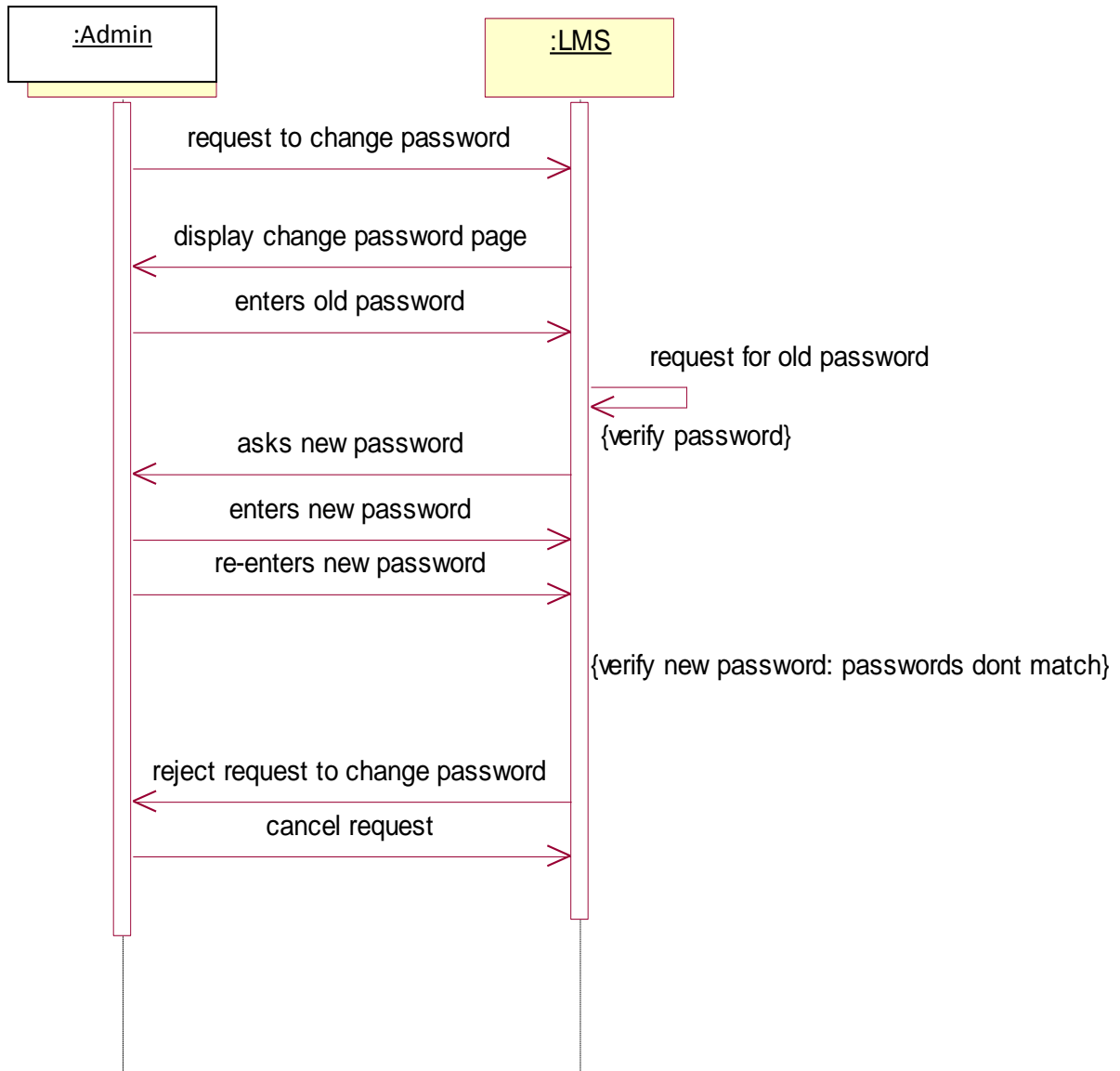
## UC-18(Add Question)

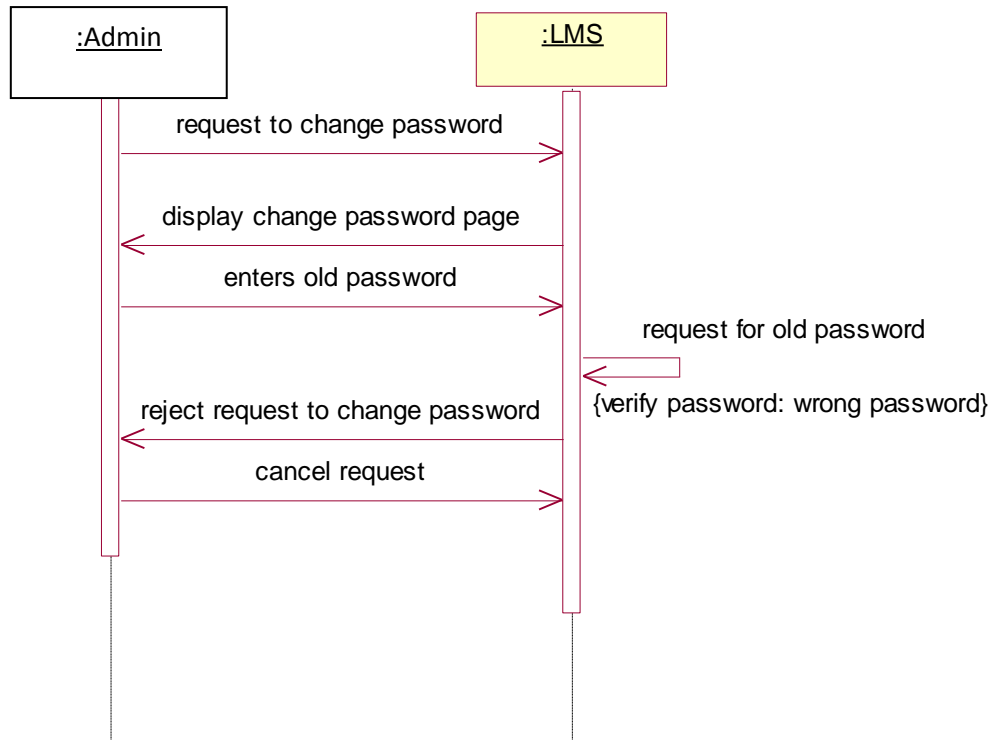




## UC-19(Change Password)

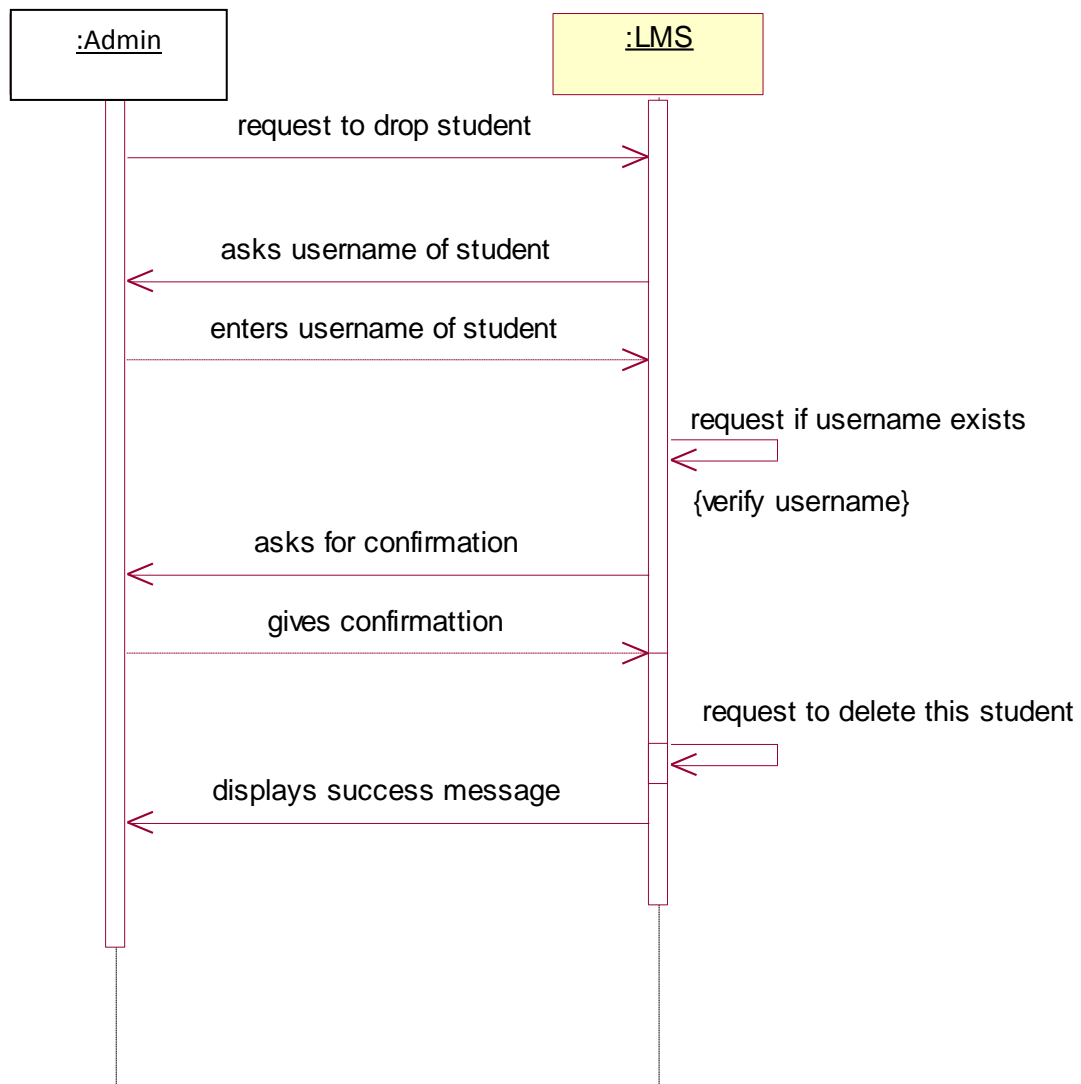


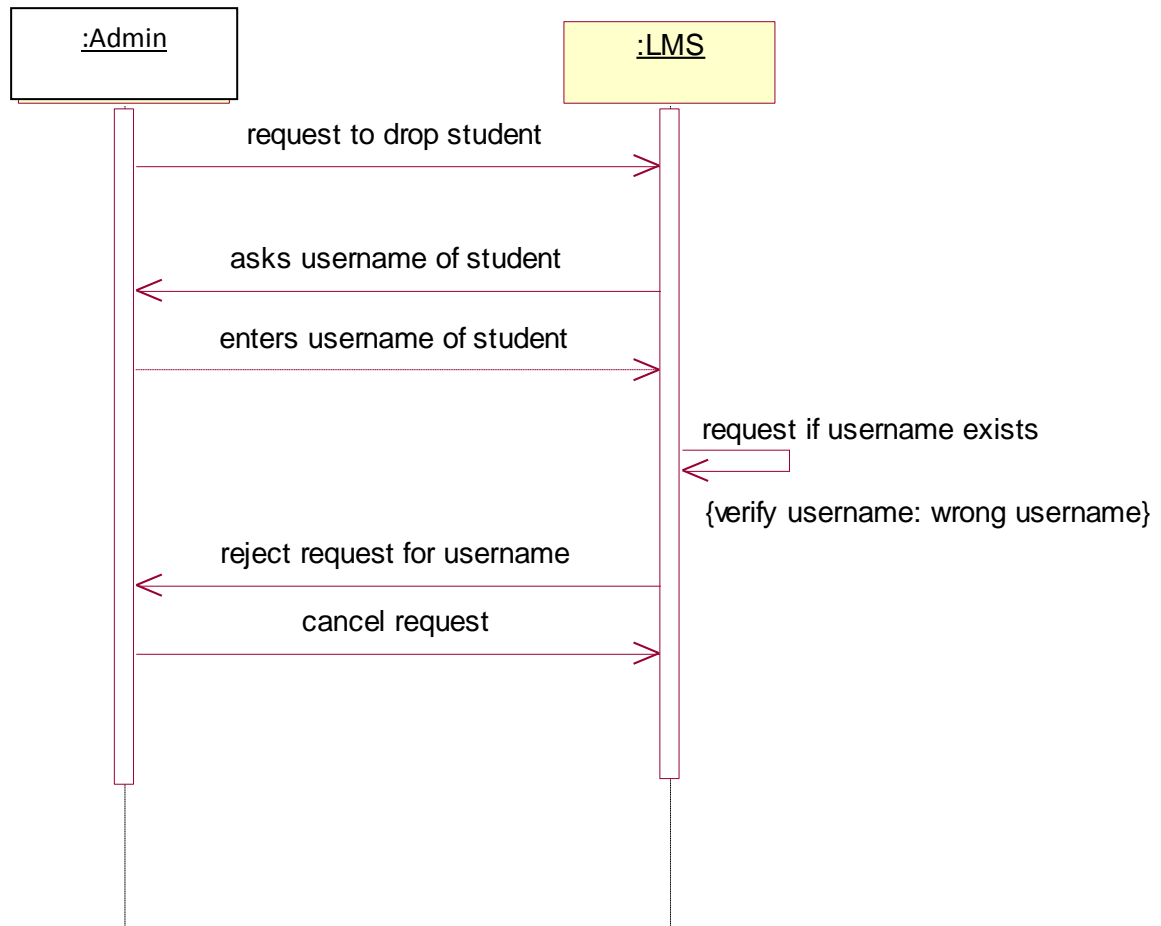




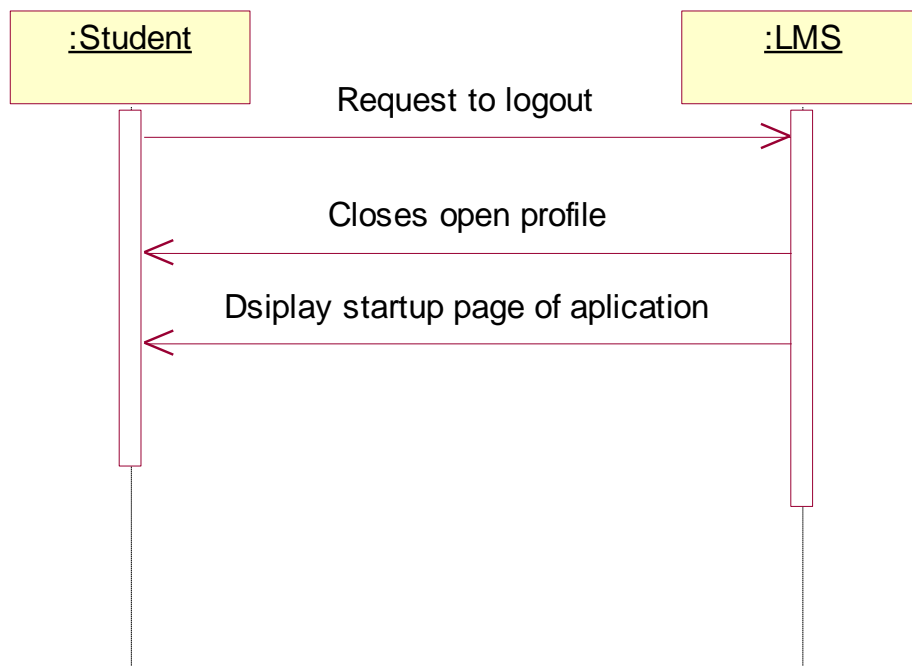


## UC-20(Drop Student)





## UC-21(Log Out)



# **GUI**

# **Prototypes**

## -UC1: Sign up

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username:

User already exists. Please enter a unique username.

Name:

Password:

Retype Password:

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username: areeba.zahid1

Name:

Password:

Retype Password:

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username: areeba.zahid1

Name: a123 Name is invalid.

Password:

Retype Password:

Contact Number:

Email Address:

uc1\_1

## SIGN UP

Username:

areeba.zahid1

Name:

areeba zahid

Password:

Retype Password:

Contact Number:

Email Address:

Submit

uc1\_1

## SIGN UP

Username:

areeba.zahid1

Name:

areeba zahid

Password:

...

Invalid Password

Retype Password:

Contact Number:

Email Address:

Submit

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password does not match.

Contact Number:

Email Address:



uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:  Contact number is invalid.

Email Address:

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:  Invalid Email ID

uc1\_1

### SIGN UP

Username: areeba.zahid1

Name: areeba zahid

Password: ●●●●●●●●

Retype Password: ●●●●●●●● Password matched

Contact Number: 0263-2342364

Email Address: areeba@adsf Invalid Email ID

Submit

uc1\_1

### SIGN UP

Username: areeba.zahid1

Name: areeba zahid

Password: ●●●●●●●●

Retype Password: ●●●●●●●● Password matched

Contact Number: 0263-2342364

Email Address: areeba@adsf.com

Submit

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:  Invalid Email ID

uc1\_1

### SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:

**Incomplete Form.**

uc1\_1

## SIGN UP

Username:

Name:

Password:

Retype Password:  Password matched

Contact Number:

Email Address:

**Congratulations! Your account has been created.**

**-UC2: Log In**

uc2

## LOG IN

Username:

Password:

**Please fill all the textboxes.**

uc2

## LOG IN

Username:

Password:

Log In

uc2

## LOG IN

Username:

User entered does not exist. Please enter a correct username.

Password:

Log In

Please fill all the textboxes.

uc2

## LOG IN

Username:

Password:  Incorrect password! Please try again.

Log In

Please fill all the textboxes.

uc2

## LOG IN

Username:

Password:  Incorrect password! Please try again.

Log In

Please fill all the textboxes.

uc2

## LOG IN

Username:

Password:

**Successfully logged in.**

uc2

## LOG IN

Username:

Password:  **Incorrect password! Please try again.**

**5 or more wrong attempts! You can't log in anymore.**



### UC3: Edit Profile

The image displays two screenshots of a web application window titled 'uc3'. The window contains a form titled 'EDIT PROFILE'.

**Top Screenshot:** The form is mostly empty, showing only the title 'EDIT PROFILE' and a single 'Edit' button centered below it.

**Bottom Screenshot:** The form is populated with the following fields and values:

- Username: areeba.zahid
- Name: areeba zahid
- Password: (masked with 8 dots)
- Retype Password: (masked with 8 dots)
- Contact Number: 0423-8792342
- Email Address: areeba@gmail.com

A 'Submit' button is located at the bottom center of the form.

uc3

## EDIT PROFILE

Username:

Name:

Password:

Retype Password:

Contact Number:

Email Address:

uc3

## EDIT PROFILE

Username:

Name:

Password:

Retype Password:

Contact Number:

Email Address:

**Incomplete Information.**

uc3

## EDIT PROFILE

Username:

Name:

Password:

Retype Password:

Contact Number:

Email Address:

**Congratulations! Your new account settings have been saved.**

### -UC4: Take Quiz

uc4

## TAKE QUIZ

uc4

TAKE QUIZ

Q1. If int x=11; write the output of: cout<<x++;

☐ 11☐ 10☐ 12

☐ 13☐ 11++

go back

next

skip

uc4

TAKE QUIZ

Q1. If int x=11; write the output of: cout<<x++;

☐ 11☐ 10☐ 12

☐ 13☐ 11++

Select an answer. Else click on skip.

go back

next

skip

uc4

TAKE QUIZ

Q2. If `int x=11`; write the output of: `cout<<x++`;

☐ 11☐ 10☐ 12

☐ 13☐ 11++

go back

next

skip

uc4

TAKE QUIZ

Q5. If `int x=11`; write the output of: `cout<<x++`;

☐ 11☐ 10☐ 12

☐ 13☐ 11++

go back

next

skip

uc4

TAKE QUIZ

Q30. If int x=11; write the output of: cout<<x++;

☐ 11

☐ 10

☐ 12

☐ 13

☐ 11++

go back

next

skip

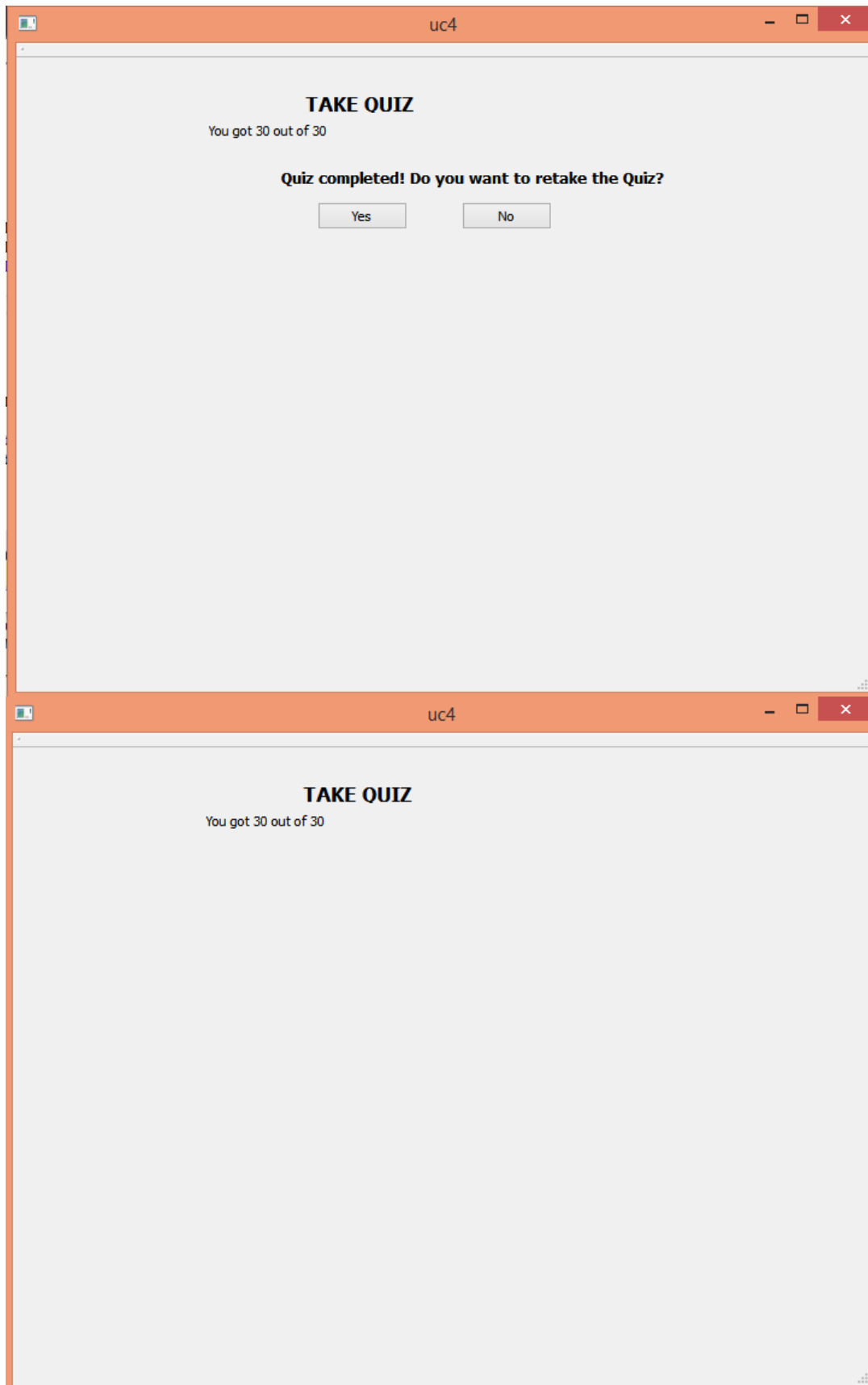
uc4

TAKE QUIZ

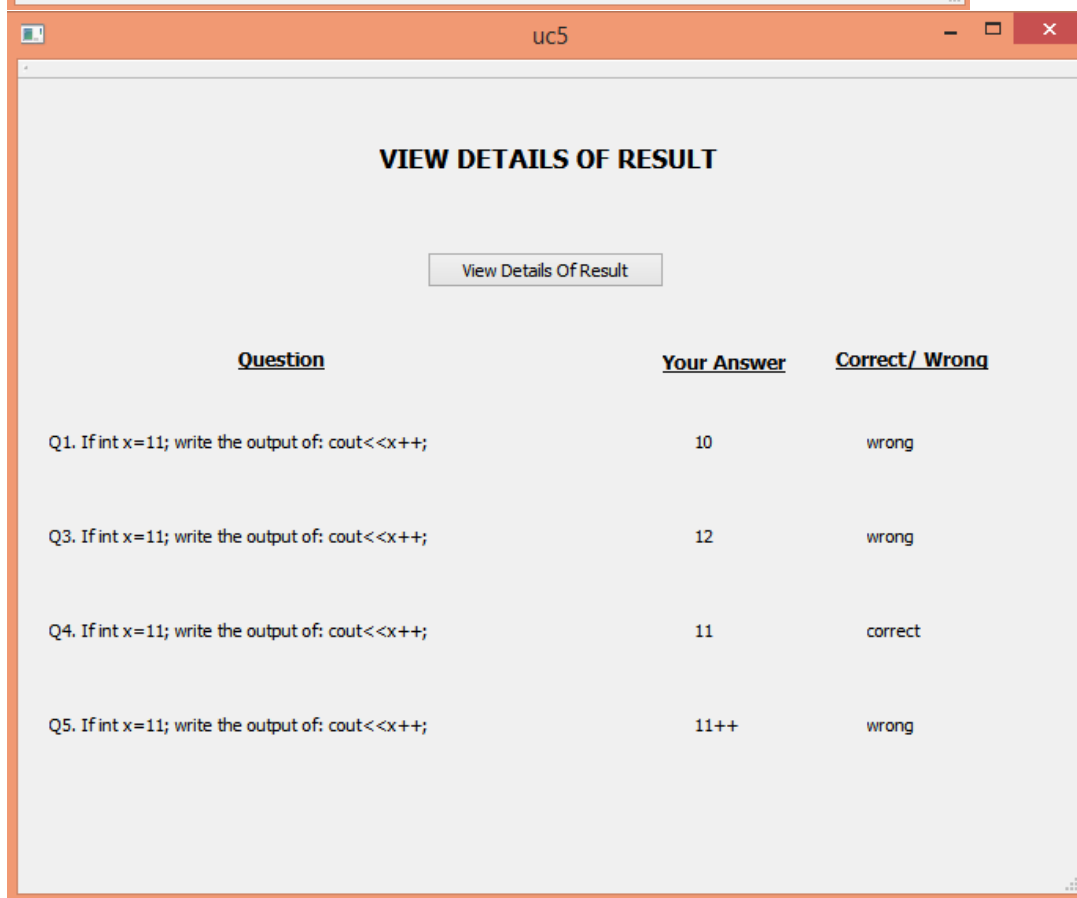
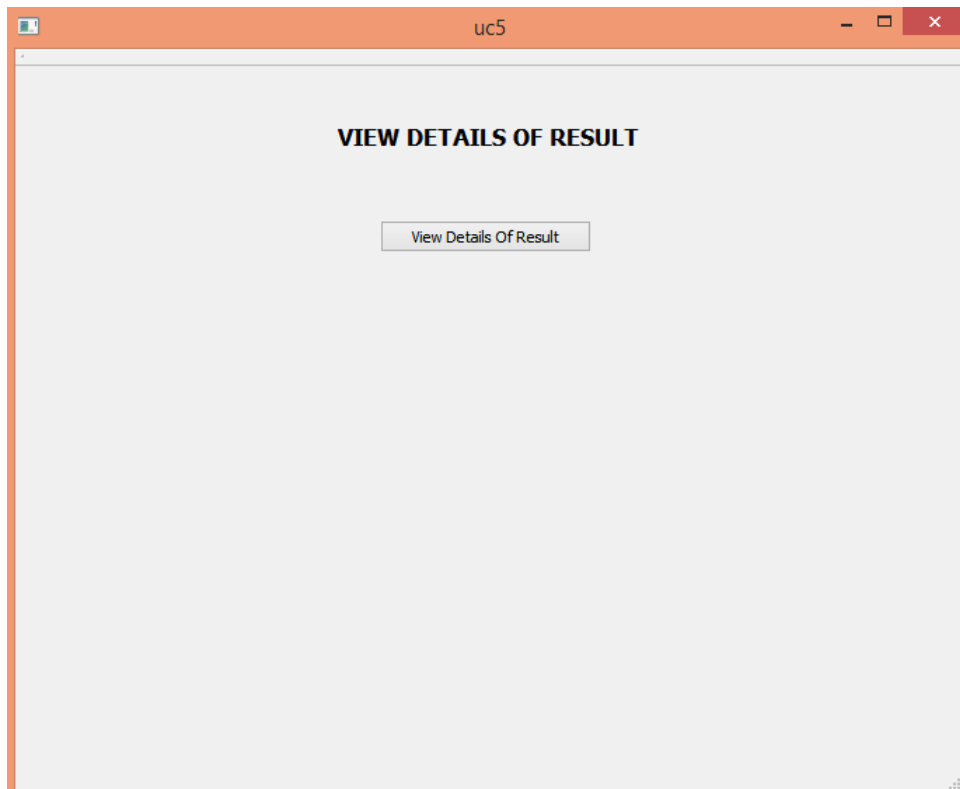
Quiz completed! Do you want to submit?

Submit Quiz

Recheck Answers

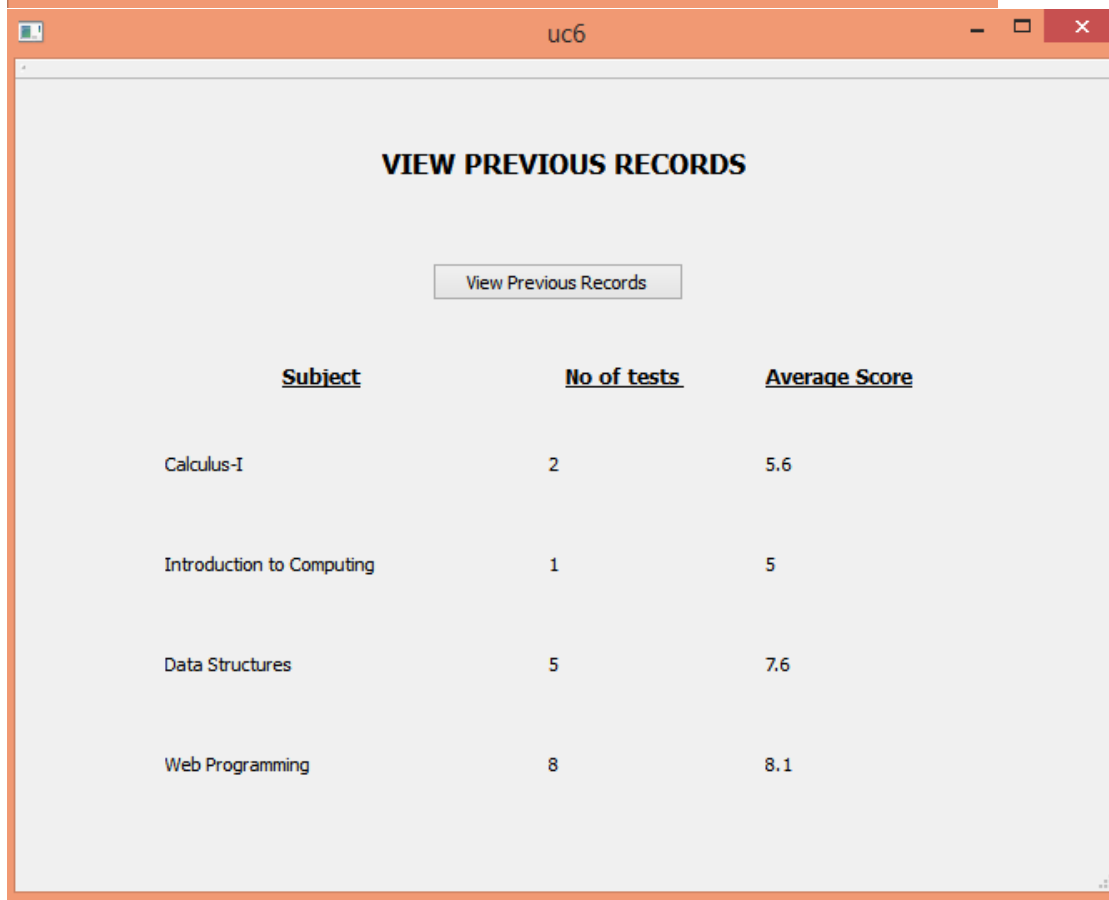
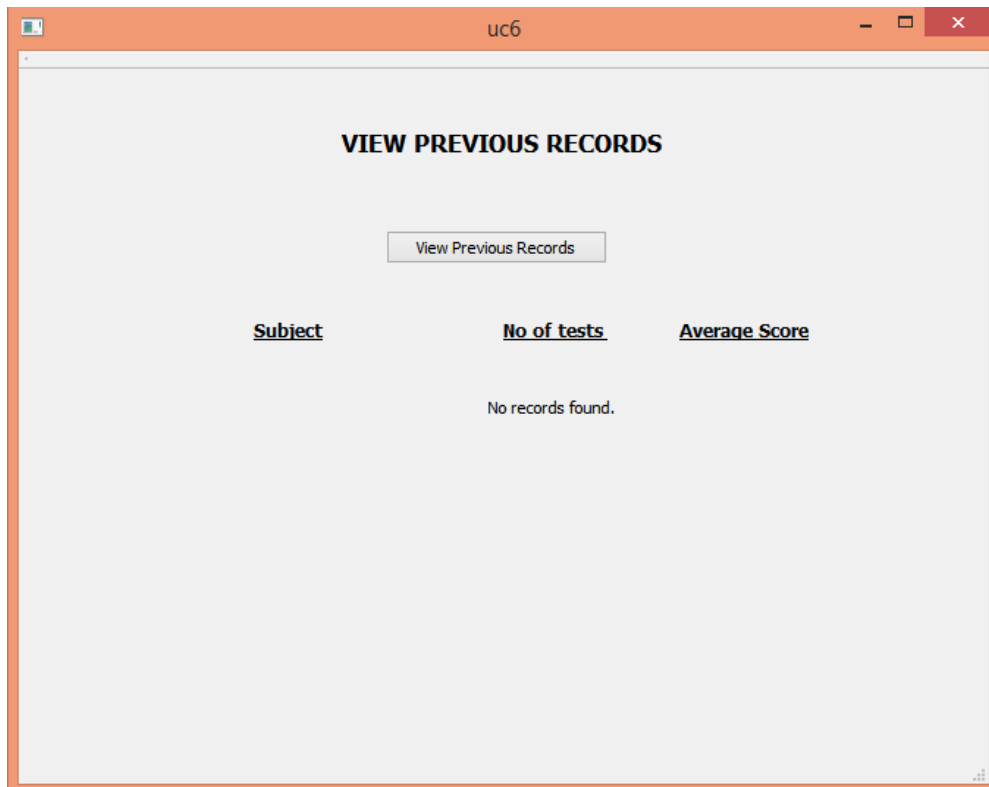


## UC5: View details

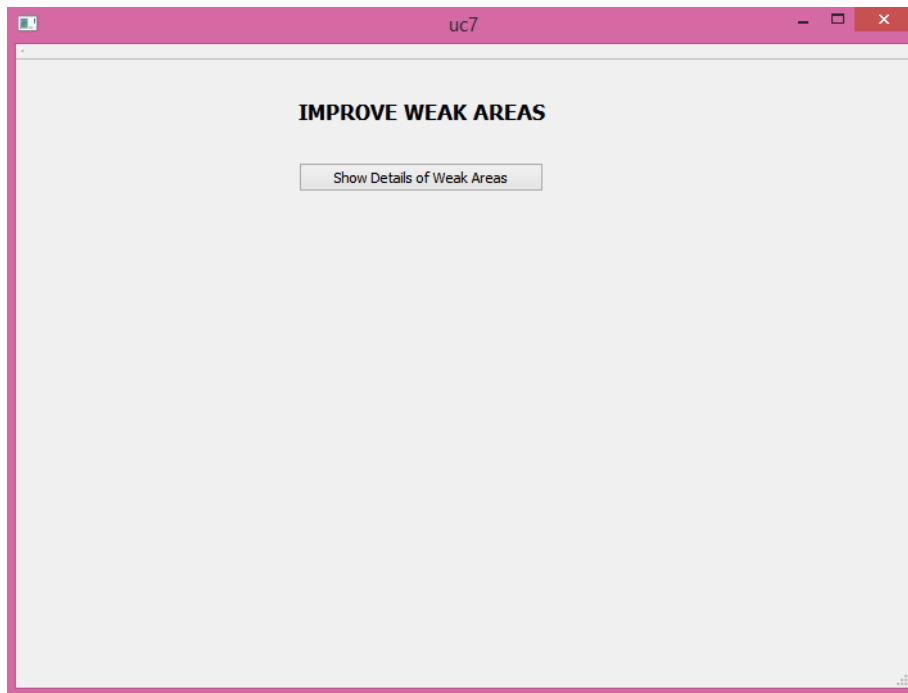




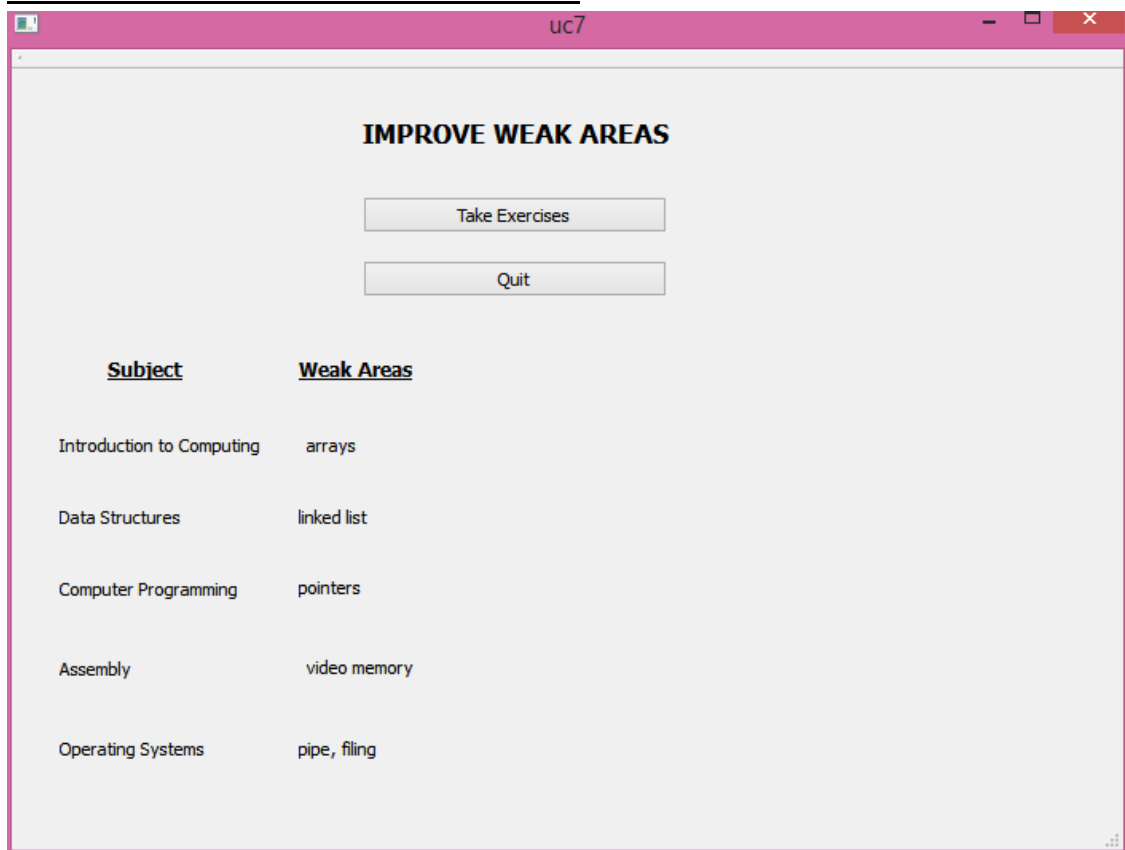
### UC6: View Previous Records

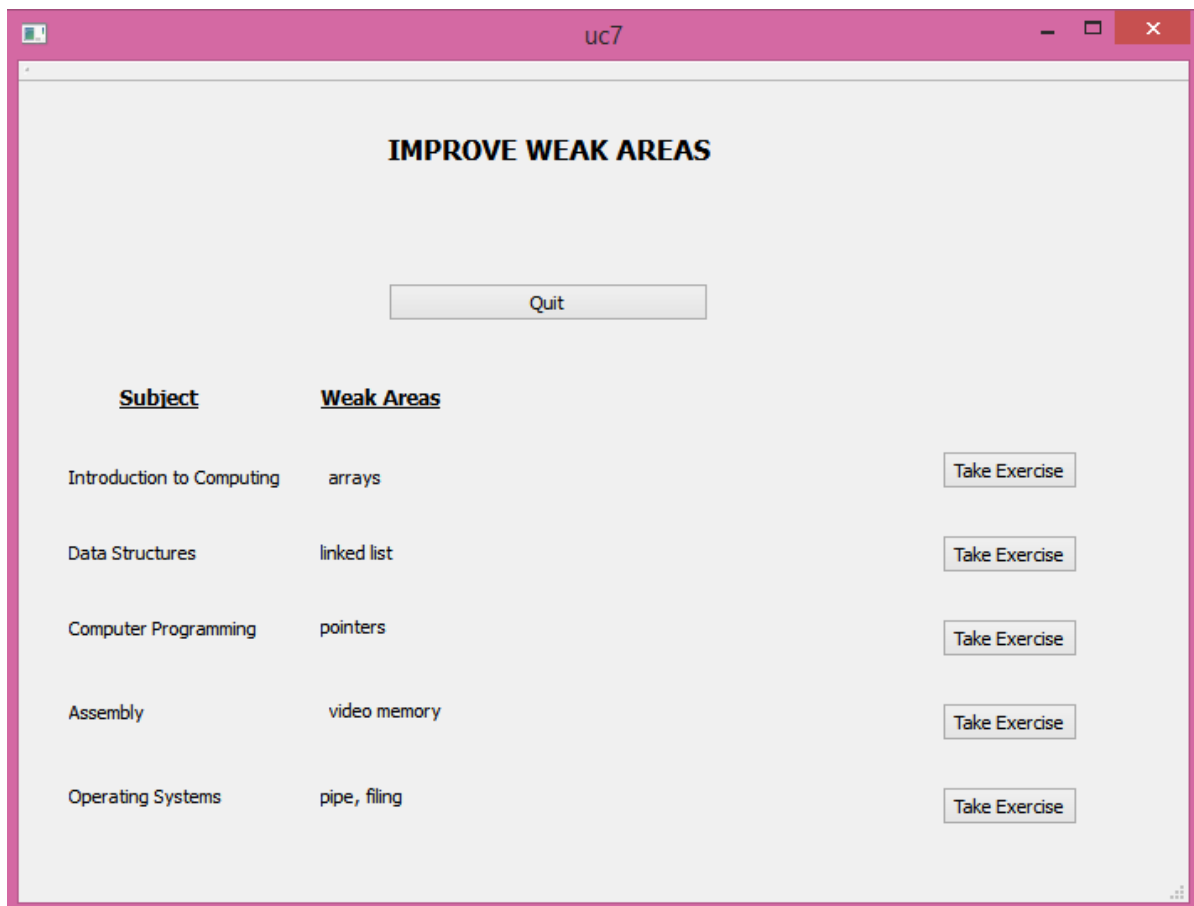
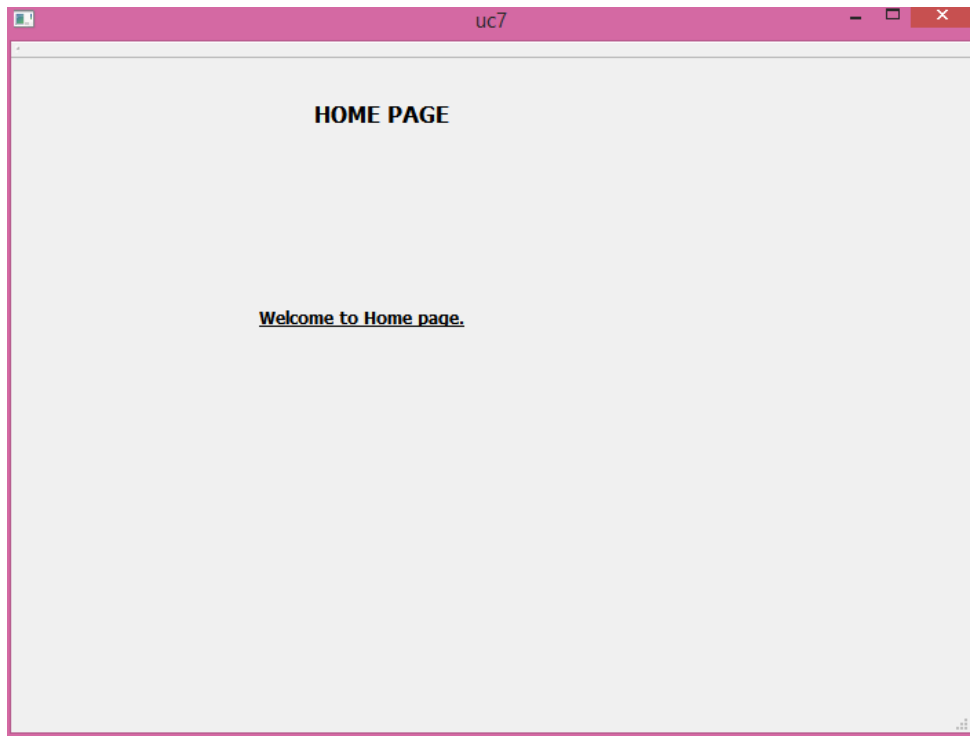


### UC7: Improve weak Areas



### When clicked on “Show details of weak areas”:





## UC 8

a)

Student Details			
Sr.No	Username	Full Name	Score
1	akhan_1	Ayesha Khan	83
2	sohail_42	Ahmed Sohail	74
3	omer19	Omer Sheikh	69

b)

Student Details			
No student has registered yet.			

## UC 9

a)

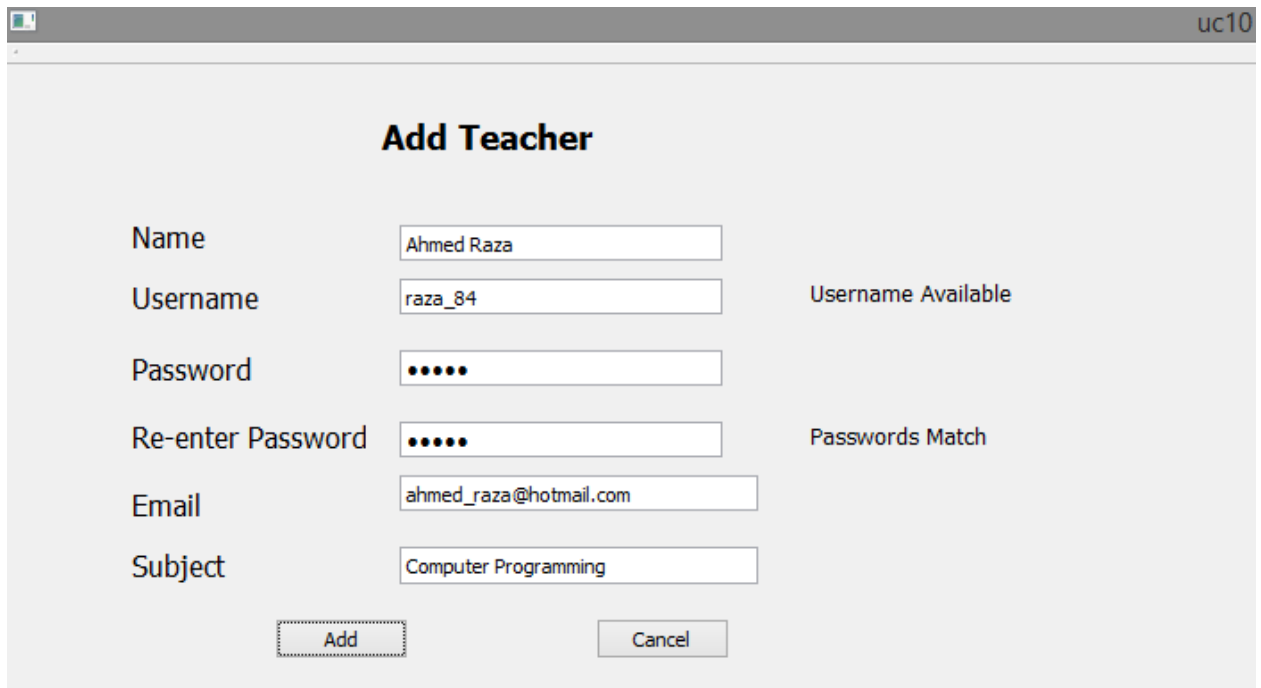
Teacher Details			
Sr.No	Username	Full Name	Subject
1	raza_84	Ahmed Raza	Computer Programming
2	alinakh_2	Alina Khan	Data Structures
3	shafique_r	Shafique-Ur-Rehman	Introduction to Algorithms

b)

Teacher Details			
No teacher exists yet.			

## UC 10

a)

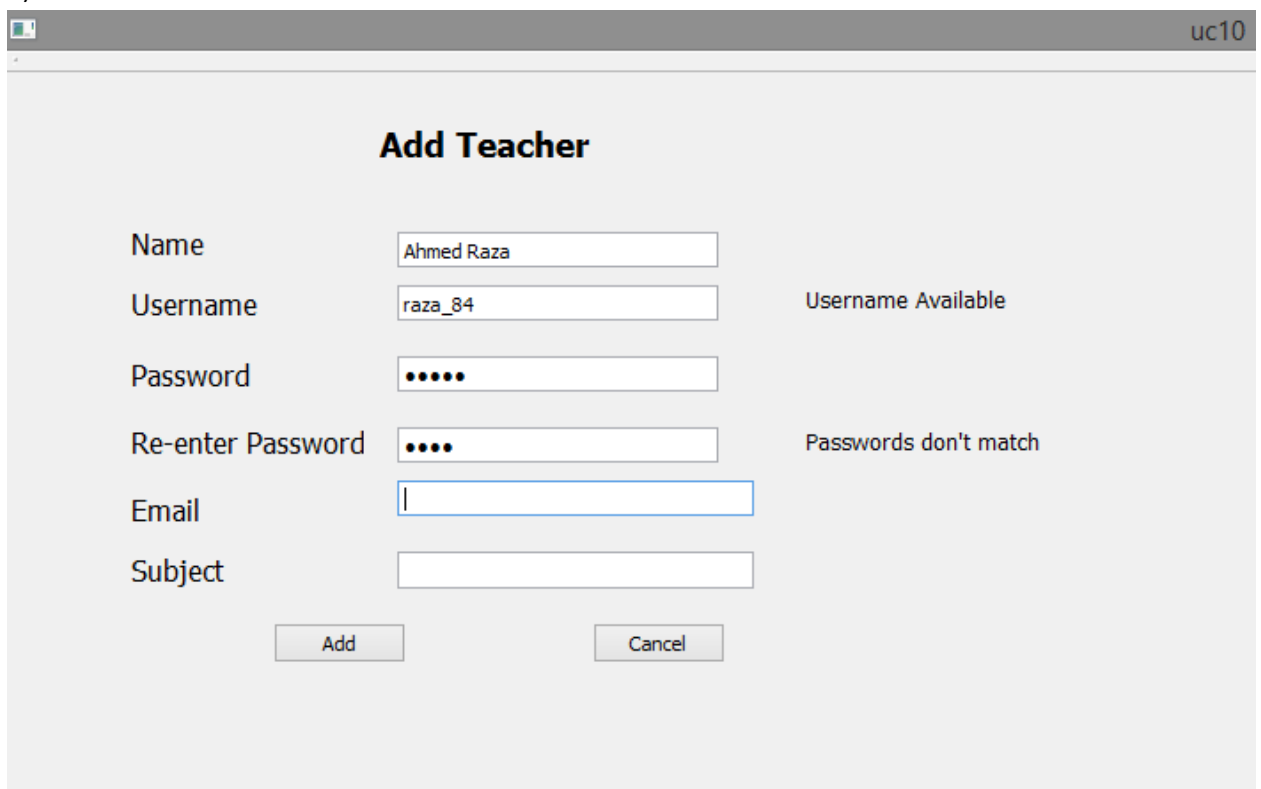


The screenshot shows a web browser window titled 'uc10'. The main heading is 'Add Teacher'. The form contains the following fields and values:

Field	Value	Validation Message
Name	Ahmed Raza	
Username	raza_84	Username Available
Password	•••••	
Re-enter Password	•••••	Passwords Match
Email	ahmed_raza@hotmail.com	
Subject	Computer Programming	

At the bottom, there are two buttons: 'Add' and 'Cancel'.

b)




The screenshot shows the same 'Add Teacher' form, but with different values and validation messages:

Field	Value	Validation Message
Name	Ahmed Raza	
Username	raza_84	Username Available
Password	•••••	
Re-enter Password	••••	Passwords don't match
Email		
Subject		

At the bottom, there are two buttons: 'Add' and 'Cancel'.


c)

 uc10

### Add Teacher

Name	<input type="text" value="@hmed Raza"/>	Invalid Name
Username	<input type="text" value=""/>	
Password	<input type="text" value=""/>	
Re-enter Password	<input type="text" value=""/>	
Email	<input type="text" value=""/>	
Subject	<input type="text" value=""/>	

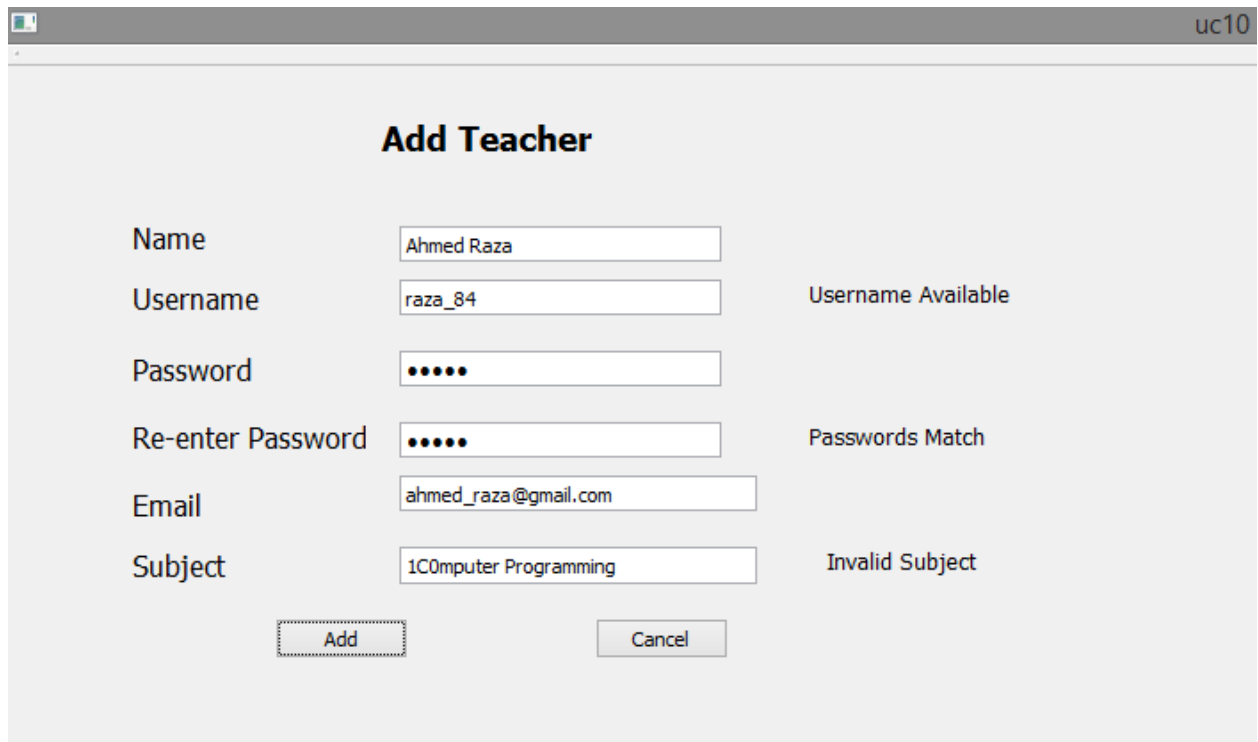
d)

 uc10

### Add Teacher

Name	<input type="text" value="Ahmed Raza"/>	
Username	<input type="text" value="raza_84"/>	Username Available
Password	<input type="password" value="....."/>	
Re-enter Password	<input type="password" value="....."/>	Passwords Match
Email	<input type="text" value="ahmed_raza@gmail.com"/>	Invalid Email
Subject	<input type="text" value=""/>	

e)



uc10

### Add Teacher

Name

Username  Username Available

Password

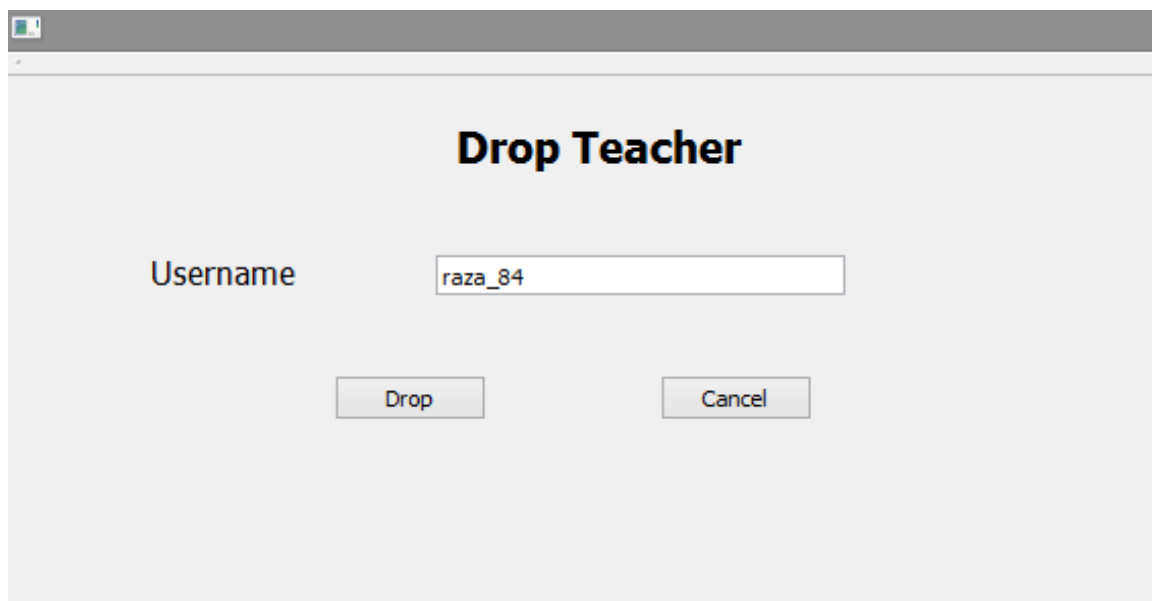
Re-enter Password  Passwords Match

Email

Subject  Invalid Subject

## UC 11

a)

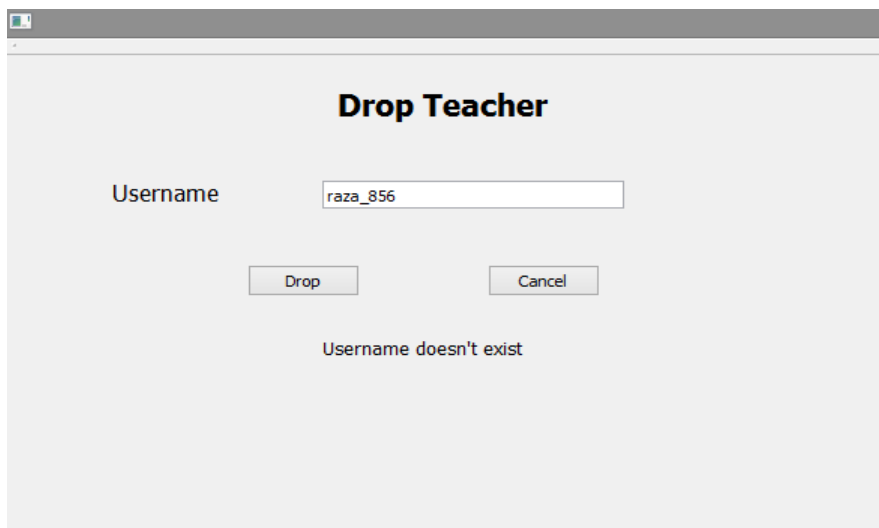


### Drop Teacher

Username

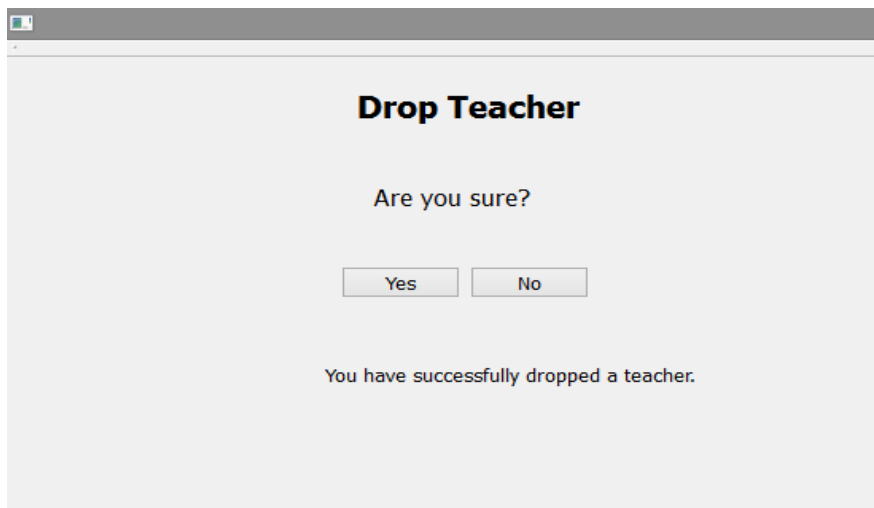


b)



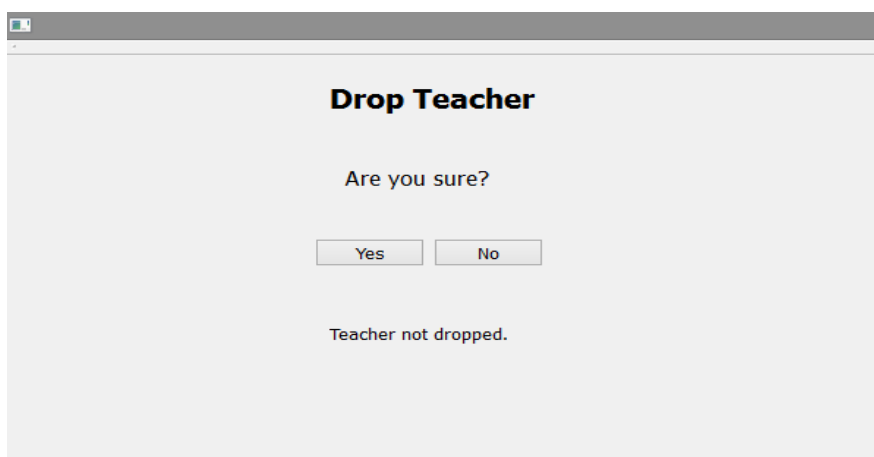
A screenshot of a web application window titled "Drop Teacher". The window has a light gray background. At the top, the title "Drop Teacher" is centered in bold black text. Below the title, there is a label "Username" on the left and a text input field on the right containing the text "raza\_856". Below the input field, there are two buttons: "Drop" on the left and "Cancel" on the right. At the bottom of the window, the text "Username doesn't exist" is displayed in a smaller font.

c)



A screenshot of a web application window titled "Drop Teacher". The window has a light gray background. At the top, the title "Drop Teacher" is centered in bold black text. Below the title, the text "Are you sure?" is centered. Below this text, there are two buttons: "Yes" on the left and "No" on the right. At the bottom of the window, the text "You have successfully dropped a teacher." is displayed in a smaller font.

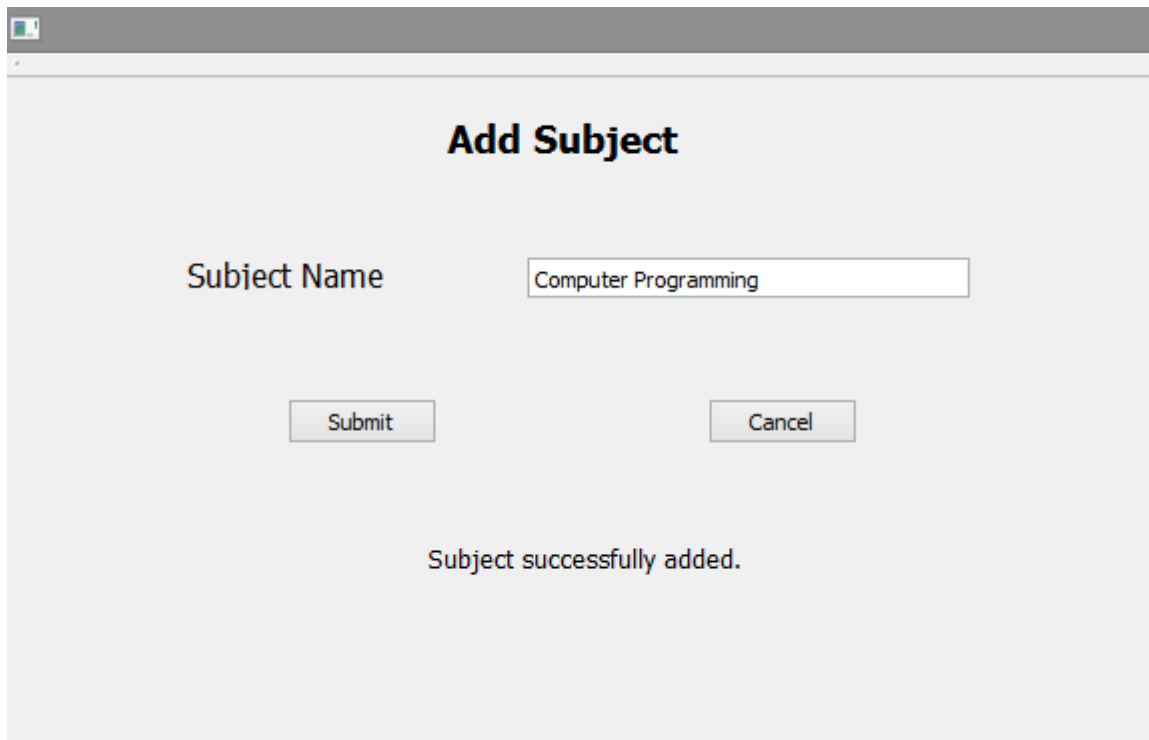
d)



A screenshot of a web application window titled "Drop Teacher". The window has a light gray background. At the top, the title "Drop Teacher" is centered in bold black text. Below the title, the text "Are you sure?" is centered. Below this text, there are two buttons: "Yes" on the left and "No" on the right. At the bottom of the window, the text "Teacher not dropped." is displayed in a smaller font.

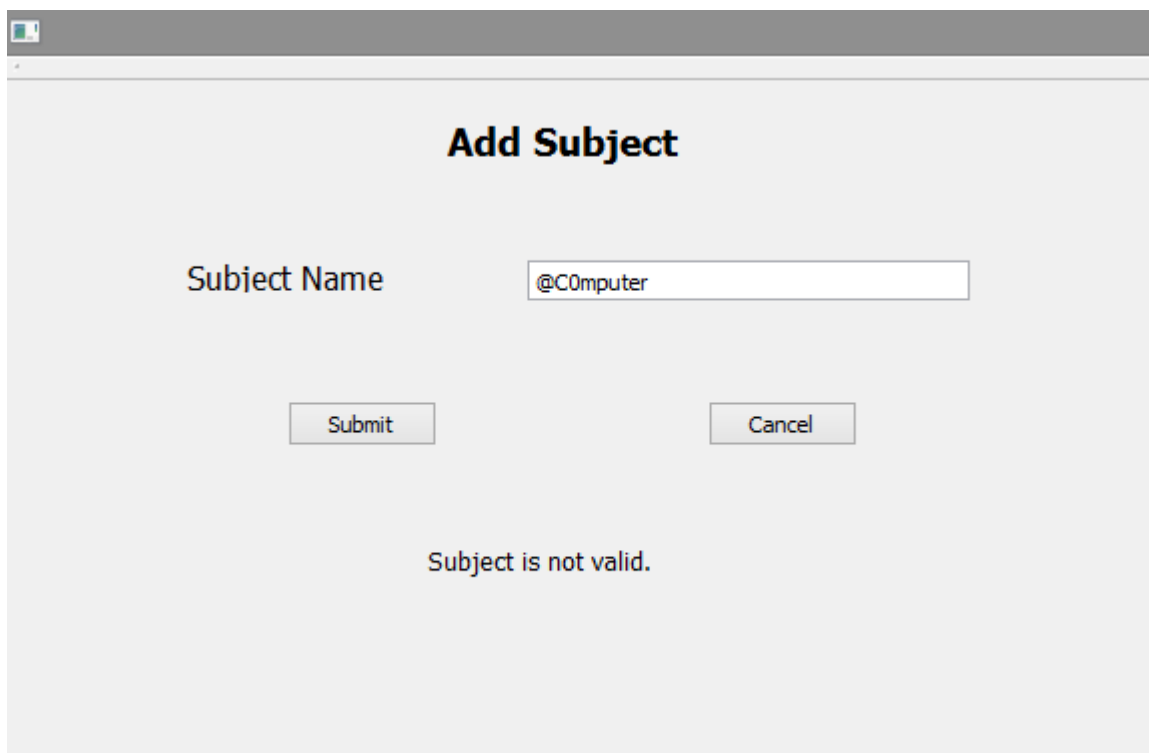
**UC 12**

a)



The screenshot shows a web browser window with a title bar. The main content area has a light gray background. At the top, the text "Add Subject" is displayed in a bold, black font. Below this, the label "Subject Name" is positioned to the left of a text input field. The input field contains the text "Computer Programming". Below the input field, there are two buttons: "Submit" on the left and "Cancel" on the right. At the bottom of the form, the message "Subject successfully added." is displayed in a black font.

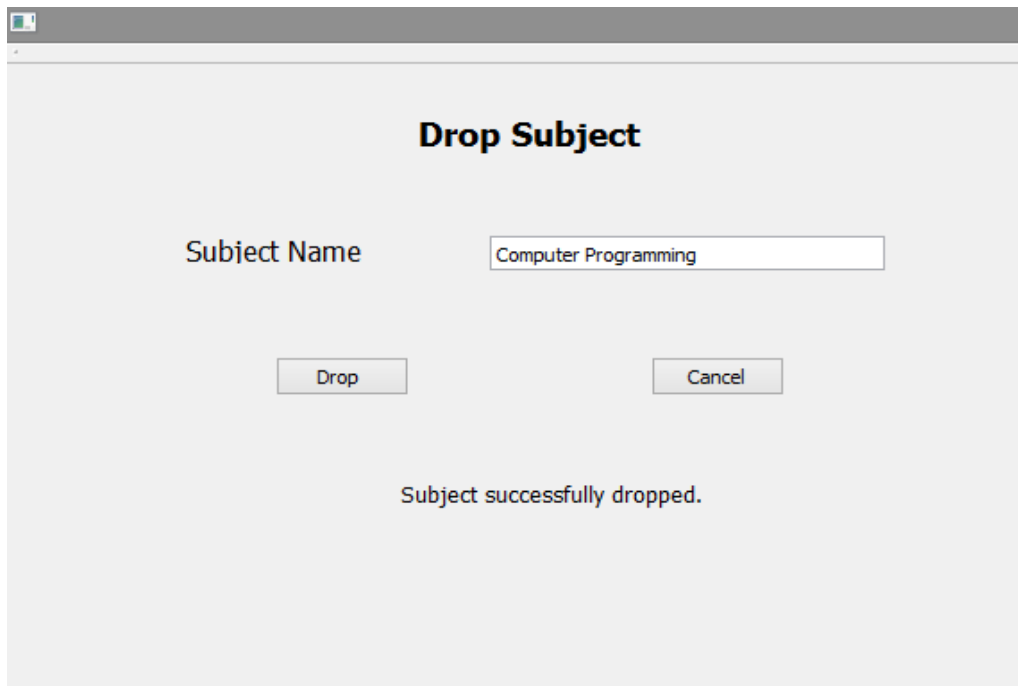
b)



The screenshot shows a web browser window with a title bar. The main content area has a light gray background. At the top, the text "Add Subject" is displayed in a bold, black font. Below this, the label "Subject Name" is positioned to the left of a text input field. The input field contains the text "@C0mputer". Below the input field, there are two buttons: "Submit" on the left and "Cancel" on the right. At the bottom of the form, the message "Subject is not valid." is displayed in a black font.

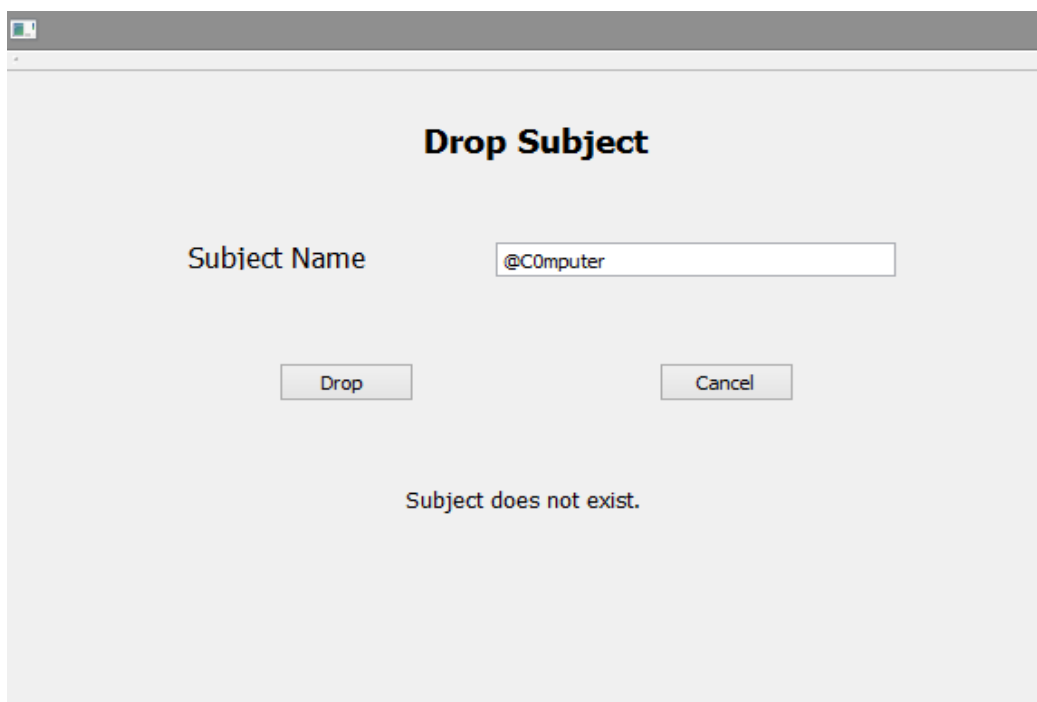
### UC 13

a)



A screenshot of a software window titled "Drop Subject". The window has a light gray background and a dark gray title bar. In the center, the text "Drop Subject" is displayed in a bold, black font. Below this, the label "Subject Name" is positioned to the left of a text input field. The input field contains the text "Computer Programming". Below the input field, there are two buttons: "Drop" on the left and "Cancel" on the right. At the bottom of the window, the message "Subject successfully dropped." is displayed in a standard black font.

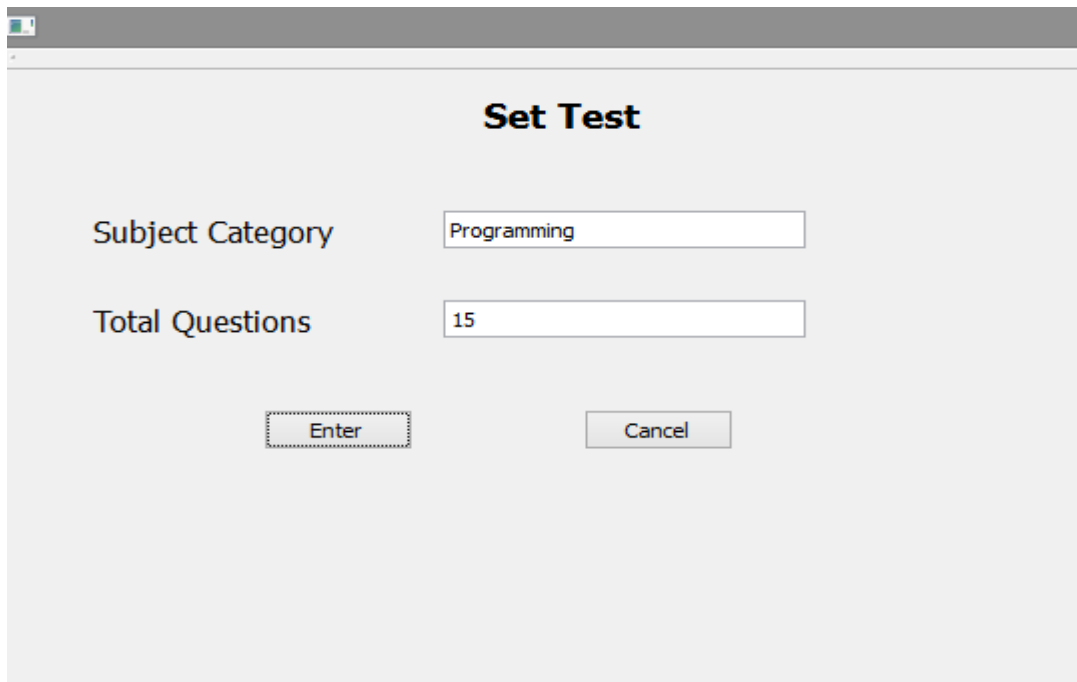
b)



A screenshot of a software window titled "Drop Subject". The window has a light gray background and a dark gray title bar. In the center, the text "Drop Subject" is displayed in a bold, black font. Below this, the label "Subject Name" is positioned to the left of a text input field. The input field contains the text "@C0mputer". Below the input field, there are two buttons: "Drop" on the left and "Cancel" on the right. At the bottom of the window, the message "Subject does not exist." is displayed in a standard black font.

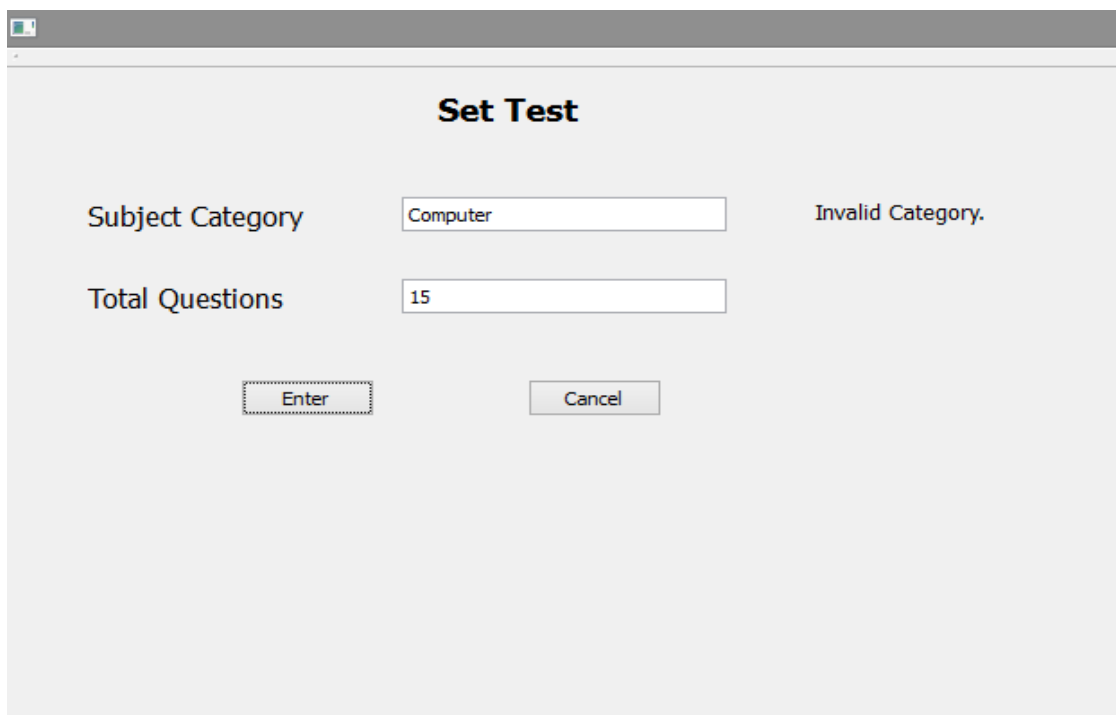
## UC 14

a)



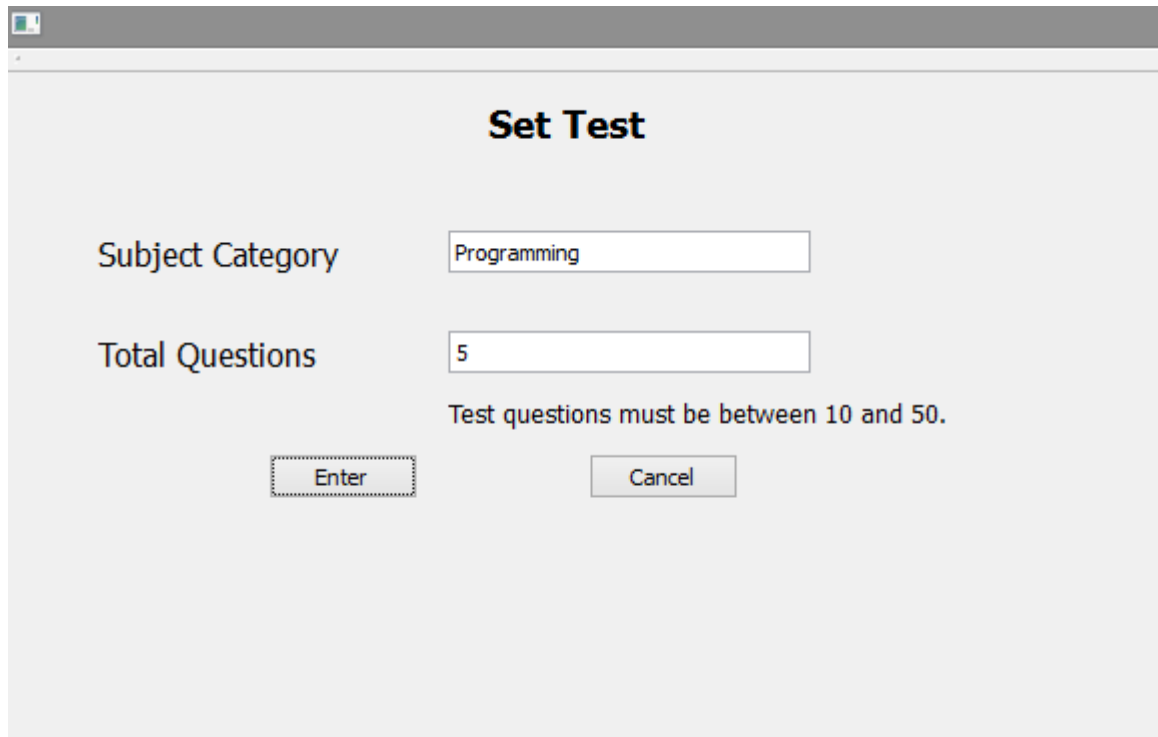
The screenshot shows a window titled "Set Test". It contains two input fields: "Subject Category" with the text "Programming" and "Total Questions" with the value "15". Below these fields are two buttons: "Enter" and "Cancel".

b)



The screenshot shows the same "Set Test" window, but the "Subject Category" field now contains the text "Computer". To the right of this field, the text "Invalid Category." is displayed. The "Total Questions" field still contains "15", and the "Enter" and "Cancel" buttons are still present.

c)



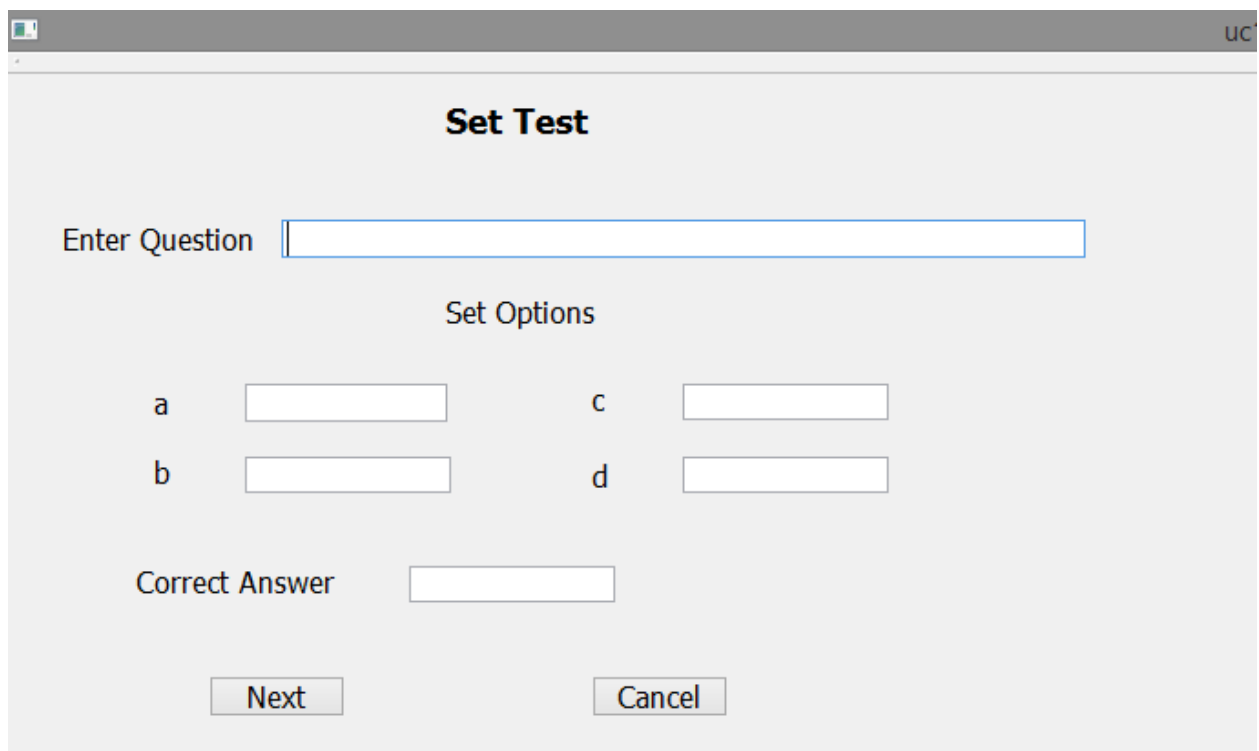
**Set Test**

Subject Category

Total Questions

Test questions must be between 10 and 50.

d)



**Set Test**

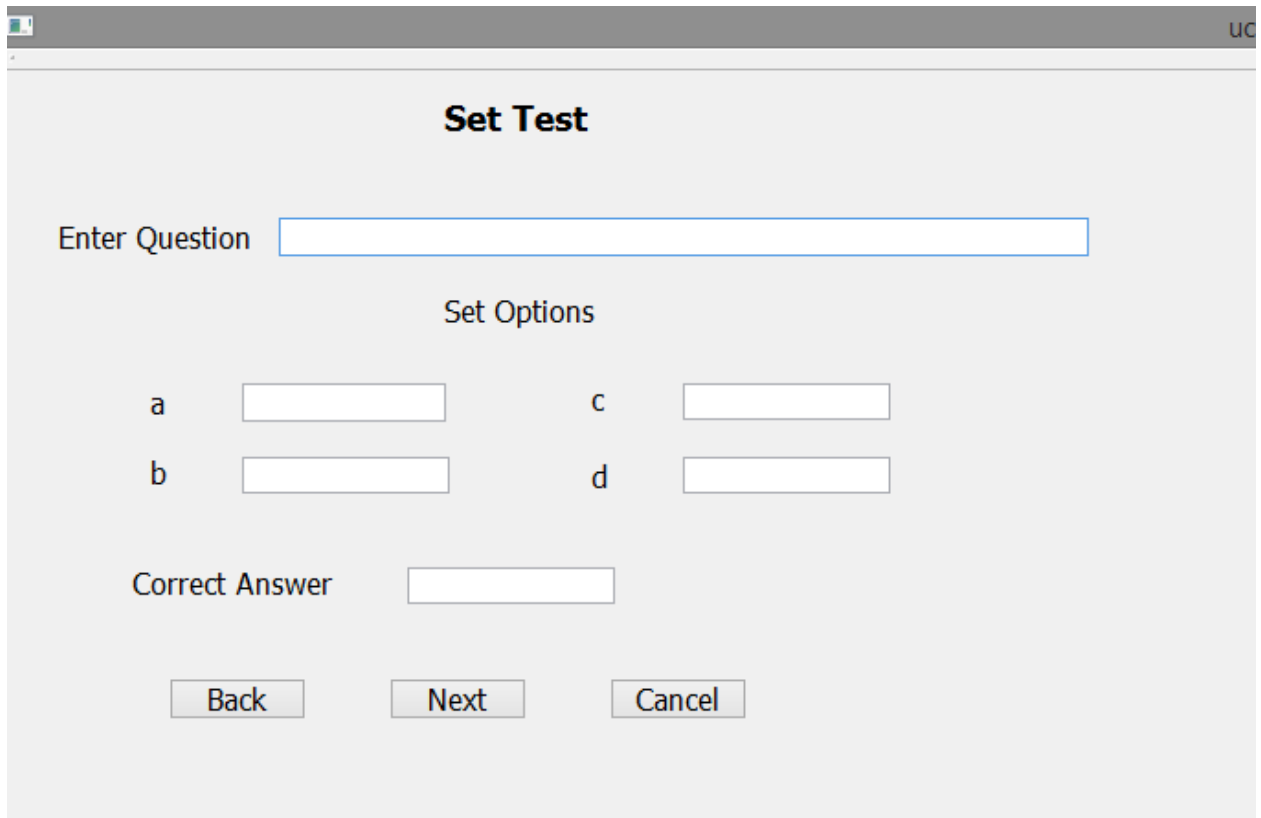
Enter Question

Set Options

a	<input type="text"/>	c	<input type="text"/>
b	<input type="text"/>	d	<input type="text"/>

Correct Answer

e)



The screenshot shows a web browser window with a dark grey header bar containing a small icon on the left and the text 'uc' on the right. The main content area has a light grey background and is titled 'Set Test' in bold black text. Below the title, there is a label 'Enter Question' followed by a long text input field. Underneath this is the label 'Set Options'. Below 'Set Options', there are four input fields arranged in two columns. The left column has labels 'a' and 'b' next to their respective input fields. The right column has labels 'c' and 'd' next to their respective input fields. Below these four fields is the label 'Correct Answer' followed by a single text input field. At the bottom of the form, there are three buttons: 'Back', 'Next', and 'Cancel', each in its own rectangular box.

**Set Test**

Enter Question

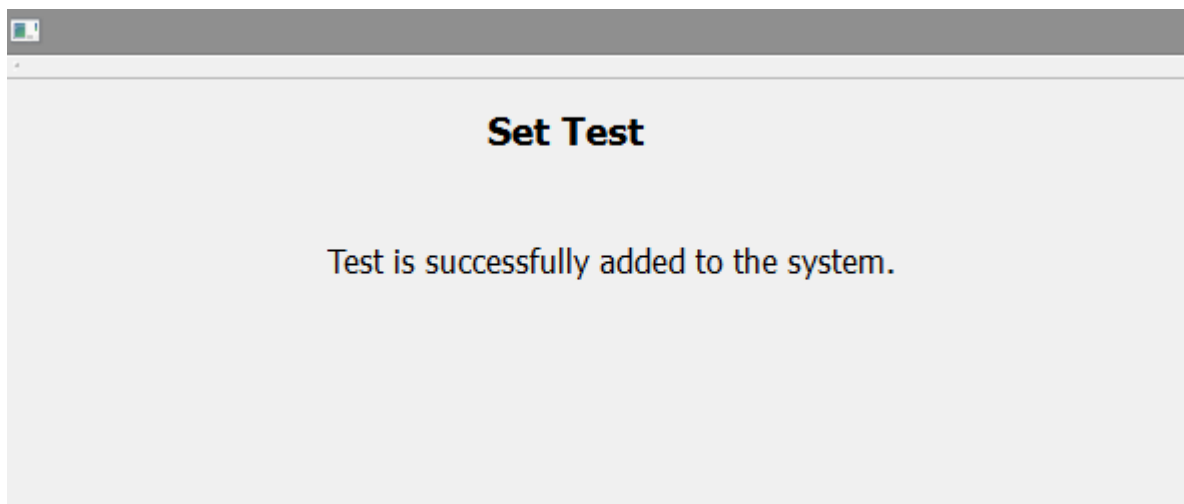
Set Options

a  c

b  d

Correct Answer

f)

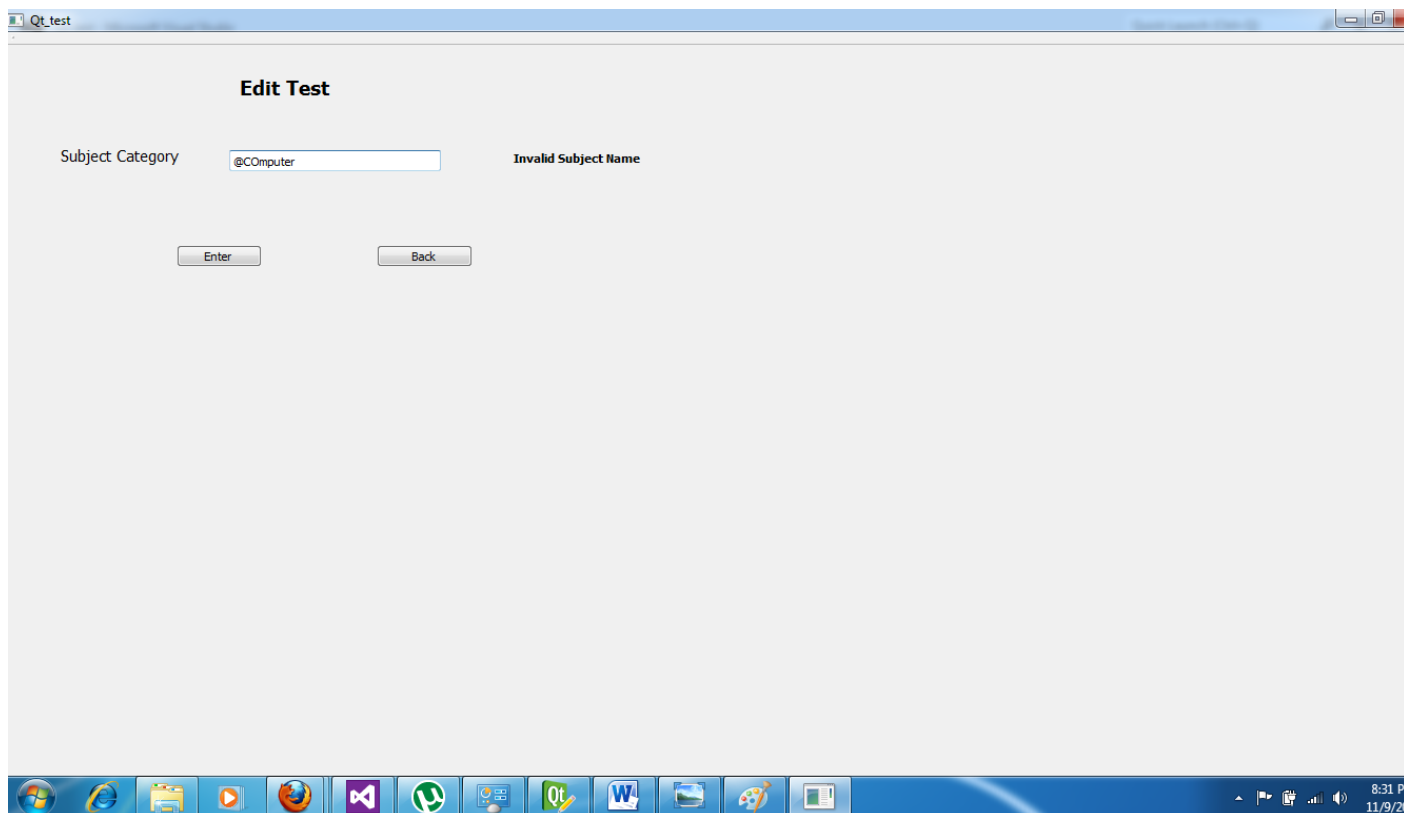
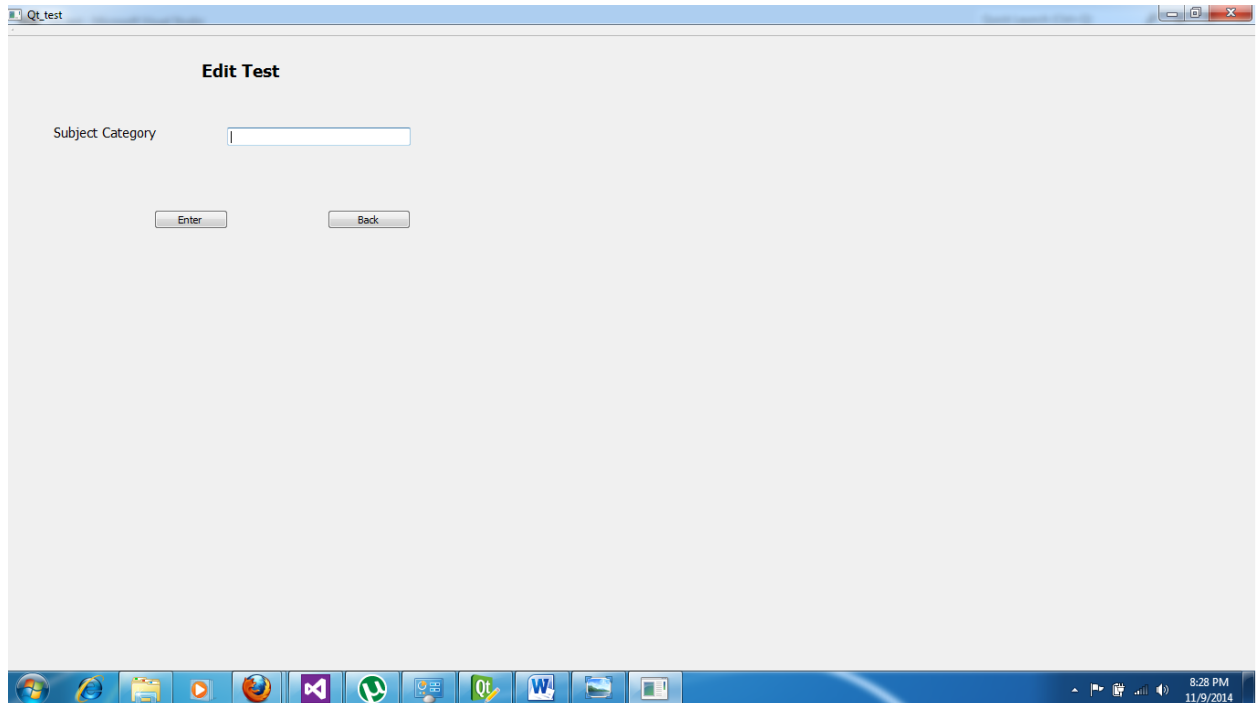


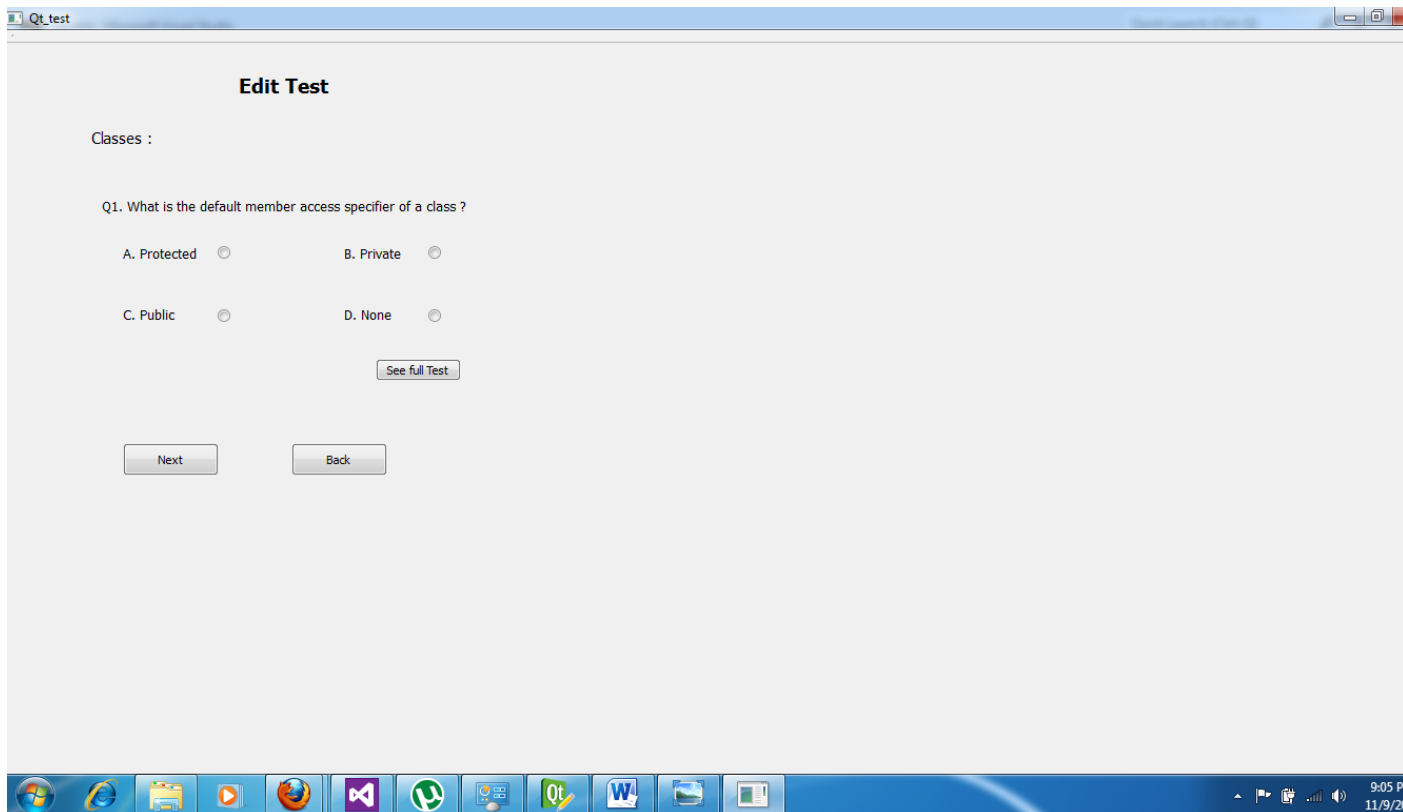
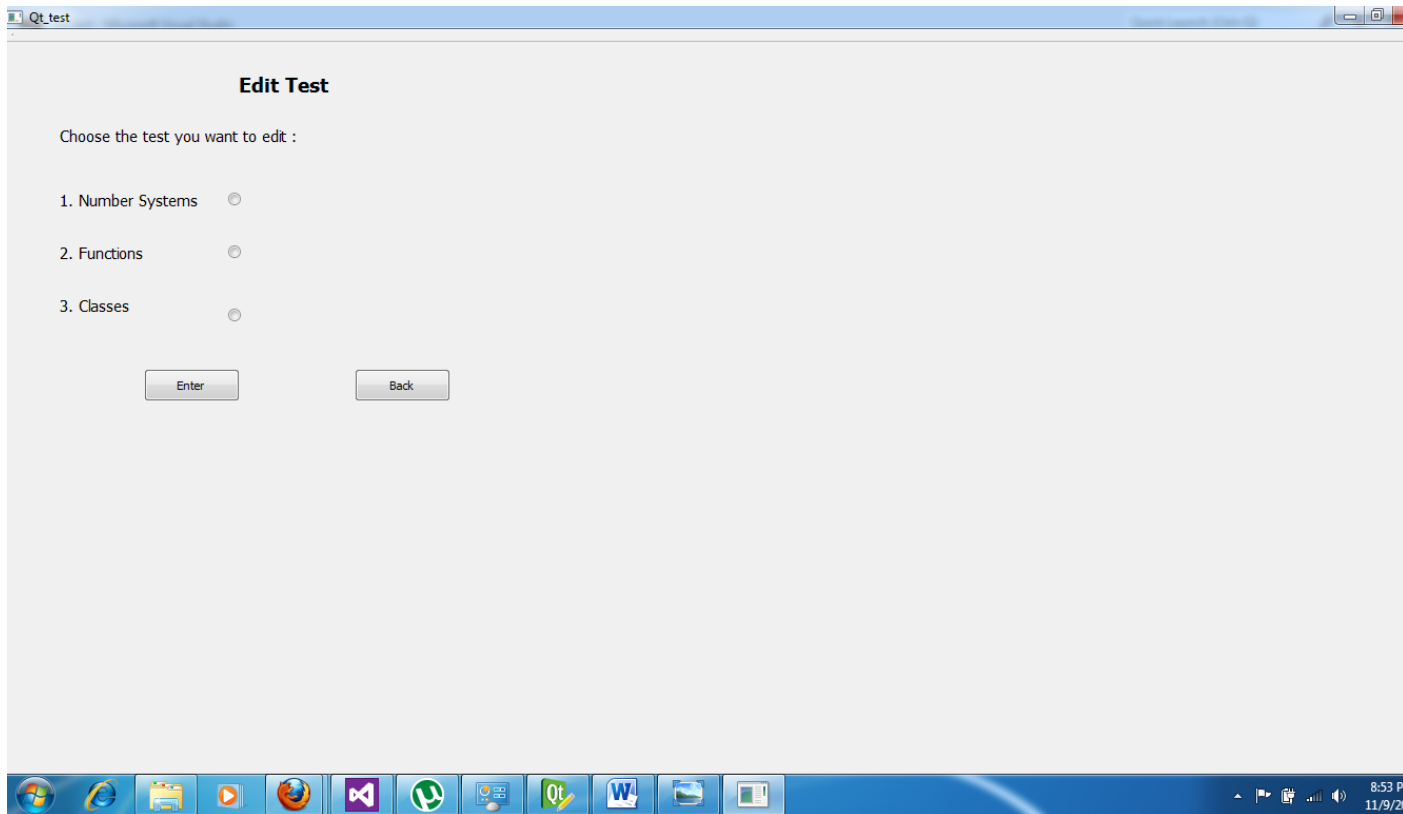
The screenshot shows the same web browser window as in the previous image. The 'Set Test' form is still present, but the input fields are not visible. Instead, the text 'Test is successfully added to the system.' is displayed in the center of the form area.

**Set Test**

Test is successfully added to the system.

## UC-15

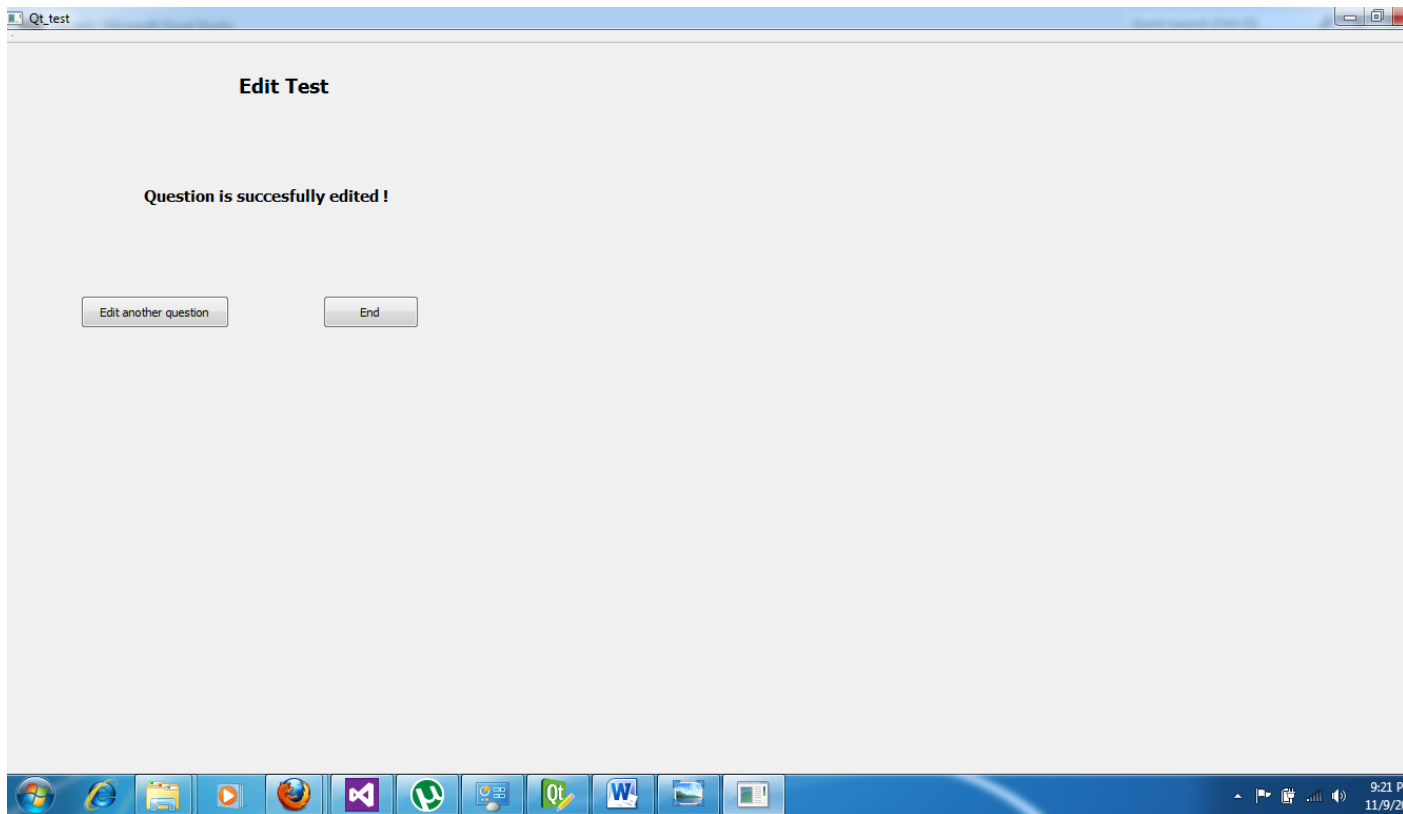




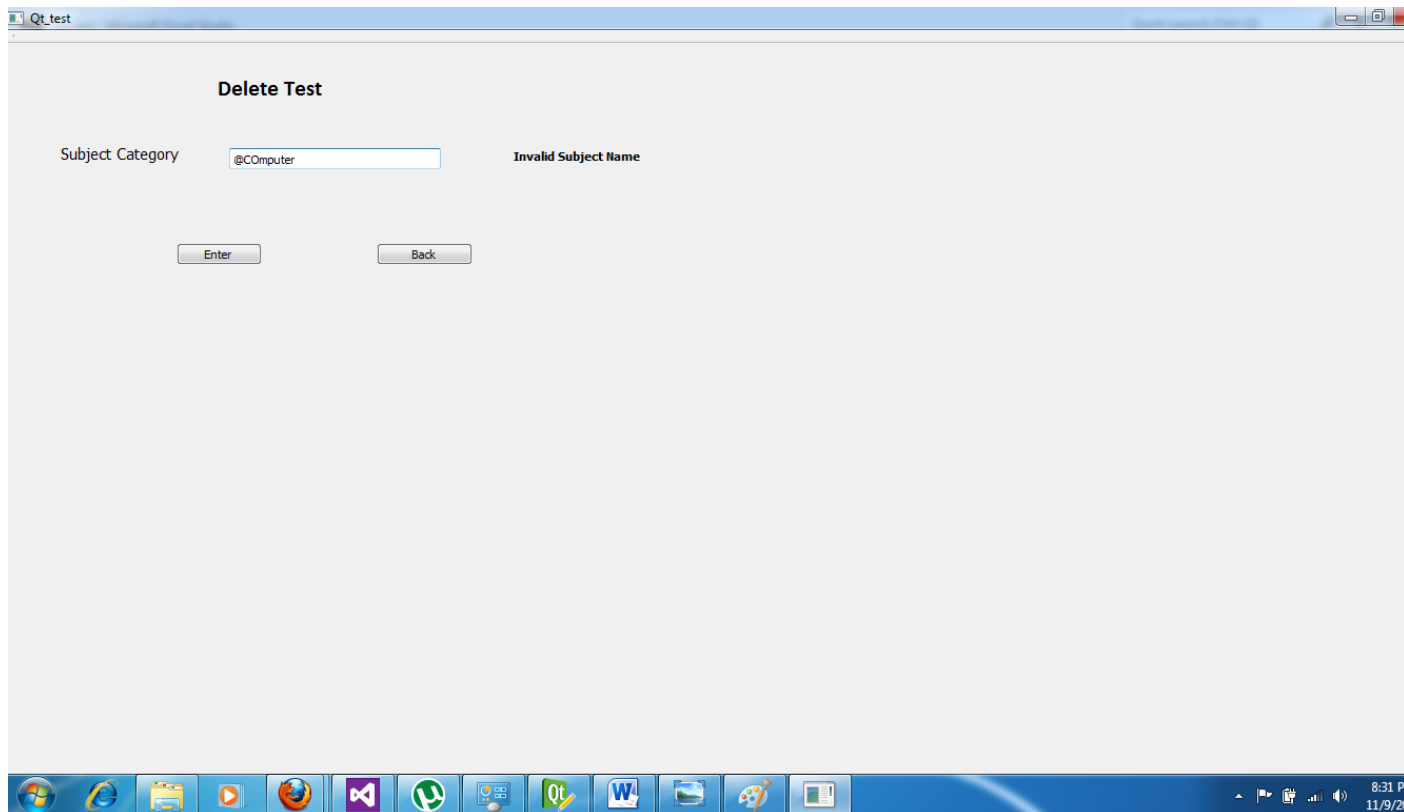
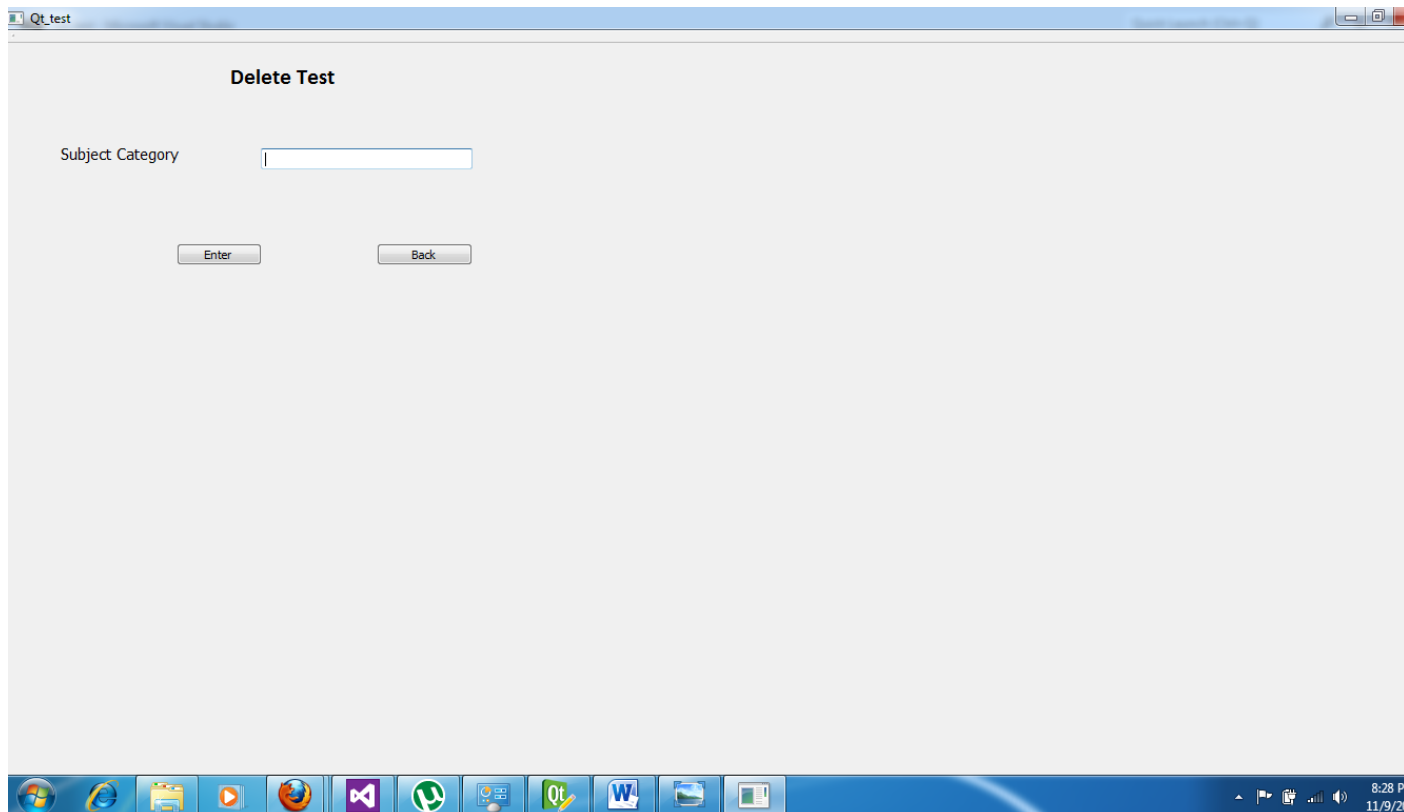


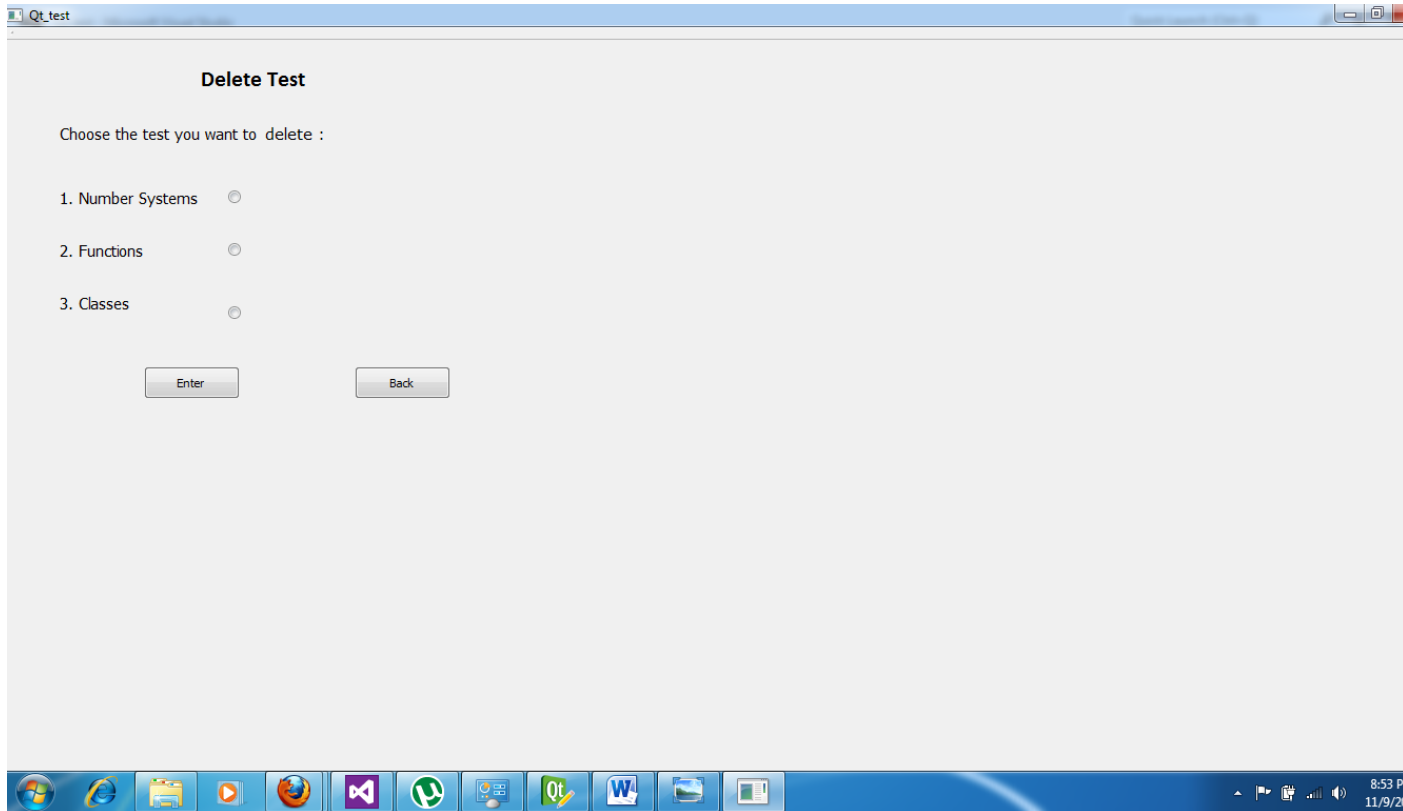
The screenshot displays a Windows 7 desktop environment. A web browser window titled "Qt\_test" is open, showing a page titled "Edit Test". The page content includes a label "Enter question number you want to edit :", a text input field labeled "Question number", and two buttons labeled "Enter" and "Back". The taskbar at the bottom of the screen contains several application icons: Internet Explorer, VLC media player, Firefox, Audacity, WhatsApp, Google Chrome, Qt, Microsoft Word, and a folder icon. The system tray in the bottom right corner shows the time as 9:10 PM and the date as 11/9/2017, along with icons for network, volume, and power.

The image is a screenshot of a Windows desktop environment. At the top, a window titled 'uc14' is open, displaying a form titled 'Edit Test'. The form contains the following elements: a text input field labeled 'Enter Statement'; a section labeled 'Set Options' with four sub-inputs labeled 'a', 'b', 'c', and 'd'; and a text input field labeled 'Correct Answer'. Below these fields are three buttons: 'Back', 'Next', and 'Cancel'. The Windows taskbar is visible at the bottom of the screen, showing icons for the Start menu, File Explorer, Google Chrome, Microsoft Edge, and several other applications. The system tray on the right side of the taskbar shows the time as 6:51 and the date as 11/9.

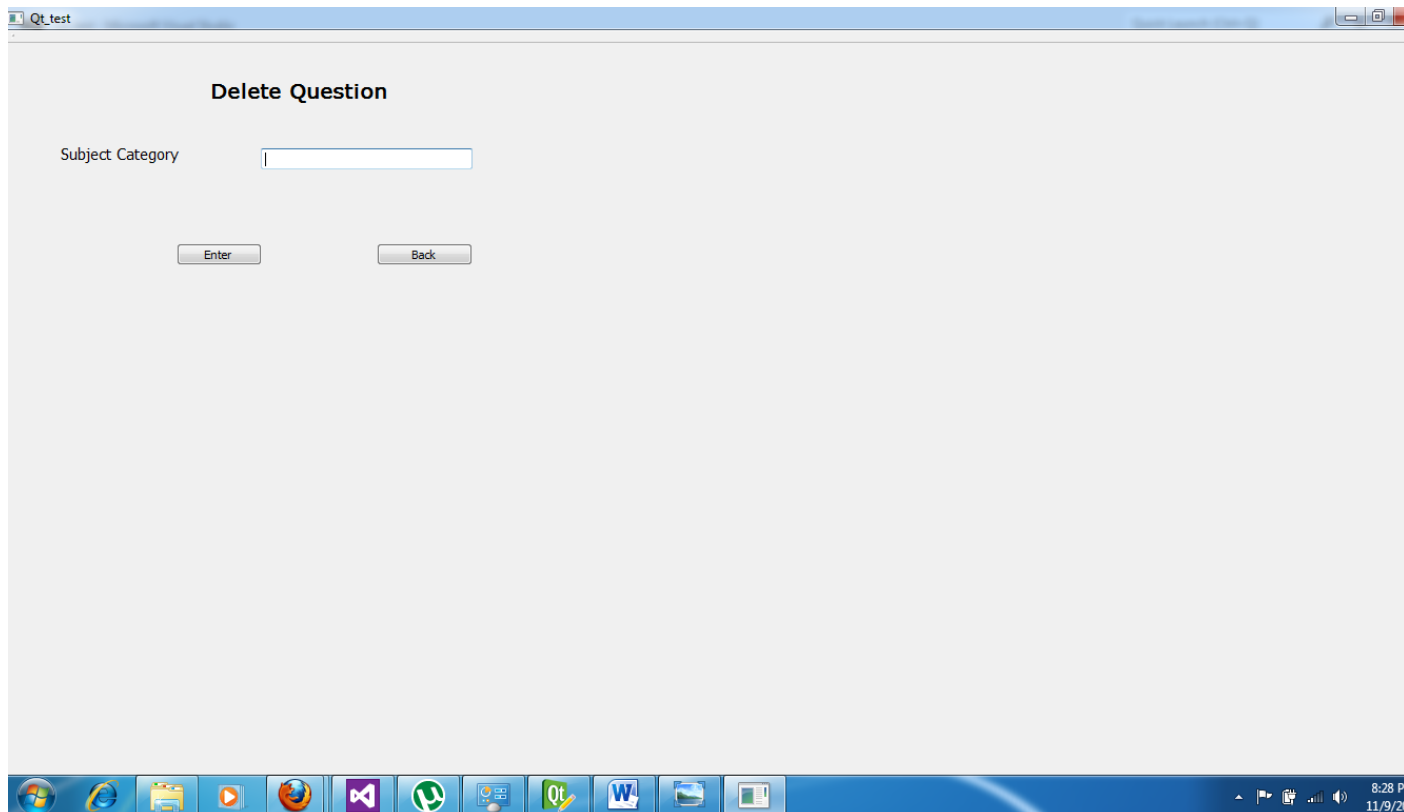


## UC-16





## UC-17:

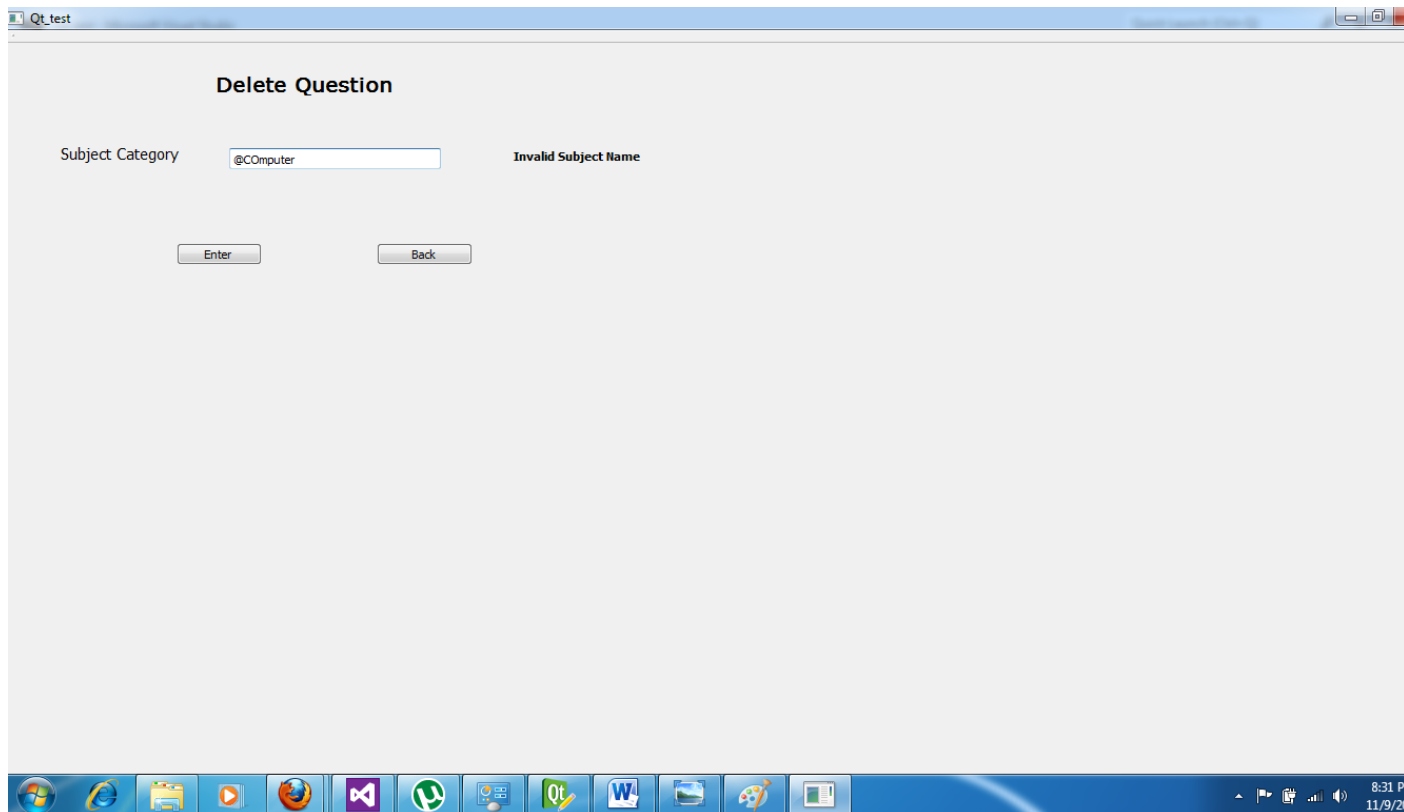


Qt\_test

### Delete Question

Subject Category

Enter Back

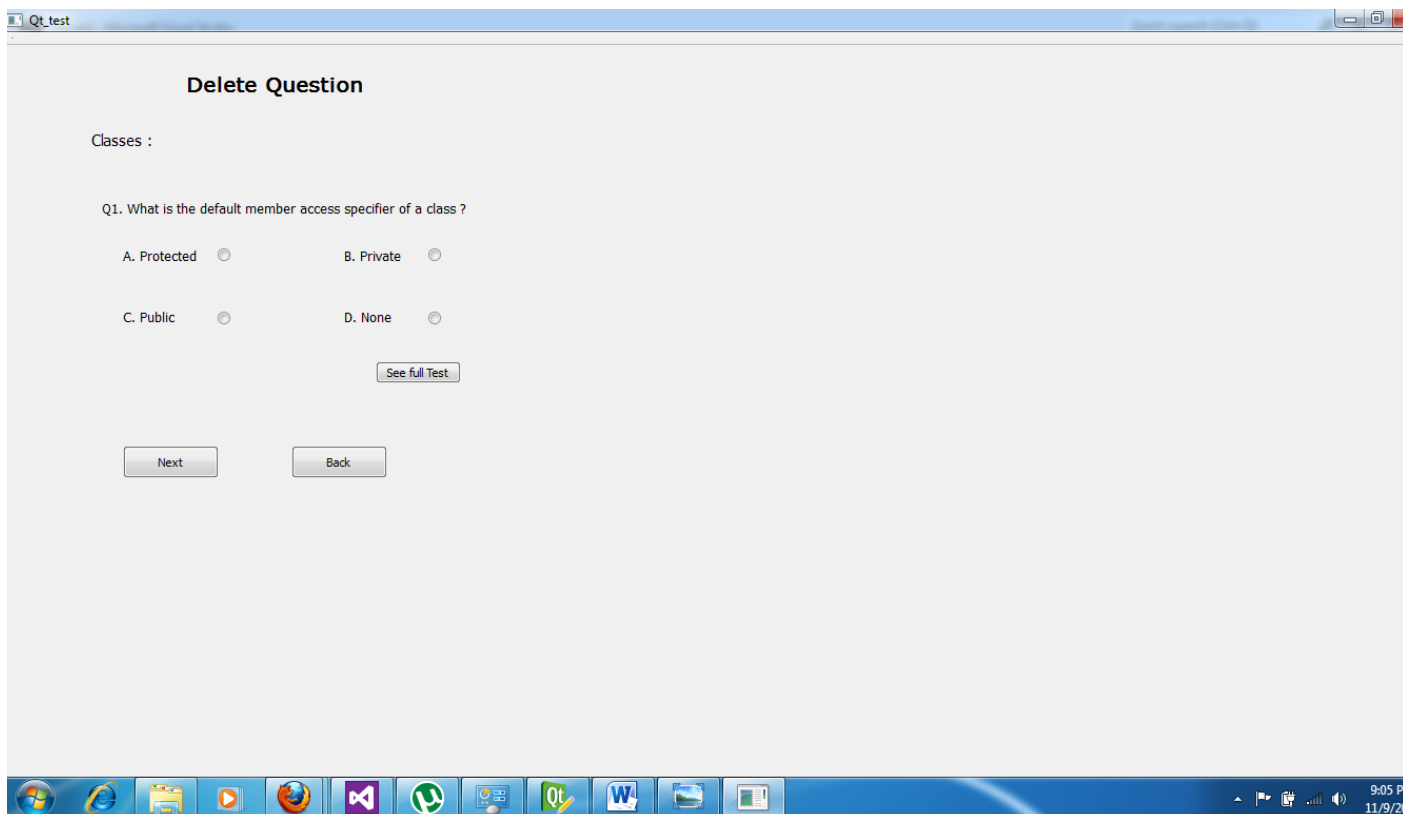
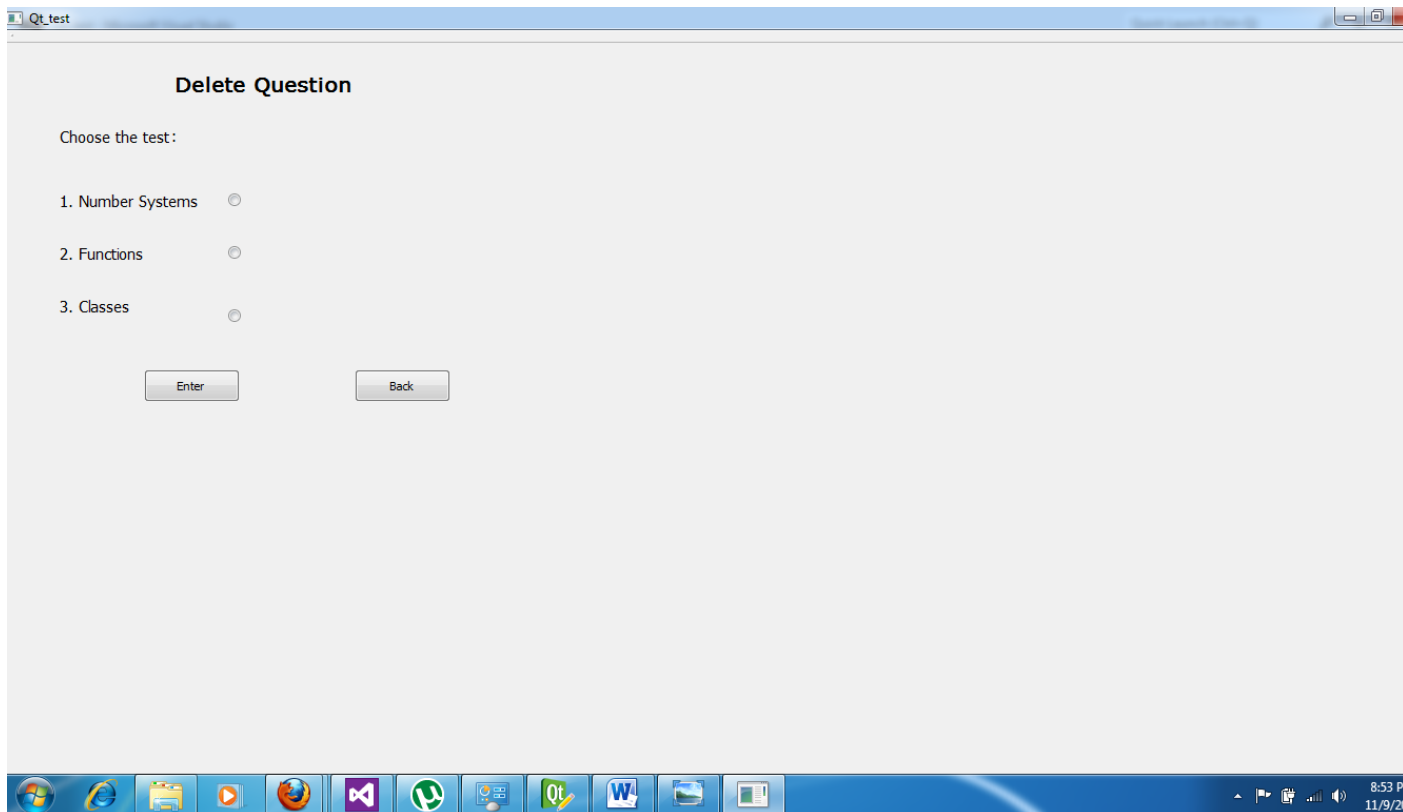


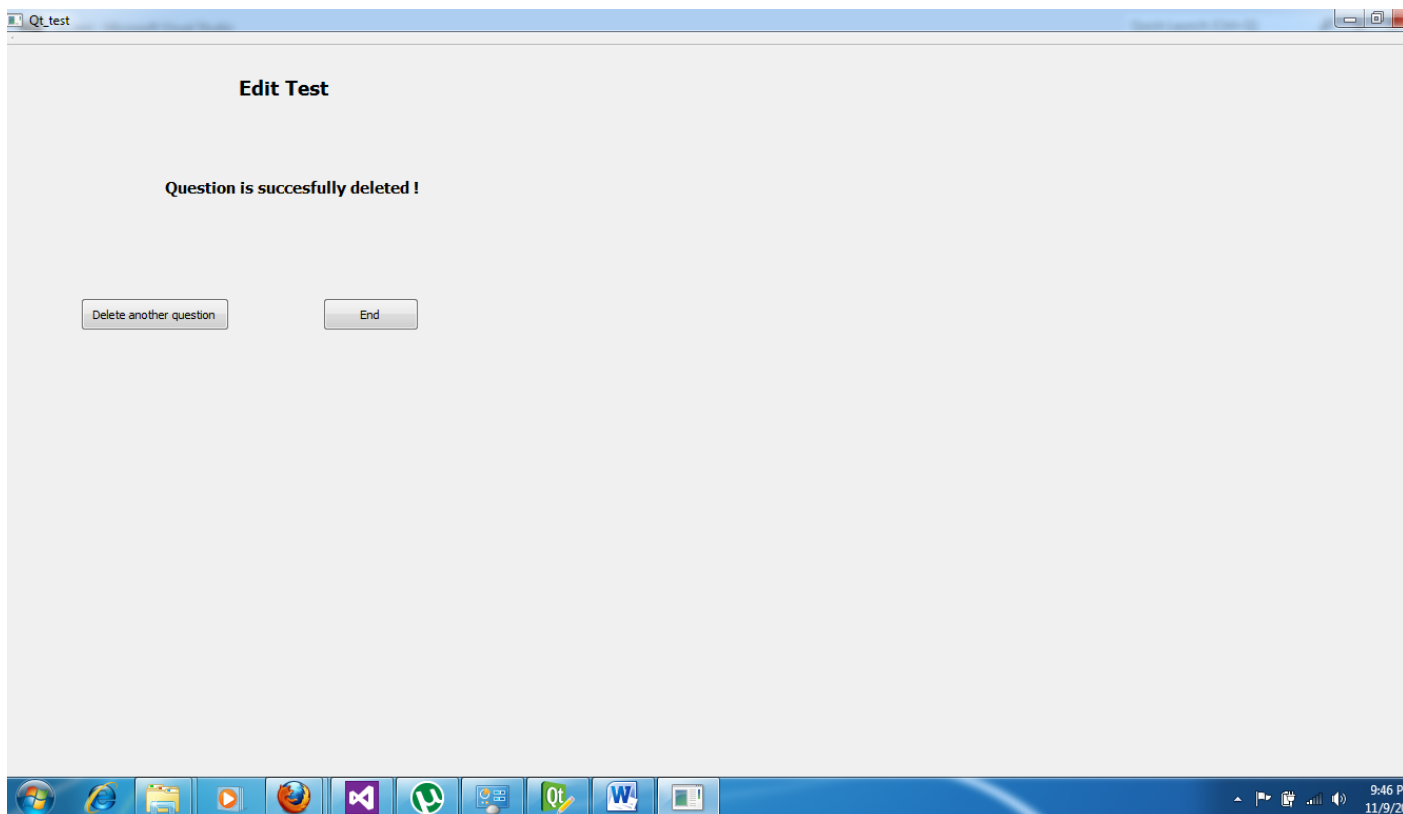
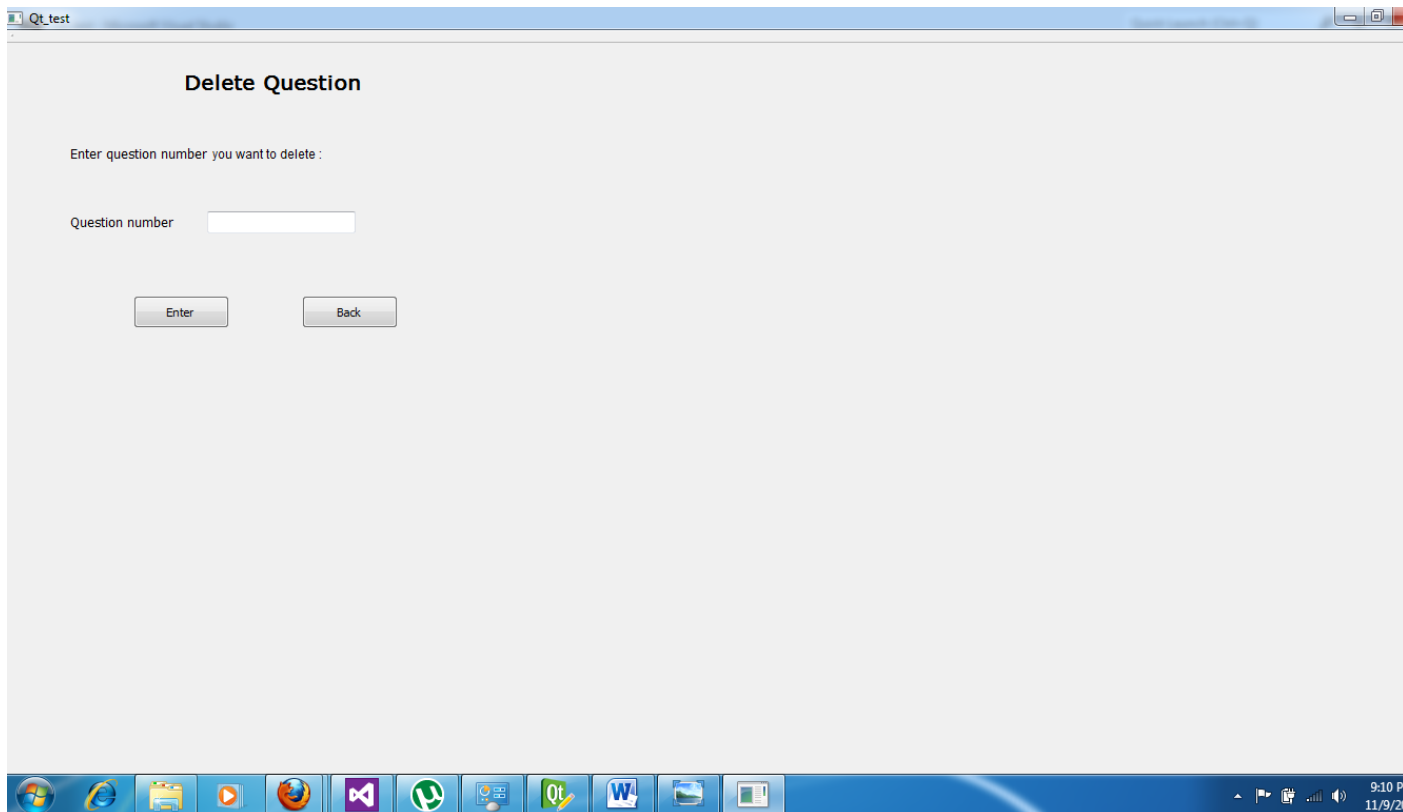
Qt\_test

### Delete Question

Subject Category  Invalid Subject Name

Enter Back





## UC-18:

Qt\_test

### Add Question

Subject Category

8:28 P  
11/9/2

Qt\_test

### Add Question

Subject Category

8:28 P  
11/9/2




Qt test

### Add Question

Choose the test :

- 1. Number Systems ☐
- 2. Functions ☐
- 3. Classes ☐



uc14


### Add Question

Enter Statement

Set Options

a	<input type="text"/>	c	<input type="text"/>
b	<input type="text"/>	d	<input type="text"/>

Correct Answer



uc14

Add Question

Enter Statement

Set Options

a

c

b

d

Correct Answer

Back

Next

Cancel

6:51  
11/9/20

Qt\_test

Add Question

Question succesfully added !

Add another question

End

11:23  
11/9/20

## UC-19:

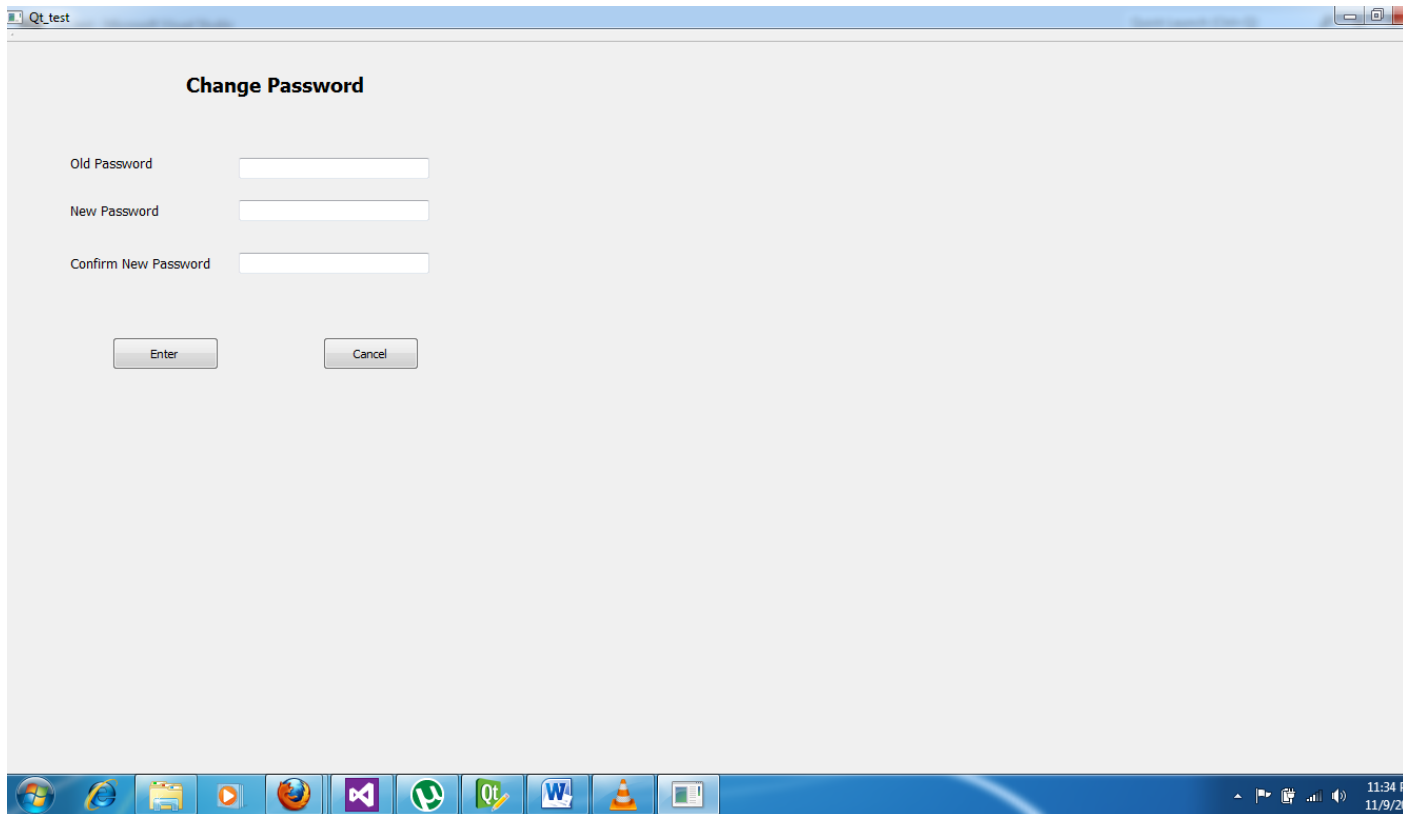
Qt\_test

### Change Password

Old Password

New Password

Confirm New Password



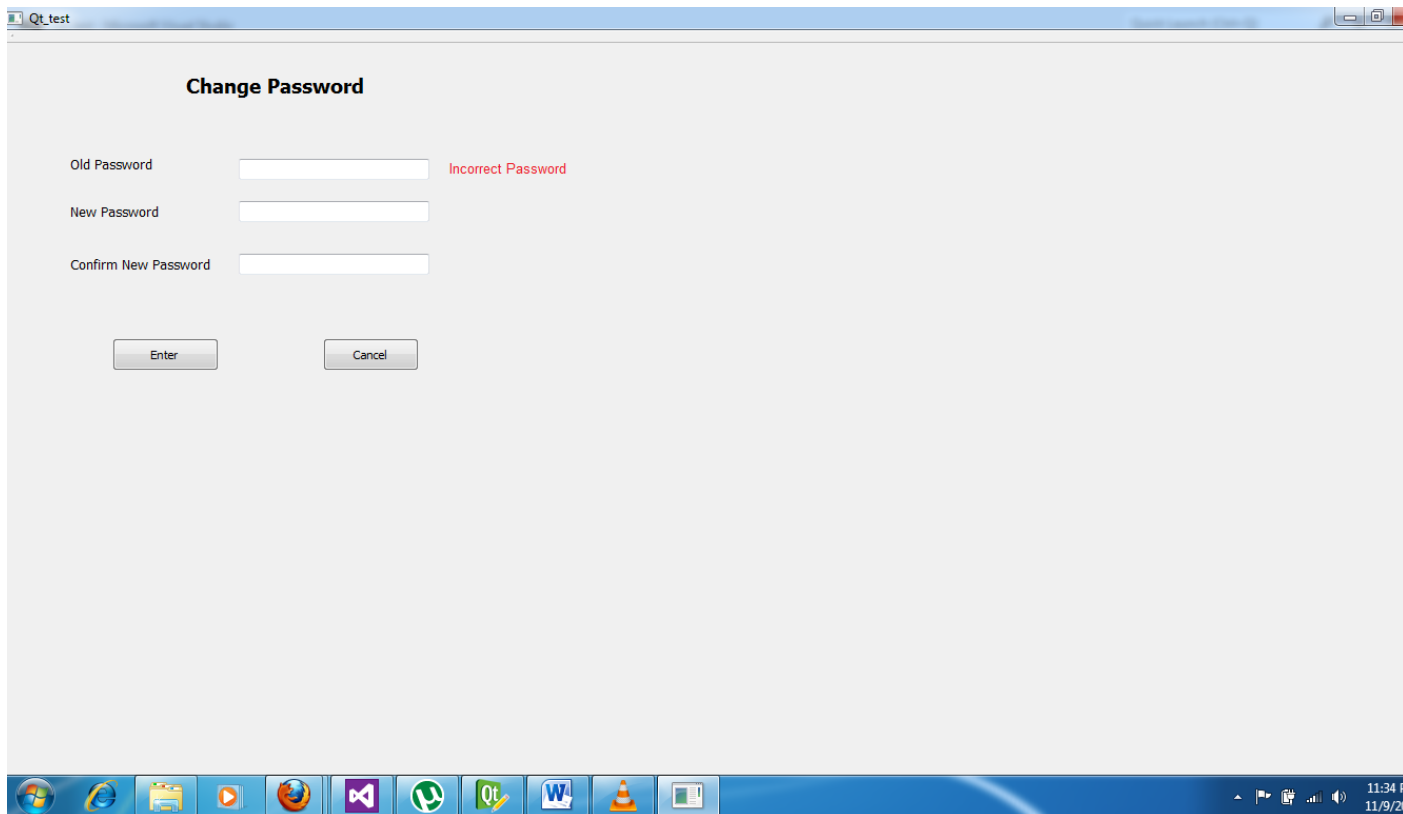
Qt\_test

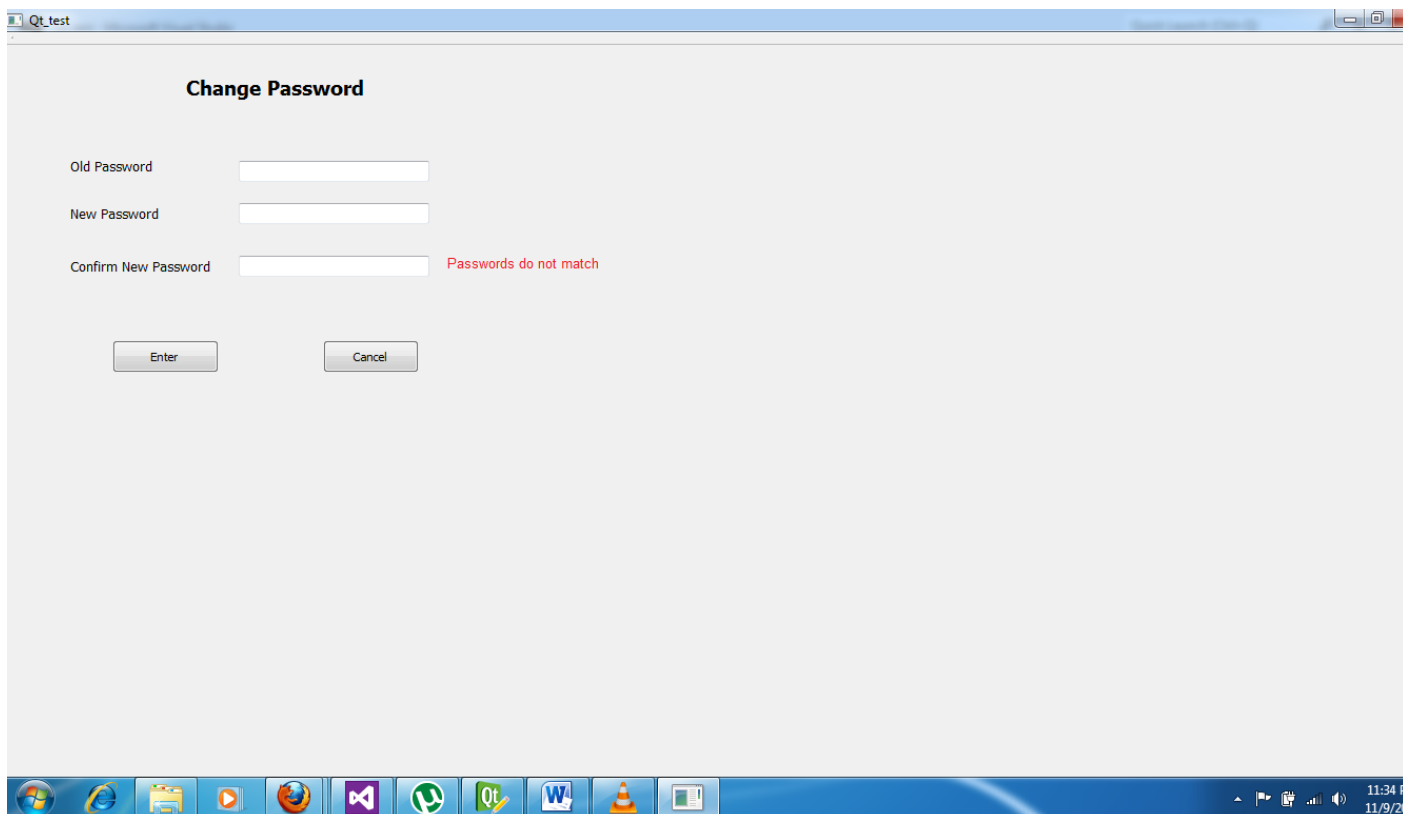
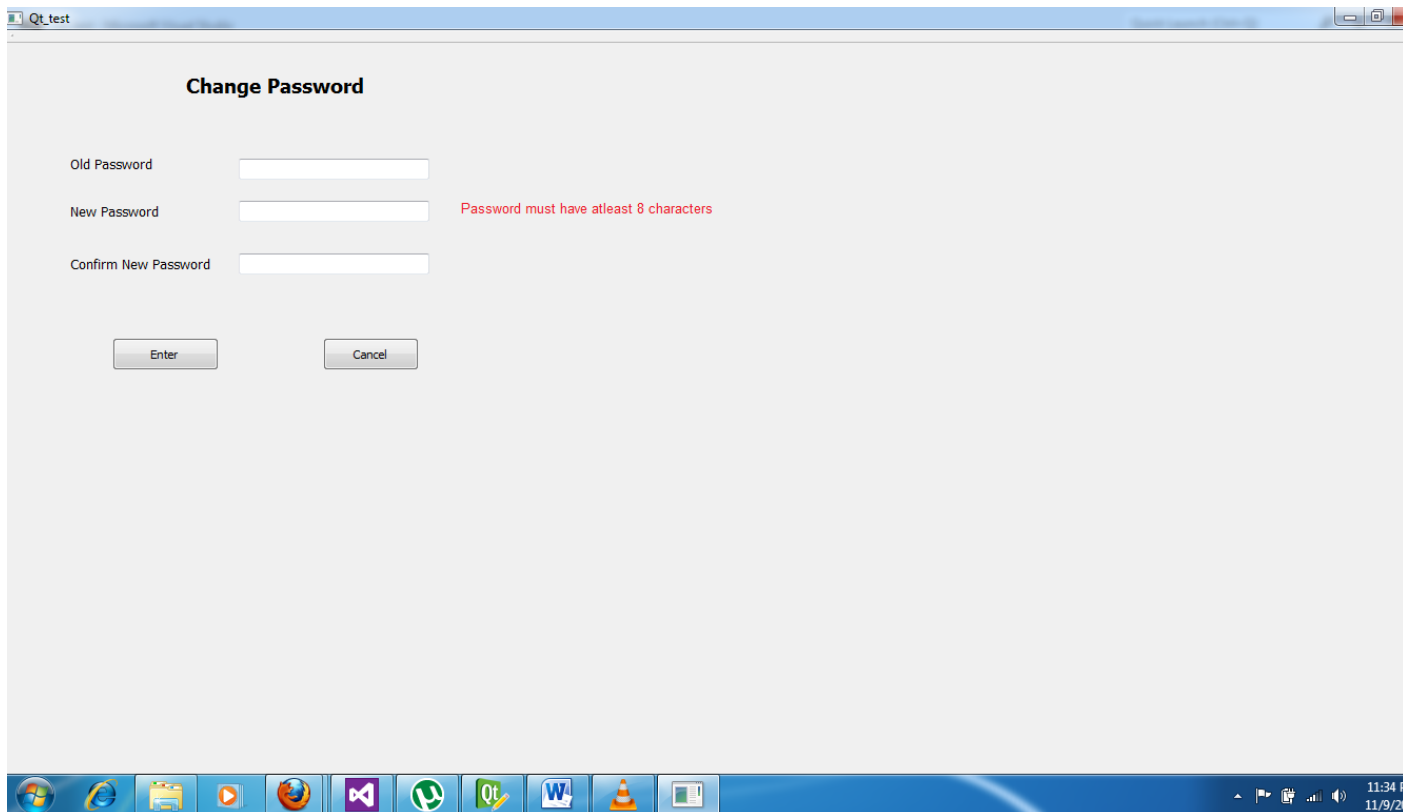
### Change Password

Old Password  Incorrect Password

New Password

Confirm New Password





## UC-20:

