

## COMSATS University Islamabad, Park Road, Chaka Shahzad, Islamabad Pakistan

# Software Requirements Specifications

(SRS DOCUMENT)

for

**MOOC** 

Version 1.1

By

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# **Table of Contents**

1.		ction	
		rpose	
		Modules:	
2	1.2.1	Modules:	
<b>4.</b>	2.1 Pro	<b>Description</b>	<b>4</b>
		erating environment	
		sign and implementation constraints	
3.		ement Identifying Technique	
•	3.1 Us	e Case Diagram:	5
	3.1.1	Use Case Diagram: Account Management	5
	3.1.2	Use Case Diagram: Teacher Portal	
	3.1.3	Use Case Diagram: Student Portal	
	3.1.4	Use Case Diagram: Admin Panel	
	3.1.5	Use Case Diagram: My Room	
	3.1.6	Use Case Diagram: 1-1 Communication & Notifications	
		e Case Description	
	3.2.1	Module 1: Account Management	
	3.2.2	Module 2: Portal	
	3.2.3	Module 3: Admin Panel	
	3.2.4	Module 4: Notification and Messaging	
	3.2.5	Module 5: Communication Using VOIP	
	3.2.6 3.2.7	Module 7: Auto Zoom	
	3.2.7	Module 8: Screen Sharing	
	3.2.8	Module 9: E-Learning Analytics	
1		onal Requirements	
4.	4.1.1	UC-1.1: Register	
	4.1.1	UC-1.2: LOGIN	
	4.1.3	UC-1.3: VERIFY ACCOUNT	
	4.1.4	UC-1.4: CHANGE PASSWORD	
	4.1.5	UC-1.5: FORGOT PASSWORD	
	4.1.6	UC-1.6: ADD PROFILE PICTURE.	
	4.1.7	UC-1.7: DELETE PROFILE PICTURE	
	4.1.8	UC-1.8: CHANGE PROFILE PICTURE	
	4.1.9	UC-1.9: VIEW PROFILE.	
		UC-1.10: ADD EDUCATION INFORMATION	
		UC-1.11: DELETE EDUCATION INFORMATION	
		UC-1.12: ADD WORK EXPERIENCE	
	4.1.13	UC-1.13: DELETE WORK EXPERIENCE	81
		UC-1.14: ADD PERSONAL INFORMATION	
	4.1.15	UC-1.15: DELETE PERSONAL INFORMATION	82
		UC-1.16: CHECK PRIVACY SETTINGS	
		UC-1.17: EDIT EDUCATION INFORMATION	
		UC-1.18: EDIT WORK EXPERIENCE	
		UC-1.19: EDIT PERSONAL INFORMATION	
	-	UC-1.20: CHANGE PRIVACY SETTINGS	
	4.1.21	UC-1.21: LOGOUT	83

4.1.22	UC-1.22: REPORT USER	83
4.1.23	UC-1.23: DELETE ACCOUNT	84
4.1.24	UC-2.1: UPLOAD ASSIGNMENT	84
4.1.25	UC-2.2: VIEW ASSIGNMENT	85
4.1.26	UC-2.3: DOWNLOAD ASSIGNMENT	86
4.1.27	UC-2.4: DELETE ASSIGNMENT	86
4.1.28	UC-2.5: EDIT ASSIGNMENT	86
	UC-2.6: SUBMIT ASSIGNMENT	
	UC-2.7: UPLOAD QUIZ	
	UC-2.9 DELETE QUIZ	
	UC-2.10: EDIT QUIZ	
	UC-2.11: SUBMIT QUIZ	
	UC-2.12: UPLOAD MARKS	
	UC-2.13: VIEW MARKS	
	UC-2.14: EDIT MARKS	
	UC-2.15: UPLOAD LECTURE FILES.	
	UC-2.16: VIEW LECTURE FILE	
	UC-2.17: DOWNLOAD LECTURE FILE	
	UC-2.18: Delete Lecture File	
	UC-2.19: SAVE VIDEO	
	UC-2.20: WATCH VIDEO	
	UC-2.21: DOWNLOAD VIDEO	
	UC-2.22: UPLOAD VIDEO	
	UC-2.23: DELETE VIDEO	
	UC-2.24: Subscribe Course	
	UC-2.25: UNSUBSCRIBE COURSE	
	UC-2.26: RATE TEACHER	
	UC-2.27: REVIEW TEACHER	
	UC-2.28: RATE COURSE	
	UC-2.29: REVIEW COURSE	
	UC-2.30: Add Course	
	UC-2.31: EDIT COURSE	
	UC-2.32: DELETE COURSE	
	UC-2.33: VIEW COURSE	
	UC-2.34: VIEW COURSE SUBSCRIBERS	
	UC-2.35: VIEW OTHER'S PROFILE	
	UC-2.36: VIEW MY ROOMS	
	UC-2.37: JOIN ROOM	
	UC-2.38: LEAVE ROOM	
	UC-2.39: CREATE ROOM	
	UC-2.40: EDIT ROOM	
	UC-2.41: DELETE ROOM	
	UC-2.42: VIEW ROOM	
	UC-2.43: REMOVE STUDENT FROM ROOM	
	UC-2.44: SEARCH	
	UC-2.45: SEND COMPLAINT	
	UC-2.46: OPEN QUIZ	
	UC-3.1: APPROVE COURSE	
	UC-3.2: DISAPPROVE COURSE	
	UC-3.3: BLOCK ACCOUNT	
	UC-3.4: UNBLOCK ACCOUNT	
-·· <b>-</b>		- 5

	4.1.73 UC-3.5: VIEW BLOCKED USERS	
	4.1.74 UC-3.6: VIEW APPROVED COURSES	
	4.1.75 UC-3.7: View Pending Course Request	
	4.1.76 UC-3.8: VIEW PENDING BLOCK ACCOUNT REQUEST	
	4.1.77 UC-3.9: VIEW COMPLAINTS	
	4.1.78 UC-3.10: REPLY COMPLAINT	
	4.1.79 UC-4.1: SEND MESSAGE	
	4.1.80 UC-4.2: USE ROOM CHAT	
	4.1.81 UC-4.3: Delete Conversation	
	4.1.82 UC-4.4: View Conversation	. 102
	4.1.83 UC-4.5: ADD ANNOUNCEMENT	
	4.1.84 UC-4.6: View Notification	
	4.1.85 UC-4.7: DELETE ANNOUNCEMENT	
	4.1.86 UC-4.8: Remove Notification	. 104
	4.1.87 UC-4.9: View Event	
	4.1.88 UC-5.1: Start Audio Call	
	4.1.89 UC-5.2: JOIN AUDIO CALL	
	4.1.90 UC-5.3: PUSH "P" TO TALK	. 105
	4.1.91 UC-5.4: Leave Audio Call	. 105
	4.1.92 UC-5.5: STOP AUDIO CALL	. 105
	4.1.93 UC-5.6: REJECT AUDIO CALL	. 105
	4.1.94 UC-5.7: ACCEPT AUDIO CALL	
	4.1.95 UC-6.1: START LIVE BROADCAST	. 106
	4.1.96 UC-6.2: STOP LIVE BROADCAST	. 106
	4.1.97 UC-6.3: JOIN BROADCAST	. 107
	4.1.98 UC-6.4: Leave broadcast	. 107
	4.1.99 UC-6.5: SWITCH TO SCREEN SHARING	
	4.1.100 UC-6.6: Lock room	. 107
	4.1.101 UC-6.7: UNLOCK ROOM	. 108
	4.1.102 UC-7.1: ENABLE AUTO ZOOM	. 108
	4.1.103 UC-7.8: DISABLE AUTO ZOOM	. 111
	4.1.104UC-8.1: START SCREEN SHARING	. 112
	4.1.105 UC-8.2: JOIN SCREEN SHARING	. 112
	4.1.106 UC-8.3: Leave Screen Sharing	. 112
	4.1.107 UC-8.4: SWITCH TO CAMERA SHARING	. 112
	4.1.108UC-8.5: STOP SCREEN SHARING	. 113
	4.1.109 UC-9.1: VIEW RECOMMENDED COURSES	. 113
	4.1.110 UC-9.2: View Trending Courses	. 113
	4.1.111 UC-9.3: VIEW VISITOR'S ANALYTICS	. 113
	4.1.112 UC-9.4: VIEW TOP COURSES' ANALYTICS	. 114
5.	Non-Functional Requirements	.114
	5.1 Usability:	. 114
	5.2 Efficiency	. 114
	5.3 Reliability:	
	5.4 Supportability:	
	5.5 Security:	
	External Interface Requirements:  6.1 User Interface:	
	6.1.2 Student View	
	6.1.3 Teacher View	
	6.1.4 Admin View	
	0.1.4 Admini view	. 120

	6.2	Communication Interface:	. 127
7.	Pro	ject Gantt chart	.127
8.	Refe	erences	.128

# **Revision History**

Name	Date	Reason For Changes	Version

<b>Application</b>	Revision	<b>History</b>
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<b>Comments (by committee)</b>	Action Taken
*include the ones given at scope time both in doc and presentation	

**Supervised by** 

Mr. Rizwan Rashid

Signature\_\_\_\_\_

#### 1. Introduction

## 1.1 Purpose

This software requirement specification document for MOOC will include all the requirements that this web application would be fulfilling. This document will briefly discuss the targeted audience for this web application and the interaction of these users with the system. Use case diagram would be helpful in describing the interaction of each user with the system. The major requirements of the user that are counted as main functionalities of the system are called use cases. These use cases are further divided into functional requirements. This document will consist if brief description of both use cases and functional requirements. However, there exists some functionalities that are not visible on the interface of the system, yet they have great importance in effective and efficient performance of the system. These functionalities are called non-functional requirements. This document will describe all the quality requirements of MOOC that would make its performance effective and efficient. By 'web application with all-in-one functionalities. MOOC has provided increased ways of interaction to the users through conference video call, audio call, direct messaging and online chat. MOOC is a highly intelligent web application that would provide students with the courses that they are interested in. In addition to this, MOOC will also provide a list of top and most famous courses for making course selection for the students easy. This system will also show some graphical and tabular analytics to the admin to know that rate to visitors and the top going courses.

#### 1.2 Scope

Our system is a web-based E-learning application which would provide an increased number of ways for student teacher interaction. Instead of directing all the traffic through one or two specified ways of communication, our system would provide the users with facilities like audio calls, conference video calls, screen sharing, direct messaging and classroom chat. The students and teachers both would have different ways of file sharing like direct messaging, portal or classroom chat. The teachers can use portal for uploading, viewing, updating lecture files, marks, assignment, quizzes and videos. The students can view these files, download them and submit their own files. Our system would provide us with two perspectives of E-learning. The first perspective is online learning, where the students can join an online classroom and can use classroom chat for interaction. The teacher can also start conference video call in this online room. Teachers can also use screen sharing feature during conference video calls. The second perspective is offline learning, where students can study from already uploaded content. The teachers can enable auto zoom feature during conference video call for making the content written on board more understandable for student. However, the video quality will not exceed 720p. A good quality external web camera would be required for capturing the videos. The students will be able to view recommended courses and trending courses. The visitors on the web application and the top courses will be shown in the form of graphs, charts and tables to the admin. At the end of course the students will be able to rate and review the teacher and the course. This feedback might help other students who are thinking to take that course.

#### **1.2.1 Modules:**

Following are the modules of our system:

#### 1.2.1.1 Module 1: Account Management

This module will help the user to make account in our web application and control it. All the activities that the user will perform related to his account will be handled by this module. These activities include:

- Login
- Register
- Verify Account
- Forgot Password
- View Profile
- Update Profile
- Edit Details
- Change Password
- Change Image
- Logout

#### 1.2.1.2 *Module 2: Portal*

#### 1.2.1.2.1 Sub-module 1: Teacher Portal

The whole interface of the teacher's panel will be a part of this module. All the courses uploaded by the teachers will be in their portals. Teacher portal will help the teachers in:

- Uploading marks
- Uploading, viewing, editing, deleting and downloading assignments
- Uploading, deleting, editing and viewing Quizzes
- Uploading, deleting, editing and viewing lecture files
- Uploading, downloading, deleting and viewing Videos
- Uploading and viewing course calendar

#### 1.2.1.2.2 Sub-module 2: Student Portal

The whole interface of the student's panel will be a part of this module. All the courses taken by the students will be in their portals. Student portal will help the students in:

- Viewing marks
- Submitting, viewing and downloading assignments
- Submitting and viewing Quizzes
- Downloading and viewing lecture files
- Watching Videos
- Viewing and downloading course calendar

#### 1.2.1.3 Module 3: Admin Panel

Admin Panel will help in managing our web application. This module will include all the activities that the admin will perform. These activities include:

- Approve/Disapprove Course: The teacher can add any course, but this course will only be activated when the admin will approve this course. The teacher will write the details of the course and the status of the course will be "Pending for Approval". This course will be sent to the admin, the admin can approve or disapprove the course. If the admin approves the course, the teacher will be notified about it and the status of the course will change to "Activated". If the admin disapproves a course, then the teacher will be notified about it and the course will be automatically removed.
- Block/Unblock Accounts: The users can report an account and the admins will get that report and they can block the user. Likely, an admin can unblock any blocked user.

#### 1.2.1.4 Module 4: Notification and Messaging

#### 1.2.1.4.1 Submodule 1: Notification

The students will be able to receive the notifications when:

- Teacher will upload an assignment, quiz, lecture file, video for the course which student has subscribed.
- The teacher will make an announcement for a course.
- The teacher starts a conference video call.

The teachers will be able to make announcements that will be sent in the form of notifications to the students. The teachers will be notified when

- A student will subscribe for a course
- A student will submit assignment or quiz.
- A student will rate teacher or any of the course that the teacher is teaching.
- Admin will approve or disapprove a course.

#### 1.2.1.4.2 Submodule 2: Today Events

This submodule will work as a reminder for both student and teacher. This submodule will be just the notification submodule with a little amendment in it. This module will give only the daily reminders to the users (e.g., "Today is the last date for XXX assignment submission").

#### 1.2.1.4.3 Submodule 3: Messages

This submodule will be helpful for users' interaction with one another. The students can send messages to one another and to their teachers.

#### 1.2.1.4.4 Submodule 4: Classroom Chat

This chat will be in the online rooms where teachers will be using live streaming. During the live broadcasting the students will be able to send their queries to the teachers. This means that this submodule will provide a highly interactive platform to the users. In this online chat the user will be able to send messages, audios and files.

#### 1.2.1.5 Module 5: Communication using VoIP

This module will also help in increasing the ways of interaction between the users. The teacher and student both will be able to make audio calls. These audio calls can be one to one or one to many or many to many. Push-to-Talk functionality will also be provided in this module. The user will push "P" whenever he wants to speak, on releasing the P key microphone will be muted.

#### 1.2.1.6 Module 6: Conference Video Call

This module will be helpful for online courses. Online courses will be the courses in which the participants can join a room for mutual discussions. The teachers will be able to start a live broadcast in that room and students can join that live broadcast. Through this module the teachers will be able to give lectures by simply sharing the web camera. Conference video call will increase the student-teacher interaction. This functionality will only be limited to teachers, student won't be allowed to use Conference Video Call to share their web camera.

#### 1.2.1.7 Module 7: Auto Zoom

The auto zoom functionality of MOOC will make it stand out among other e-learning systems. The teachers can also use this feature online by enabling it during the conference video call (live broadcast). This module consists of following submodules:

#### 1.2.1.7.1 <u>Sub-module 1: Action Recognition</u>

This submodule will track the teacher by action recognition. Once the teacher is detected through his movements this feature will detect either he is speaking or writing on board.

#### 1.2.1.7.2 Sub-module 2: Smart Zooming

As soon as the action of teacher is detected, our auto zoom feature will start working. If the teacher is speaking, then the teacher will be the center of attention. If he is writing on board then that white board will be zoomed in. This module will be helpful for the students to view the board more properly.

#### 1.2.1.8 Module 8: Screen Sharing

Since not all teachers what to give lecture by making their own video so teachers need an alternate method to show slides or any screen content thus need for computer screen sharing. Teachers will be able to share their laptop screen with students during the live broadcast. The teachers will enable the "Screenshare" option for this functionality. Teacher's laptop/computer screen will be broadcasted to all the students who are online in the online classroom. This functionality will only be limited to teachers, student won't be able to use screen sharing to share their laptop screen.

#### 1.2.1.9 Module 9: E-learning Analytics

#### 1.2.1.9.1 Submodule 1: Recommended Courses

Using machine learning algorithm Courses suggestions will be tuned according to the student's subscription only those courses will display to the student that are relevant instead of showing all the courses. It will automatically learn new acquired taste of the student and will modify the recommendations according to it. It will help the student to choose courses that are useful for him and will save time for the student.

#### 1.2.1.9.2 Submodule 2: Top Courses

The most famous that are taken by most of the students will be shown to the students under the category of "Trending Courses".

#### 1.2.1.9.3 Submodule 3: Trending Courses' Analytics

This submodule is for admin. The admin will be able to view the top courses based on click and subscriptions. These courses will be shown in the form of tables and charts.

#### 1.2.1.9.4 Submodule 4: Visitors' Analytics

This submodule will show the number of visitors each week in the web application. These analytics will be shown in the form of graph.

## 2. Overall Description

## 2.1 Product perspective

In these modern times, e-learning is getting a lot of importance. Now a day's most of the students use different websites for learning purpose. All these websites have skilled teachers who use different specialized techniques to teach stuff to the students online. Though many e-learning systems already exist, yet our system will be a reimplementation of these systems with

innovation. It would be an all in one platform including video calls, audio calls, student's teacher's portal, direct messaging, live streaming, classroom chat and screensharing etc. This is how we can say that this website will increase the ease of usability of user, since now user do not need to move from one application to other for different functions. All the functionalities are in this single web application. The auto focus feature of our website makes it different from all other e-learning websites. Hence, we can say that our website will be the next evolved version of all e-learning systems till the present time.

#### 2.2 Operating environment

Following are the operating environments of our system:

- *OE-1:* The System shall operate correctly with the following web browsers: Firefox 68 or higher; Google Chrome 76 or higher; Edge 44 or higher.
- **OE-2:** Chrome version 76 or higher will must be needed for Screen Sharing to work.
- **OE-3:** Firefox 68 or higher; Google Chrome 76 or higher; will be needed for Video Calling to work
- **OE-4:** The system shall only work properly in Desktop browsers.

#### 2.3 Design and implementation constraints

Our system has following constraints:

- *CO-1:* Shall be using MERN stack to develop the system.
- CO-2: Shall use Keras for Neural network models, and tensorflow as a backend.
- **CO-3:** Shall use Python for machine learning and deep learning.
- **CO-4:** Shall use *OpenCVJs* for Image Processing.
- *CO-5:* The system shall use REST API to handle request and responses.
- *CO-7:* We shall use S7 Camera as external Web Cam for testing purposes since a Camera with minimum 5 Megapixels is Required.
- **CO-8:** The system shall need at least 5 Megapixels camera and maximum of 720p video quality support.

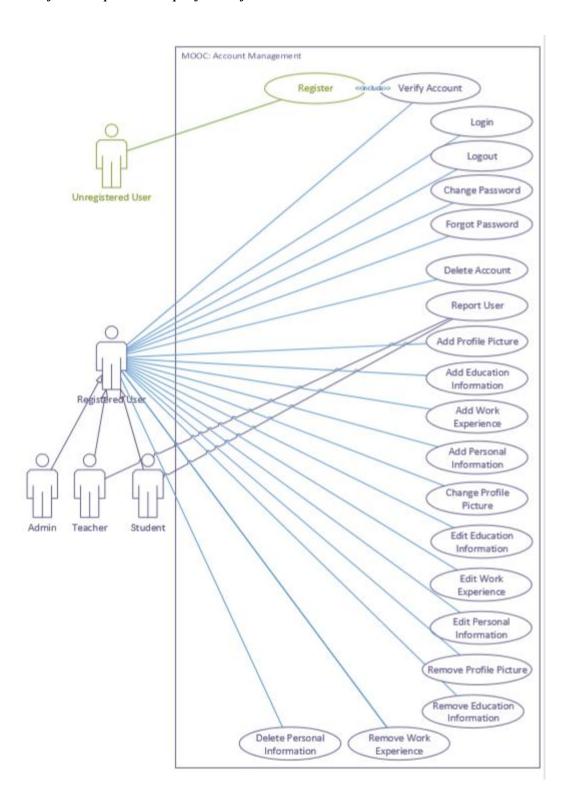
## 3. Requirement Identifying Technique

#### 3.1 Use Case Diagram:

The use case diagrams of our system are divided into following parts:

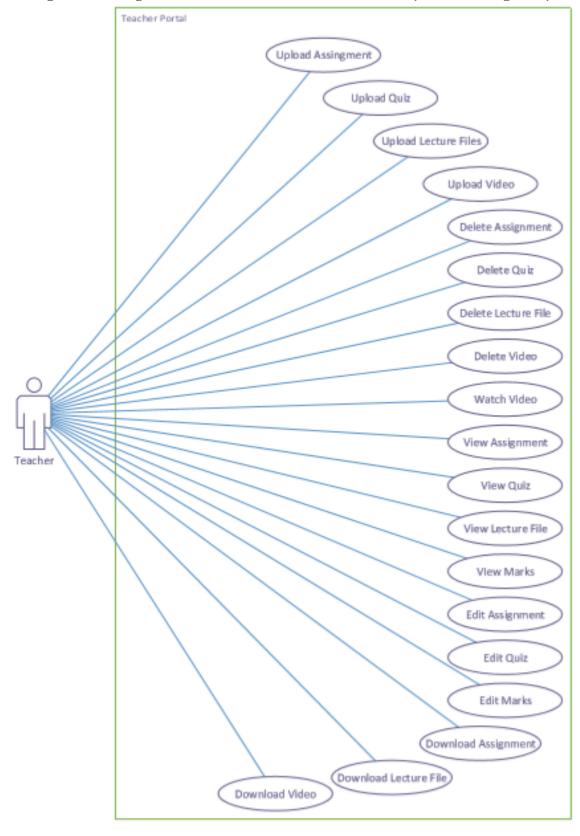
#### 3.1.1 Use Case Diagram: Account Management

Following use case diagram consist of all the use cases of module 1.



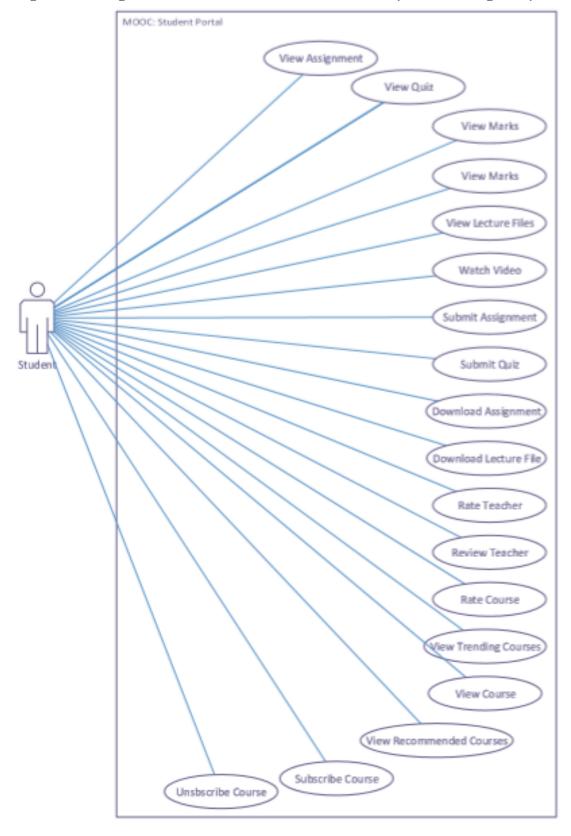
#### 3.1.2 Use Case Diagram: Teacher Portal

Following use case diagram shows the activities that teacher shall perform through his portal.



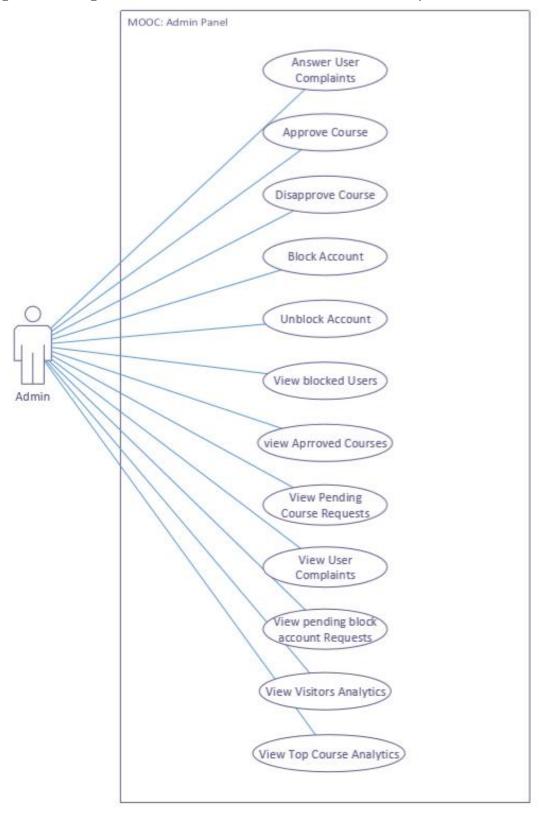
#### 3.1.3 Use Case Diagram: Student Portal

Following use case diagram shows the activities that student shall perform through his portal.



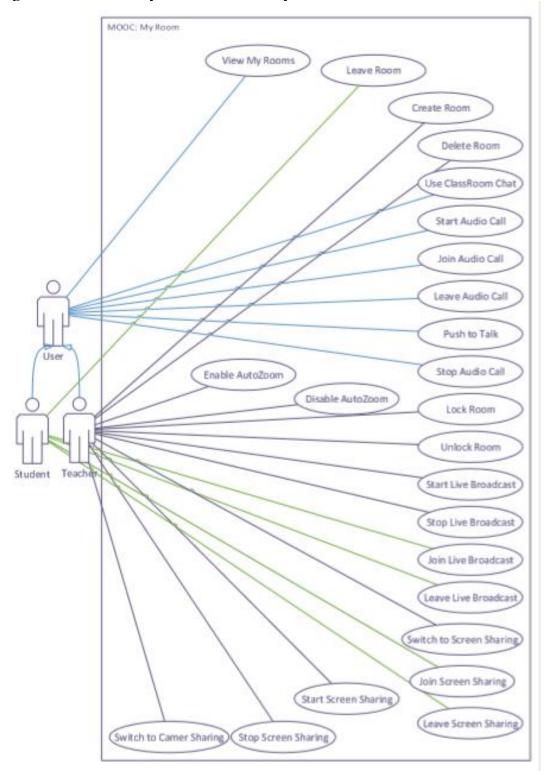
#### 3.1.4 Use Case Diagram: Admin Panel

Following use case diagram consist of all the activities that an admin will perform.



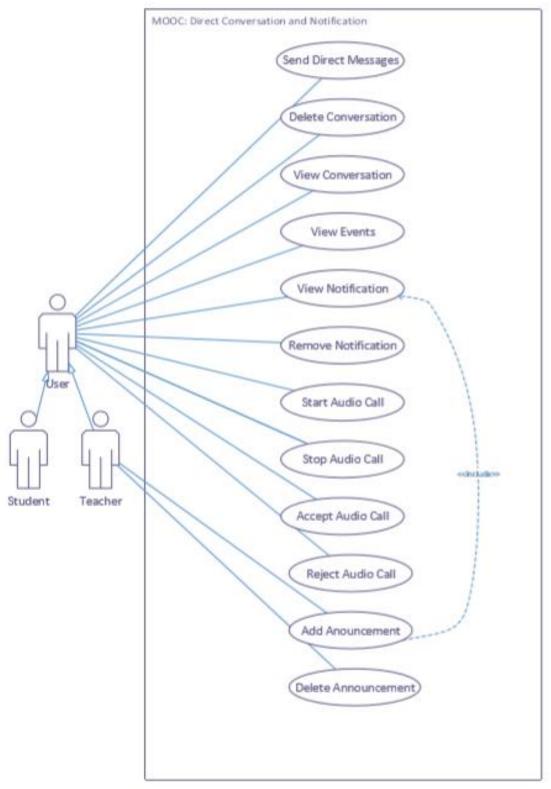
#### 3.1.5 Use Case Diagram: My Room

This diagram consists of all the activities that actors can perform within the room. This diagram shows 1 to many communication ways.



#### 3.1.6 Use Case Diagram: 1-1 Communication & Notifications

Following use case diagram would consist of one to one communication that actors can perform and notifications.



## 3.2 Use Case Description

All of the modules of our system consist of certain use cases. These use cases are described below, under the heading of their relevant modules.

## 3.2.1 Module 1: Account Management

Use case ID	Use case Name
M1-UC-1.1	Register
M1-UC-1.2	Login
M1-UC-1.3	Verify Account
M1-UC-1.4	Change Password
M1-UC-1.5	Forgot Password
M1-UC-1.6	Add Profile Picture
M1-UC-1.7	Delete Profile Picture
M1-UC-1.8	Change Profile picture
M1-UC-1.9	View Profile
M1-UC-1.10	Add Education Information
M1-UC-1.11	Delete Education Information
M1-UC-1.12	Add Work Experience
M1-UC-1.13	Delete Work Experience
M1-UC-1.14	Add Personal Information
M1-UC-1.15	Delete Personal Information
M1-UC-1.16	Check Privacy Settings
M1-UC-1.17	Edit Education Information
M1-UC-1.18	Edit Work Experience
M1-UC-1.19	Edit Personal Information
M1-UC-1.20	Change Privacy Settings
M1-UC-1.21	Logout
M1-UC-1.22	Report User
M1-UC-1.23	Delete Account

Table: Module 1: Account Management

## UC-1.1: Register

Use Case ID	M1-UC-1.1
<b>Use Case Name</b>	Register
Actors	Unregistered User
Description	User will be able to create an account in web application.
Trigger User will click on "Join Us" button.	
<b>Pre-conditions</b>	<b>PRE-01:</b> Internet connection is available and working properly.
Post-conditions	POST-01: User account created successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user opens the MOOC web application.
	<b>NF-02:</b> The user will click on "Join Us" button.

	<i>NF-03:</i> User will enter all the details.
	<i>NF-04:</i> The user will click on signup button
<b>Alternative Flow</b>	N/A
Exceptions	<i>E-01:</i> The email is already registered.
_	<i>E-02:</i> The password is too weak.
	<i>E-03:</i> The server is not available.
Business Rule BR-01: User will use his unique email for registration.	
<b>Assumptions</b> 1. The user should have basic knowledge of using browser and w	
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-1.1 Register

## UC-1.2: Login

Use Case ID	M1-UC-1.2
Use Case Name	Login
Actors	Admin, Teacher, Student
Description	The user will be able to access their portal by logging into their account.
Trigger	The user clicks on "Login".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be registered.
Post-conditions	<b>POST-01:</b> The user is logged in to his respective account.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> User opens the web application.
	<i>NF-02:</i> The user enters his email and password.
	<i>NF-03:</i> The user clicks on "Login" button.
<b>Alternative Flow</b>	N/A
Exceptions	<i>E-01:</i> User is not registered.
	<i>E-01:</i> The server is not available.
<b>Business Rule</b>	<b>BR-01:</b> The user should be registered.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.2 Login

## **UC-1.3: Verify Account**

Use Case ID	M1-UC-1.3
<b>Use Case Name</b>	Verify Account
Actors	Admin, Teacher, Student
Description	After the registration, the user will be asked to verify account by visiting
_	his email and writing the passcode sent to him in his email.

Trigger	The user click in verify.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should have filled the form for registration.
<b>Post-conditions</b>	<b>POST-01:</b> The user's account will be verified and he will get access to
	his account.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will visit his email.
	<i>NF-02:</i> The user will copy the passcode from there.
	<i>NF-03:</i> The user will fill the field of passcode.
	<i>NF-04:</i> The user will click on verify.
Alternative Flow	If the email is not sent to the user:
	AF-01: The user will click on "Resend me email".
	<i>AF-02:</i> The user will visit his email.
	<i>AF-03:</i> The user will copy the passcode from there.
	<i>AF-04:</i> The user will fill the field of passcode.
	AF-05: The user will click on verify.
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.3 Verify Account

## **UC-1.4: Change Password**

Use Case ID	M1-UC-1.4
Use Case Name	Change Password
Actors	Admin, Teacher, Student
Description	The user can change his account password.
Trigger	The user will click on "Change Password".
<b>Pre-conditions</b>	PRE-01: The user logs in.
Post-conditions	POST-01: The password is changed.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on change password.
	<i>NF-02:</i> The user will enter his current password.
	<b>NF-03:</b> The user will enter his new password.
	<b>NF-04:</b> The user will confirm his password.
	<b>NF-05:</b> The user will click on "Change".
Alternative Flow	If the user enters wrong current password:
	<b>AF-01:</b> The user will reenter his current password.
	<b>AF-02:</b> The user will enter his new password.
	<b>AF-03:</b> The user will confirm his password.
	AF-04: The user will click on "Change".
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The user should have a strong password.
Assumptions	1. The user has internet availability.

2. The user understands English language.
3. The user knows how to use browser and web application.

**Table: UC-1.4 Change Password** 

## **UC-1.5: Forgot Password**

Use Case ID	M1-UC-1.5
Use Case Name	Forgot Password
Actors	Student, Teacher, Admin
Description	During log in if the user forgets his password then he can click on forgot password.
Trigger	The user will click on forgot password.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be registered.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to set a new password.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Forgot Password".
	<i>NF-02:</i> The user will enter his email to verify his identity.
	<i>NF-03:</i> The user will enter his new password.
	NF-04: The user will click on "Reset" button.
Alternative Flow	If the email entered by user is not registered:
	<i>AF-01:</i> The user will reenter his email to verify his identity.
	AF-02: The user will enter his new password.
	AF-03: The user will click on "Reset" button.
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The user should be registered.
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.5 Forgot Password** 

## **UC-1.6: Add Profile Picture**

Use Case ID	M1-UC-1.6
<b>Use Case Name</b>	Add Profile Picture
Actors	Teacher, Student
Description	The user will be able to add his profile picture.
Trigger	The user will click on "Add image".
<b>Pre-conditions</b>	PRE-01: The user is logged in.
Post-conditions	POST-01: The user has uploaded an image.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Add image".
	NF-02: The user will click on "Upload Image".
	NF-03: The user will click on "Save Image"

<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.6 Add Profile Picture** 

## **UC-1.7: Delete Profile Picture**

Use Case ID	M1-UC-1.7
Use Case Name	Delete Profile Picture
Actors	Teacher, Student
Description	The user will be able to delete his profile picture.
Trigger	The user will click on "Delete image".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	POST-01: The user has deleted profile picture.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Delete Image".
	NF-02: The user will click on "Save Image"
Alternative Flow	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.7 Add Profile Picture** 

## **UC-1.8: Change Profile Picture**

Use Case ID	M1-UC-1.8
Use Case Name	Change Profile Picture
Actors	Student, Teacher
Description	The user will be able to change his existing image with a new image.
Trigger	The user will click on "Update".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The user should have uploaded any image before.
<b>Post-conditions</b>	<b>POST-01:</b> The user would be able to update his profile picture.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Update".
	<i>NF-02:</i> The user will upload a picture.

	<i>NF-03:</i> The user will click on save button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.8 Change Profile Picture** 

## **UC-1.9: View Profile**

Use Case ID	M1-UC-1.9
<b>Use Case Name</b>	View Profile
Actors	Teacher, Students
Description	The user will be able to view his profile.
Trigger	The user will click in "Profile Name" or "Profile Picture".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The user will be able to view his profile.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Profile Name" or "Profile Picture".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.9 View Profile** 

## **UC-1.10: Add Education Information**

Use Case ID	M1-UC-1.10
Use Case Name	Add Education Information
Actors	Teacher, Student
Description	The user will be able to add all the education information about him.
Trigger	The user will click on "Add Education Information"
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The education information of the user will be added to his profile.

Normal Flow	Normal flow will be:  NF-01: The user will click on "Add Education information".  NF-02: The user will add the information.  NF-03: The user will click on save button.
Alternative Flow	N/A
Exceptions	N/A
Business Rule	<b>BR-01:</b> The user should fill all the fields while entering a particular qualification degree.
Assumptions	<ol> <li>The user has internet availability.</li> <li>The user understands English language.</li> <li>The user knows how to use browser and web application.</li> </ol>

**Table: UC-1.10 Add Education Information** 

## **UC-1.11: Delete Education Information**

Use Case ID	M1-UC-1.11
Use Case Name	Delete Education Information
Actors	Teacher, Student
Description	The user will be able to delete the education information about him.
Trigger	The user will click on "Cross" icon against that information.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
<b>Post-conditions</b>	<b>POST-01:</b> The education information of the user will be deleted from
	his profile.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Education information".
	<b>NF-02:</b> The user will click on "Cross" icon against that information.
	<i>NF-03:</i> The user will click on save button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The user should fill all the fields while entering a particular
	qualification degree.
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.11 Delete Education Information** 

## **UC-1.12: Add Work Experience**

Use Case ID	M1-UC-1.12
<b>Use Case Name</b>	Add Work Experience
Actors	Student, Teacher

The user will be able to add work experience to his profile.
The user will click on "Add Work Experience".
<b>PRE-01:</b> The user should be logged in.
<b>POST-01:</b> The work experience of the user is updated.
Normal flow will be:
<b>NF-01:</b> The user will click on "Add Work experience".
<i>NF-02:</i> The user will add information.
<i>NF-03:</i> The user will click on save button.
N/A
N/A
<b>BR-01:</b> The user should fill all the fields for a particular work
experience.
1. The user has internet availability.
2. The user understands English language.
3. The user knows how to use browser and web application.

Table: UC-1.12 Add Work Experience

## **UC-1.13: Delete Work Experience**

Use Case ID	M1-UC-1.13
<b>Use Case Name</b>	Delete Work Experience
Actors	Student, Teacher
Description	The user will be able to delete work experience from his profile.
Trigger	The user will click on "Cross" icon against that information.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The work experience of the user is deleted.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "cross" icon against that information.
	<i>NF-02:</i> The user will click on save button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	BR-01: The user should fill all the fields for a particular work
	experience.
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.13 Add Work Experience

## **UC-1.14: Add Personal Information**

Use Case ID	M1-UC-1.14
Use Case Name	Add Personal Information
Actors	Student, Teacher
Description	The user would be able to add his personal information in his profile.
Trigger	The user will click on "Add Personal Information".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
<b>Post-conditions</b>	<i>POST-01:</i> The profile of the user will be updated.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Add Personal Information".
	<i>NF-02:</i> The user will add information.
	<i>NF-03:</i> The user will click on save.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.14 Add Personal Information** 

## **UC-1.15: Delete Personal Information**

Use Case ID	M1-UC-1.15
<b>Use Case Name</b>	Delete Personal Information
Actors	Student, Teacher
Description	The user would be able to delete his personal information in his profile.
Trigger	The user will click on "Cross" icon against that information.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	POST-01: That information will be deleted.
Normal Flow	Normal flow will be: <i>NF-01:</i> The user will click on "Cross" information against that information. <i>NF-02:</i> The user will click on save.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.15 Delete Personal Information** 

## **UC-1.16: Check Privacy Settings**

Use Case ID	M1-UC-1.16
Use Case Name	Check Privacy Settings
Actors	Student, Teacher
Description	The user will check his privacy settings.
Trigger	The user will click on "Privacy Settings"
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The user would be able to check privacy settings of his profile.
Normal Flow	Normal flow will be:  NF-01: The user will click on Privacy settings.  NF-02: The user will check the settings.  NF-03: The user will click on save button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumption	1. The user has internet availability.
	2. The user understands English language.
Faller IIC 1 16 Charle Prime	3. The user knows how to use browser and web application.

**Table: UC-1.16 Check Privacy Settings** 

## **UC-1.17: Edit Education Information**

Use Case ID	M1-UC-1.17
Use Case Name	Edit Education Information
Actors	Teacher, Student
Description	The user will be able to edit all the education information about him.
Trigger	The user will click on "Edit"
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	PRE-02: The user should have already entered some educational
	information.
Post-conditions	<b>POST-01:</b> The education information of the user will be updated to his
	profile.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Education information".
	<i>NF-02:</i> The user will click in edit.
	<i>NF-03:</i> The user will add the information.
	<i>NF-04:</i> The user will click on save button.
Alternative Flow	N/A
Exceptions	NA

<b>Business Rule</b>	<b>BR-01:</b> The user should fill all the fields while entering a particular
	qualification degree.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.17 Edit Education Information** 

## **UC-1.18: Edit Work Experience**

Use Case ID	M1-UC-1.18
Use Case Name	Edit Work Experience
Actors	Student, Teacher
Description	The user will be able to update work experience to his profile.
Trigger	The user will click on "Edit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The user should have already added some work experience.
Post-conditions	<b>POST-01:</b> The work experience of the user is updated.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Work experience".
	<i>NF-02:</i> The user will click on edit.
	<i>NF-03:</i> The user will add information.
	<i>NF-04:</i> The user will click on save button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	BR-01: The user should fill all the fields for a particular work
	experience.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.18 Edit Work Experience** 

## **UC-1.19: Edit Personal Information**

Use Case ID	M1-UC-1.19
Use Case Name	Edit Personal Information
Actors	Student, Teacher
Description	The user would be able to update his personal information in his profile.
Trigger	The user will click on "Edit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The user should have already added some personal information
	before.
<b>Post-conditions</b>	<i>POST-01:</i> The profile of the user will be updated.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Personal Information".

	NF-02: The user will click on edit. NF-03: The user will add information. NF-04: The user will click on save.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-1.19 Edit Personal Information** 

## **UC-1.20: Change Privacy Settings**

Use Case ID	M1-UC-1.20
Use Case Name	Change Privacy Settings
Actors	Student, Teacher
Description	The user will change his privacy settings.
Trigger	The user will click on "Privacy Settings"
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The user would be able to update the privacy setting of his profile.
Normal Flow	Normal flow will be:  NF-01: The user will click on Privacy settings.  NF-02: The user will click on "Change".  NF-02: The user will check the settings.  NF-03: The user will click on save button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumption	1. The user has internet availability.
	<ul><li>2. The user understands English language.</li><li>3. The user knows how to use browser and web application.</li></ul>
	3. The user knows now to use browser and web application.

Table21: UC-1.20 Change Privacy Settings

## UC-1.21: Logout

Use Case ID	M1-UC-1.21
<b>Use Case Name</b>	Logout
Actors	Student, Teacher, Admin
Description	The user will be able to sign out.
Trigger	The user will click on "Logout".

<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The user will be logged out of his account.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Logout".
Alternative Flow	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.21 Logout

## UC-1.22: Report User

Use Case ID	M1-UC-1.22
Use Case Name	Report User
Actors	Teacher
Description	The user will be able to report the user if he has some issue with that
	user.
Trigger	The user will click on "Report".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
<b>Post-conditions</b>	<b>POST-01:</b> The user is reported successfully.
Normal Flow	Normal flow will be:
	NF-01: The teacher will click on "Report".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher can report the user.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.22 Report User

## **UC-1.23: Delete Account**

Use Case ID	M1-UC-1.23
<b>Use Case Name</b>	Delete Account
Actors	Teacher, Student
Description	The user will be able to delete his account.
Trigger	The user will click on "Delete My Account".

<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The account is deleted successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on "Delete My Account".
	<i>NF-02:</i> The user will enter his password.
	<b>NF-03:</b> The teacher will click on "Delete".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> If a user deletes his account, he will no more be the owner of his
	account and he have to again register to have an account.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-1.23 Delete Account

## 3.2.2 Module 2: Portal

Use case ID	Use case Name
M2-UC-2.1	Upload Assignment
M2-UC-2.2	View Assignment
M2-UC-2.3	Download Assignment
M2-UC-2.4	Delete Assignment
M2-UC-2.5	Edit Assignment
M2-UC-2.6	Submit Assignment
M2-UC-2.7	Upload Quiz
M2-UC-2.8	View Quiz
M2-UC-2.9	Delete Quiz
M2-UC-2.10	Edit Quiz
M2-UC-2.11	Submit Quiz
M2-UC-2.12	Upload Marks
M2-UC-2.13	View Marks
M2-UC-2.14	Edit Marks
M2-UC-2.15	Upload Lecture File
M2-UC-2.16	View Lecture File
M2-UC-2.17	Download Lecture File
M2-UC-2.18	Delete Lecture File
M2-UC-2.19	Save Video
M2-UC-2.20	Watch Video
M2-UC-2.21	Download Video
M2-UC-2.22	Uploads Video
M2-UC-2.23	Delete Video
M2-UC-2.24	Subscribe Course
M2-UC-2.25	Unsubscribe Course
M2-UC-2.26	Rate Teacher
M2-UC-2.27	Review Teacher

M2UC-2.28	Rate Course
M2-UC-2.29	Review Course
M2-UC-2.30	Add Course
M2-UC-2.31	Edit Course
M2-UC-2.32	Delete Course
M2-UC-2.33	View Course
M2-UC-2.34	View Course Subscribers
M2-UC-2.35	View Other's Profile
M2-UC-2.36	View My Rooms
M2-UC-2.37	Join Room
M2-UC-2.38	Leave Room
M2-UC-2.39	Create Room
M2-UC-2.40	Edit Room
M2-UC-2.41	Delete Room
M2-UC-2.42	View Room
M2-UC-2.43	Remove Student from Room
M2-UC-2.44	Search
M2-UC-2.45	Send Complaints
M2-UC-2.46	Open Quiz

**Table: Module 2: Portal** 

## **UC-2.1: Upload Assignment**

Use Case ID	M2-UC-2.1
Use Case Name	Upload Assignment
Actors	Teacher
Description	The assignment will be uploaded by the teacher and the students will get this assignment on their portals.
Trigger	User will click on "Upload" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has added the course.
Post-conditions	<b>POST-01:</b> The assignment uploaded successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on assignment.
	<i>NF-02:</i> The user will click on "Upload" button.
	<i>NF-03:</i> The teacher will upload the assignment and fill the description
	and due date fields.
	<i>NF-04:</i> The teacher will click on save.
Alternative Flow	The user has already uploaded 4 assignments and he cannot add any other one. He will get the option of deleting the uploaded assignment. <i>AF-01:</i> The teacher will select any assignment to delete. <i>AF-02:</i> The user will click on "Upload" button.
	<b>AF-03:</b> The teacher will upload the assignment and fill the description
	and due date fields.
	AF-04: The teacher will click on save.
Exceptions	<i>E-01:</i> The user has already uploaded 4 assignments.
<b>Business Rule</b>	<b>BR-01:</b> The teacher cannot upload more than 4 assignments.

Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet access.

**Table: UC-2.1 Upload Assignment** 

## **UC-2.2: View Assignment**

Use Case ID	M2-UC-2.2
Use Case Name	View Assignment
Actors	Teacher, Student
Description	The user will be able to view the assignment from their portals.
Trigger	The user clicks on "View".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The assignments are uploaded.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the assignment.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "View"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.2 View Assignment** 

## **UC-2.3: Download Assignment**

Use Case ID	M2-UC-2.3
Use Case Name	Download Assignment
Actors	Teacher, Student
Description	The student and teacher both will have the option of downloading the
	assignment.
Trigger	The user click on download.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The assignment is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The assignment will be downloaded in user's system.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Download".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.

2. The user understands English language.
3. The user knows how to use browser and web application.

Table: UC-2.3 Download Assignment

## **UC-2.4: Delete Assignment**

Use Case ID	M2-UC-2.4
<b>Use Case Name</b>	Delete Assignment
Actors	Teacher
Description	The teacher can delete the uploaded assignment.
Trigger	The user will click on "Delete".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The assignment is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The assignment is deleted successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on "Delete".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table29: UC-2.4 Delete Assignment

## **UC-2.5: Edit Assignment**

Use Case ID	M2-UC-2.5
Use Case Name	Edit Assignment
Actors	Teacher
Description	The teacher can edit the uploaded assignment.
Trigger	The user will click on "Edit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The assignment is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The assignment is edited successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on "Edit".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> If an assignment is edited by the teacher, the students will be
	notified about it.
Assumptions	1. The user has internet availability.
	2. The user understands English language.

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3. The user knows how to use browser and web application.
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Table30: UC-2.5 Edit Assignment

## **UC-2.6: Submit Assignment**

Use Case ID	M2-UC-2.6
Use Case Name	Submit Assignment
Actors	Student
<b>Description r</b>	The student will be able to submit the assignment.
Trigger	The student will click on "Submit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The assignment is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The student has submitted the assignment successfully.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Upload".
	<i>NF-02:</i> The user will upload the assignment.
	NF-03: The user will click on "Submit".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The user will not be able to submit the assignment after due date.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.
able IIC 2 6 Submit Agging	4

Table: UC-2.6 Submit Assignment

## UC-2.7: Upload Quiz

Use Case ID	M2-UC-2.7
<b>Use Case Name</b>	Upload Quiz
Actors	Teacher
Description	The quiz will be uploaded by the teacher and the students will get this quiz on their portals.
Trigger	User will click on "Upload" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has added the course.
<b>Post-conditions</b>	<b>POST-01:</b> The quiz uploaded successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on quiz.
	<i>NF-02:</i> The user will click on "Upload" button.
	<i>NF-03:</i> The teacher will upload the quiz and fill the description and date
	fields.
	<b>NF-04:</b> The teacher will click on save.

Alternative Flow	The user has already uploaded 4 quizzes and he cannot add any other one. He will get the option of deleting the uploaded quiz. <i>AF-01:</i> The teacher will select any quiz to delete. <i>AF-02:</i> The user will click on "Upload" button. <i>AF-03:</i> The teacher will upload the quiz and fill the description and date fields. <i>AF-04:</i> The teacher will click on save.
Exceptions	<i>E-01:</i> The user has already uploaded 4 quizzes.
<b>Business Rule</b>	<b>BR-01:</b> The teacher cannot upload more than 4 quizzes. <b>BR-02:</b> Images should not be included in the quiz.
Assumptions	<ol> <li>The user should have basic knowledge of using browser and websites.</li> <li>The user should understand English.</li> <li>The user should have internet available.</li> </ol>

Table: UC-2.7 Upload Quiz

# UC-2.8: Open Quiz

Use Case ID	M2-UC-2.8
<b>Use Case Name</b>	View Quiz
Actors	Teacher, Student
Description	The user will be able to view the quiz from their portals.
Trigger	The user clicks on "View".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The quiz is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the quiz.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "View"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.8 View Quiz** 

## UC-2.9: Delete Quiz

Use Case ID	M2-UC-2.9
<b>Use Case Name</b>	Delete Quiz
Actors	Teacher
Description	The teacher can delete the uploaded quiz.
Trigger	The user will click on "Delete".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The quiz is uploaded.

Post-conditions	<b>POST-01:</b> The quiz is deleted successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on "Delete".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.9 Delete Quiz** 

## UC-2.10: Edit Quiz

Use Case ID	M2-UC-2.10
Use Case Name	Edit Quiz
Actors	Teacher
Description	The teacher will be able to edit the uploaded quiz.
Trigger	The Teacher will click on "Edit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The quiz is uploaded.
<b>Post-conditions</b>	<b>POST-01:</b> The teacher has edited the quiz successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Edit".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> If a quiz is edited by the teacher, the students will be notified
	about it.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.10 Edit Quiz

# UC-2.11: Submit Quiz

Use Case ID	M2-UC-2.11
Use Case Name	Submit Quiz
Actors	Student
Description	The student will be able to submit the quiz.
Trigger	The student will click on "Submit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The quiz is uploaded.
Post-conditions	<b>POST-01:</b> The student has submitted the quiz successfully.

Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Submit".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The user will not be able to submit the quiz after due date.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.11 Submit Quiz

## **UC-2.12: Upload Marks**

Use Case ID	M2-UC-2.12
Use Case Name	Upload Marks
Actors	Teacher
Description	The marks will be uploaded by the teacher and the students will view
	these marks on their portals.
Trigger	User will click on "Upload" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has added the course.
<b>Post-conditions</b>	<b>POST-01:</b> The marks are uploaded successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on marks.
	<i>NF-02:</i> The teacher will upload the marks.
	<i>NF-03:</i> The teacher will click on save.
Alternative Flow	The teacher can also upload an excel sheet of marks.
	<b>AF-01:</b> The teachers will click on upload marks sheet.
	<i>AF-02:</i> The teacher will upload the sheet.
	AF-03: The teacher will click on save.
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The teacher cannot upload marks of more than 4 assignments.
	<b>BR-02:</b> The teacher cannot upload marks of more than 4 quizzes.
	<b>BR-03:</b> If an assignment is deleted by teacher, its uploaded marks will
	also be deleted.
	<b>BR-04:</b> If a quiz is deleted by teacher, its marks will also be deleted.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-2.12 Upload Marks

## **UC-2.13: View Marks**

Use Case ID	M2-UC-2.13
<b>Use Case Name</b>	View Marks

Actors	Teacher, Student
Description	The users will be able to view the marks from their portals.
Trigger	The user clicks on "View".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The marks should be uploaded.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the marks.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "View"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.13 View Marks

## UC-2.14: Edit Marks

Use Case ID	M2-UC-2.14
Use Case Name	Edit Marks
Actors	Teacher
Description	The Teachers will be able to edit the uploaded marks.
Trigger	The user will click on Edit.
<b>Pre-conditions</b>	<ul><li>PRE-01: The user should be logged in.</li><li>PRE-02: The marks should be uploaded.</li></ul>
<b>Post-conditions</b>	<b>POST-01:</b> The marks will be edited.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Edit".
	<i>NF-02:</i> The user will edit the marks.
	NF-03: The user will click on "Save Changes".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.14 Edit Marks

## **UC-2.15: Upload Lecture File**

Use Case ID	M2-UC-2.15
Use Case Name	Upload Lecture File

Actors	Teacher
Description	The lecture file will be uploaded by the teacher and the students will get
_	this lecture file on their portals.
Trigger	User will click on "Upload" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has added the course.
<b>Post-conditions</b>	<b>POST-01:</b> The lecture file is uploaded successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on lecture files.
	<i>NF-02:</i> The user will click on "Upload" button.
	<b>NF-03:</b> The teacher will upload the lecture file and fill the description
	fields.
	<i>NF-04:</i> The teacher will click on save.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-2.15 Upload Lecture Files** 

## **UC-2.16: View Lecture Files**

Use Case ID	M2-UC-2.16
Use Case Name	View Lecture Files
Actors	Teacher, Student
Description	The user will be able to view the lecture files from their portals.
Trigger	The user clicks on "View".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The lecture file is posted.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the lecture file.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "View"
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.16 View Lecture File** 

# **UC-2.17: Download Lecture File**

Use Case ID	M2-UC-2.17
<b>Use Case Name</b>	Download Lecture File
Actors	Teacher, Student
Description	The student and teacher both will have the option of downloading the
	lecture file.
Trigger	The user will click on download.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The is posted.
Post-conditions	<b>POST-01:</b> The assignment will be downloaded in user's system.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Download".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.17 Download Lecture File

# **UC-2.18: Delete Lecture File**

TI C TD	152 153 2 10
Use Case ID	M2-UC-2.19
<b>Use Case Name</b>	Delete Lecture File
Actors	Teacher
Description	The teacher can delete the uploaded file.
Trigger	The user will click on "Delete".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The file is uploaded.
<b>Post-conditions</b>	<i>POST-01:</i> The file is deleted successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on "Delete".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.18 Delete Lecture File** 

## UC-2.19: Save Video

Use Case ID	M2-UC-2.19
<b>Use Case Name</b>	Save Video
Actors	Teacher
Description	After the conference video call has ended, the teacher will get an option that do you want to save this as a video in your course profile or not.
Trigger	The user will click on "Save".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher has ended the conference video call.
<b>Post-conditions</b>	<i>POST-01:</i> The user will be able to save the video.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Save"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.19 Save Video

## UC-2.20: Watch Video

Use Case ID	M2-UC-2.20
Use Case Name	Watch Video
Actors	Teacher, Student
Description	The user will be able to watch videos.
Trigger	The user will click on "Paly Icon".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher should have uploaded the video.
<b>Post-conditions</b>	<b>POST-01:</b> The video will stay playing.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Play Icon".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.20 Watch Videos

# UC-2.21: Download Video

Use Case ID	M2-UC-2.21
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Use Case Name	Download Video
Actors	Teacher
Description	Only teachers will be able to download their videos can use it anywhere
	else.
Trigger	The user will click on "Download".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher has uploaded or saved the video.
<b>Post-conditions</b>	<b>POST-01:</b> The video will be downloaded in the system of user.
Normal Flow	Normal flow will be:
	NF-01: The user will click on "Download".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.21 Download Video

## UC-2.22: Upload Video

Use Case ID	M2-UC-2.22
Use Case Name	Upload Video
Actors	Teacher
Description	The teachers can also upload any video from their system.
Trigger	The user will click on "Upload Video".
<b>Pre-conditions</b>	<ul><li>PRE-01: The teacher should be logged in.</li><li>PRE-02: The teacher should have uploaded a course for which he is uploading the video.</li></ul>
Post-conditions	POST-01: The video will be uploaded.
Normal Flow	Normal flow will be:  NF-01: The user will click on "Upload Video".  NF-02: The teacher will select the video.  NF-03: The teacher will click on save.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	<ol> <li>The user has internet availability.</li> <li>The user understands English language.</li> <li>The user knows how to use browser and web application.</li> </ol>

Table: UC-2.22 Upload Video

# **UC-2.23: Delete Video**

Use Case ID	M2-UC-2.23
Use Case Name	Delete Video
Actors	Teacher
Description	The teacher can delete any video uploaded or saved by him for the
	courses.
Trigger	User will click on "Delete" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has uploaded or saved the video.
<b>Post-conditions</b>	<i>POST-01:</i> The video will be deleted successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher will click on delete button.
	<b>NF-02:</b> The user will get the alert message saying "Are you sure you
	want to delete this video".
	<i>NF-03:</i> The teacher will click on "Yes".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher can delete the video.
Assumptions	1. The user should have basic knowledge of using browser and websites.
_	2. The user should understand English.
	3. The user should have internet available.

Table: UC-2.23 Delete Video

## **UC-2.24: Subscribe Course**

Use Case ID	M2-UC-2.24
<b>Use Case Name</b>	Subscribe Course
Actors	Student
Description	The student can subscribe the course that he want to take.
Trigger	The user clicks on "Subscribe".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The course is uploaded by the teacher.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view get notifications of that course
	and he will be able to view the contents posted by teacher for that course.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Subscribe" button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.24 Subscribe Course

## **UC-2.25: Unsubscribe Course**

Use Case ID	M2-UC-2.23
Use Case Name	Unsubscribe Course
Actors	Student
Description	The student can easily withdraw or unfollow a course by simply unsubscribing that course.
Trigger	The user will click on "Unsubscribe".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The user should have subscribed that course.
<b>Post-conditions</b>	<b>POST-01:</b> The user will successfully unsubscribe the course.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Unsubscribe".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.25 Unsubscribe Course** 

## UC-2.26: Rate Teacher

Use Case ID	M2-UC-2.26
Use Case Name	Rate Teacher
Actors	Student
Description	The student will be able to give star ratings to the teachers.
Trigger	The student will click on the star he/she want to give to that teacher.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The user should have ended the course.
Post-conditions	<b>POST-01:</b> The student has rated the teacher successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on star.
	NF-02: The user will click on "Save".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> At the end of every course, it is compulsory for students to rate
	their teachers.
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.26 Rate Teacher

## **UC-2.27: Review Teacher**

Use Case ID	M2-UC-2.27
Use Case Name	Review Teacher
Actors	Student
Description	The students will be able to give comments about their teachers.
Trigger	User will click on "Review" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The student is logged in.
	<b>PRE-02:</b> The students should have completed the course.
<b>Post-conditions</b>	<b>POST-01:</b> The review uploaded successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The students will click on "Review Teacher".
	<i>NF-02:</i> The user will fill the review text field.
	<i>NF-03:</i> The teacher will click on save.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> At the end of every course, it is compulsory for students to rate
	their teachers.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-2.27 Review Teacher

## UC-2.28: Rate Course

Use Case ID	M2-UC-2.28
Use Case Name	Rate Course
Actors	Student
Description	The student will be able to give star rating to course.
Trigger	The user clicks on "Rate Course".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The student should have completed the course.
<b>Post-conditions</b>	<b>POST-01:</b> Star rating will be given to the course by the student
	successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on star.
	<i>NF-02:</i> The user will click on "Save".
<b>Alternative Flow</b>	N/A
Exceptions	N/A

<b>Business Rule</b>	<b>BR-01:</b> At the end of every course, it is compulsory for students to rate
	the course.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.28 Rate Course** 

## **UC-2.29: Review Course**

<b>Use Case ID</b>	M2-UC-2.28
<b>Use Case Name</b>	Review Course
Actors	Student
Description	The students will be able to give comments about their course.
Trigger	User will click on "Review" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The student is logged in.
	<b>PRE-02:</b> The students should have completed the course.
<b>Post-conditions</b>	<b>POST-01:</b> The review uploaded successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The students will click on "Review Course".
	<i>NF-02:</i> The user will fill the review text field.
	<i>NF-03:</i> The teacher will click on save.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> At the end of every course, it is optional for students to review
	the course.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table54: UC-2.29 Review Course

## UC-2.30: Add Course

Use Case ID	M2-UC-2.30
<b>Use Case Name</b>	Add Course
Actors	Teacher
Description	The teacher will be able add a course by adding course details.
Trigger	The student will click on "Add Course".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Dant	DOCT 01. Th
Post-conditions	<i>POST-01:</i> The course will be added.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Submit".

Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	BR-01:
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.30 Add Course

## UC-2.31: Edit Course

Use Case ID	M2-UC-2.31
<b>Use Case Name</b>	Edit Course Details
Actors	Teacher
Description	The teacher will be able to edit the already added course details.
Trigger	The user clicks on "Edit".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher should have uploaded the course details.
<b>Post-conditions</b>	<i>POST-01:</i> Course details edited successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Edit".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.31 Edit Course Details.

## **UC-2.32: Delete Course**

Use Case ID	M2-UC-2.32
<b>Use Case Name</b>	Delete Course
Actors	Teacher
Description	The Teachers can delete the course, but it will not be deleted until the
	admin approves that deletion request.
Trigger	The user will click on "Delete" icon.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The course should be uploaded by the user.
<b>Post-conditions</b>	<i>POST-01:</i> The course will be deleted.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Delete" icon.
	NF-02: The system will ask "Do You want to delete this course?".

	NF-03: The user will click on "Yes".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.32 Delete Course** 

## UC-2.33: View Course

Use Case ID	M2-UC-2.33
<b>Use Case Name</b>	View Course
Actors	Teacher, Student, Admin
Description	The user will be able to view the activated courses.
Trigger	User will click on "View" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> The teacher has added the course.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the course.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on course.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The users will not be able to view a course until the course is
	approved by the admin.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-2.33 View Course** 

## **UC-2.34: View Course Subscribers**

Use Case ID	M2-UC-2.34
Use Case Name	View Course Subscribers
Actors	Teacher
Description	The teacher will be able to view subscribers of all the courses that he teaches.
Trigger	The user will click on "My subscribers".
<b>Pre-conditions</b>	PRE-01: The user should be logged in.
Post-conditions	<b>POST-01:</b> The teacher will be able to view the subscribers.

Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on "My subscribers".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.34 View Course Subscribers

## **UC-2.35: View Other's Profile**

Use Case ID	M2-UC-2.34
<b>Use Case Name</b>	View Other's Profile
Actors	Teacher, Student
Description	The users will be able to view each other's profile.
Trigger	The user will click on the name of the user to view his profile. He can
	also search for the user.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
<b>Post-conditions</b>	<b>POST-01:</b> The user will be able to view the profile of any user.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on user's name or "View".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.35 View Other's Profile

## **UC-2.36: View My Rooms**

Use Case ID	M2-UC-2.36
<b>Use Case Name</b>	View My Rooms
Actors	Teacher, Student
Description	The user will be able to view list of rooms that he is part of.
Trigger	The user will click on "My Rooms".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The students should have subscribed for that room.
	<b>PRE-03:</b> The teacher should have created the room.
<b>Post-conditions</b>	<i>POST-01:</i> The list of rooms will be shown to the user.

Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "My rooms".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.36 View My Rooms

## UC-2.37: Join Room

Use Case ID	M2-UC-2.37
<b>Use Case Name</b>	Join Room
Actors	Student
Description	The students will be able to join the room where they can attend the
	conference video calls of teachers and can interact with whole class.
Trigger	The user will click on "Join".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher should have created that room.
Post-conditions	<b>POST-01:</b> The student has joined room successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Join".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> If the Room is private then the student will be asked for the
	Room password so that he may join.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.37 Join Room

## UC-2.38: Leave Room

Use Case ID	M2-UC-2.38
Use Case Name	Leave Room
Actors	Student
Description	The student will be able to leave the room.
Trigger	The user will click on "Upload Video".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The student should have joined the room.
Post-conditions	<b>POST-01:</b> Student will no more be a part of that room.

Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Leave Room".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.38 Leave Room** 

## UC-2.39: Create Room

Use Case ID	M2-UC-2.39
Use Case Name	Create Room
Actors	Teacher
Description	The teacher will be able create a room for online learning.
Trigger	The user will click on "Create Room".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The list of rooms will be shown to the user.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Create Room".
	<b>NF-02:</b> The user will fill all the credentials for creating a room.
	<i>NF-03:</i> The user will click on "Create Room".
<b>Alternative Flow</b>	N/A
T (	N//
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.39 Create Room** 

## UC-2.40: Edit Room

Use Case ID	M2-UC-2.40
Use Case Name	Edit Room
Actors	Teacher
Description	The teacher will be able to edit the Room information and settings.
Trigger	The user will click on "Edit" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> Information of the Room will be updated.

Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Edit Room" button.
	<i>NF-01:</i> The user will update the details.
	<i>NF-01:</i> The user will click on "Save" button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.40 Edit Room

## UC-2.41: Delete Room

Use Case ID	M2-UC-2.41
Use Case Name	Delete Room
Actors	Teacher
Description	The teacher will be able to delete the room.
Trigger	The user will click on "Delete".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
	<b>PRE-02:</b> The teacher should have created that room.
Post-conditions	<b>POST-01:</b> The teacher has deleted room successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Delete".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.41 Delete Room** 

## UC-2.42: View Room

Use Case ID	M2-UC-2.42
<b>Use Case Name</b>	View Room
Actors	Teacher, Student
Description	The teacher will be able to delete the room.
Trigger	The user will click on "Room title".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
<b>Post-conditions</b>	<b>POST-01:</b> Room will be displayed to the user.

Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Room title".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.42 View Room** 

## **UC-2.43: Remove Student from Room**

Use Case ID	M2-UC-2.43
<b>Use Case Name</b>	Kick User from Room
Actors	Teacher
Description	The teacher will be able to remove the Student from the room if he is annoying or spamming in the room.
Trigger	The user will click on "Kick" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> Information of the Room will be updated.
Normal Flow	Normal flow will be:  NF-01: The user will click on "Edit Room" button.  NF-02: The user will update the details.  NF-03: The user will click on "Save" button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	<ol> <li>The user has internet availability.</li> <li>The user understands English language.</li> <li>The user knows how to use browser and web application.</li> </ol>

Table: UC-2.43 Kick Student from Room

# UC-2.44: Search

Use Case ID	M2-UC-2.44
<b>Use Case Name</b>	Search
Actors	Teacher, Student and Admin
Description	Users will be able to search for a particular course or a particular profile.
Trigger	The user shall click on "Search" icon.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.

Post-conditions	<b>POST-01:</b> All related search results will be displayed.
Normal Flow	Normal flow will be:
	NF-01: The user shall click on "Search" field.
	<b>NF-02:</b> The user shall enter the person's name or course he may want to
	search.
	NF-03: The user shall click on "Search" icon.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-2.44 Search

## **UC-2.45: Send Complaints**

Use Case ID	M2-UC-2.45
Use Case Name	Send Complaints
Actors	Teacher and Student
Description	User can send complaints if user is having some trouble then user can
	make a complaint regarding to it.
Trigger	The user will click on "Send" button.
<b>Pre-conditions</b>	N/A
Post-conditions	POST-01: Complaint will be submitted.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user is logged in.
	<i>NF-02:</i> The user shall click on "Support" button.
	<i>NF-03:</i> The user shall write the subject name.
	<i>NF-04:</i> The user shall fill the description.
	<i>NF-05:</i> The user shall upload the file.
	<i>NF-06:</i> The user shall click on "Submit" button.
Alternative Flow	Alternate flow will be:
	<i>NF-01:</i> The user is logged in.
	<i>NF-02:</i> The user shall click on "Trouble in logging in?" link.
	<i>NF-03:</i> The user shall write his registered email in "Email" field.
	<i>NF-04:</i> The user shall write the subject name.
	<i>NF-05:</i> The user shall fill the description.
	<i>NF-06:</i> The user shall upload the file.
	<i>NF-07:</i> The user shall click on "Submit" button.
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-2.45 Send Complaints** 

#### 3.2.3 Module 3: Admin Panel

Use case ID	Use case Name
M3-UC-3.1	Approve Course
M3-UC-3.2	Disapprove Course
M3-UC-3.3	Block Account
M3-UC-3.4	Unblock Account
M3-UC-3.5	View Blocked Users
M3-UC-3.6	View Approved Courses
M3-UC-3.7	View Pending Course Request
M3-UC-3.8	View Pending Block Account Request
M3-UC-3.9	View Complaints
M3-UC-3.10	Answer Complaints

Table: Module 3: Admin Panel

# **UC-3.1: Approve Course**

Use Case ID	M3-UC-3.1
Use Case Name	Approve Course
Actors	Admin,
Description	The admin will be able to approve a course. Without the approval of course by an admin, the teacher will not be able to activate that course.
Trigger	The admin will click on "Approve" button.
<b>Pre-conditions</b>	<ul><li>PRE-01: The admin is logged in.</li><li>PRE-02: The teacher should have uploaded the course and the current status of course is "Pending for Approval".</li></ul>
<b>Post-conditions</b>	<b>POST-01:</b> The course will be approved by the admin and the teacher will be notified about this approval.
Normal Flow	Normal flow will be: <i>NF-01:</i> The admin will click on "Approve".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> A course should only be approved by the admin if all of the fields of course adding form are filled.
Assumptions	<ol> <li>The user should have basic knowledge of using browser and websites.</li> <li>The user should understand English.</li> <li>The user should have internet available.</li> </ol>

**Table: UC-3.1 Approve Course** 

## **UC-3.2: Disapprove Course**

Use Case ID	M3-UC-3.2
Use Case Name	Disapprove Course

Actors	Admin
Description	The admin will be able to disapprove a course and the course will be deleted.
Trigger	The admin will click on "Disapprove" button.
<b>Pre-conditions</b>	<ul><li>PRE-01: The admin is logged in.</li><li>PRE-02: The teacher should have uploaded the course and the current status of course is "Pending for Approval".</li></ul>
<b>Post-conditions</b>	<b>POST-01:</b> The course will be disapproved by the admin. The teacher will be notified about this disapproval and the course will be deleted.
Normal Flow	Normal flow will be: <b>NF-01:</b> The admin will click on "Disapprove".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> A course should only be approved by the admin if all of the fields of course adding form are filled.
Assumptions	<ol> <li>The user should have basic knowledge of using browser and websites.</li> <li>The user should understand English.</li> <li>The user should have internet available.</li> </ol>

**Table: UC-3.2 Disapprove Course** 

## **UC-3.3: Block Account**

Use Case ID	M3-UC-3.3
Use Case Name	Block Account
Actors	Admin
Description	The admin can block any user.
Trigger	The admin will click on "Block".
<b>Pre-conditions</b>	<b>PRE-01:</b> The admin should be logged in.
Post-conditions	<i>POST-01:</i> The user will be blocked.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The admin will click on "Block".
Alternative Flow	The teacher might report a student. This report will be sent to the admin.
	AF-01: The admin will click on "Block".
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The admin will only be able to block a user.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-3.3 Block Account** 

#### **UC-3.4: Unblock Account**

Use Case ID	M3-UC-3.4
<b>Use Case Name</b>	Unblock Account
Actors	Admin
Description	The admin can unblock any blocked user. The user will get access to his portal.
Trigger	The admin will click on "Unblock".
<b>Pre-conditions</b>	<b>PRE-01:</b> The admin is logged in.
	<b>PRE-02:</b> The user should be blocked.
<b>Post-conditions</b>	<b>POST-01:</b> The user will get access to his portal.
Normal Flow	Normal flow will be:
	NF-01: The admin will click on "Unblock"
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> The admin will only be able to unblock a user.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-3.4 Unblock Account** 

## **UC-3.5: View Blocked Users**

Use Case ID	M3-UC-3.5
Use Case Name	View Blocked Users
Actors	Admin
Description	The admin will be able to view the list of blocked users.
Trigger	The admin will click on "Blocked List" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The admin is logged in.
Post-conditions	<b>POST-01:</b> The blocked list will be viewed by admin successfully.
Normal Flow	Normal flow will be:
	NF-01: The admin will click on "Blocked List".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
•	2. The user should understand English.
	3. The user should have internet available.

Table: UC-3.5 View Blocked Users

## **UC-3.6: View Approved Courses**

3	
Use Case ID	M3-UC-3.6

Use Case Name	View Approved Courses
Actors	Admin
Description	The admin will be able to view the approved courses.
Trigger	The admin will click on "Approved" button.
<b>Pre-conditions</b>	PRE-01: The admin is logged in.
Post-conditions	<b>POST-01:</b> The course will be shown with the list of approved courses.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The admin will click on "Approved".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
_	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-3.6 View Approved Courses** 

## **UC-3.7: View Pending Course Request**

Use Case ID	M3-UC-3.7
<b>Use Case Name</b>	View Pending Course Request
Actors	Admin
Description	All of the course requests will be in this list.
Trigger	The admin will click on "Pending Request".
<b>Pre-conditions</b>	<b>PRE-01:</b> The admin is logged in.
Post-conditions	<b>POST-01:</b> The list of pending requests will be shown.
Normal Flow	Normal flow will be:
	NF-01: The admin will click on "Pending Request"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-3.7 View Pending Course Request** 

## **UC-3.8: View Pending Block Account Request**

Use Case ID	M3-UC-3.8
<b>Use Case Name</b>	View Pending Block Account Request
Actors	Admin

Description	The admin can view the list of pending block account request.
Trigger	The admin will click on "Pending Requests".
<b>Pre-conditions</b>	PRE-01: The admin is logged in.
Post-conditions	<b>POST-01:</b> The admin will be able to view pending requests.
Normal Flow	Normal flow will be:
	NF-01: The admin will click on "Pending Requests"
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-3.8 View Pending Block Account Request

## **UC-3.9: View Complaints**

Use Case ID	M3-UC-3.9
<b>Use Case Name</b>	View Complaints
Actors	Admin
Description	The admin can view the complaints.
Trigger	The admin will click on "View Complaints".
<b>Pre-conditions</b>	<b>PRE-01:</b> The admin is logged in.
Post-conditions	<b>POST-01:</b> The admin will be able to "View Complaints".
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The admin will click on "View Complaints"
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-3.9 View Complaints** 

## **UC-3.10: Answer Complaints**

Use Case ID	M3-UC-3.10
Use Case Name	Answer Complaints
Actors	Admin
Description	The admin can reply to the user's complaints.
Trigger	The admin will click on "Answer Complaints".

<b>Pre-conditions</b>	PRE-01: The admin is logged in.
Post-conditions	<b>POST-01:</b> The admin will be able to "Answer Complaints".
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The admin will click on "Answer Complaints"
	<b>NF-02:</b> The admin will click on "Reply" against the subject name of the
	complaint.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-3.10 Answer Complaints** 

## 3.2.4 Module 4: Notification and Messaging

Use case ID	Use case Name
M4-UC-4.1	Send Message
M4-UC-4.2	Use room Chat
M4-UC-4.3	Delete Conversation
M4-UC-4.4	View Conversation
M4-UC-4.5	Add Announcement
M4-UC-4.6	View Notification
M4-UC-4.7	Delete Announcement
M4-UC-4.8	Remove Notification
M4-UC-4.9	View Events

Table: Module 4: Notification and Messaging

## **UC-4.1: Send Message**

Use Case ID	M4-UC-4.1
Use Case Name	Send Message
Actors	Teacher, Student
Description	The user shall be able to send message to any other user.
Trigger	The admin shall click on "Compose" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
<b>Post-conditions</b>	<b>POST-01:</b> Message sent successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user shall click on "Compose".
	<i>NF-02:</i> The user shall enter the name of the receiver.
	<i>NF-03:</i> The user shall write the message.
	NF-04: The user shall click on "Send".

Alternative Flow	<ol> <li>If the user visits the profile of another user, then he can use following steps to send message:         AF-01: The user shall click on "message".         AF-02: The user shall enter the name of the receiver.         AF-03: The user shall write the message.         AF-04: The user shall click on "Send".     </li> <li>The user can also reply to any message sent to him by any other user by following these steps:</li> <li>AF-01: The user shall click on "reply".</li> <li>AF-02: The user shall write the message.</li> <li>AF-03: The user shall click on "Send".</li> </ol>
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	<ol> <li>The user should have basic knowledge of using browser and websites.</li> <li>The user should understand English.</li> <li>The user should have internet available.</li> </ol>

**Table: UC- 4.1 Send Message** 

## **UC-4.2: Use Room Chat**

Use Case ID	M4-UC-4.2
Use Case Name	Use Room Chat
Actors	Teacher, Students
Description	The user will be able to interact with whole class in a room.
Trigger	The user will click on "Send" icon.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
	<b>PRE-02:</b> The user has joined room.
Post-conditions	<b>POST-01:</b> The message will be sent to the other students and teacher
	who are part of that room.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user shall write the message.
	NF-02: The user shall click on "Send" icon.
Alternative Flow	The alternative flow would be:
	AF-01: The user shall click on "My Rooms".
	AF-02: The user shall search for a particular room.
	AF-03: The user shall click on "Message".
	AF-04: The user shall click on "Send".
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> A user will not be able to send more than one message in 10
	seconds.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-4.2 Use Room Chat** 

#### **UC-4.3: Delete Conversation**

Use Case ID	M4-UC-4.3
Use Case Name	Delete Conversation
Actors	Teacher, Student
Description	The user will be able to delete any of his conversation.
Trigger	The admin will click on "Delete Conversation".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
	<b>PRE-02:</b> The user has started a conversation with any other user.
<b>Post-conditions</b>	<b>POST-01:</b> The conversation will be deleted successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Delete Conversation".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-4.3 Delete Conversation** 

## **UC-4.4: View Conversation**

Use Case ID	M4-UC-4.4
<b>Use Case Name</b>	View Conversation
Actors	Student, Teacher
Description	The user shall be able to view the conversation.
Trigger	The user shall click on the user's name to view the conversation with
	that user.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
	<b>PRE-02:</b> The user should have started a conversation.
<b>Post-conditions</b>	<i>POST-01:</i> The course will not be deleted.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user shall click on message.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-4.4 View Conversation** 

## **UC-4.5: Add Announcement**

Use Case ID	M4-UC-4.5
Use Case Name	Add Announcement
Actors	Teacher
Description	The teacher will be able to make an announcement, that would be sent
	to the students in the form of notification.
Trigger	The teacher will click on "Add" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher should be logged in.
	PRE-01: The teacher should have selected the course, whose
	announcement he is about to make.
<b>Post-conditions</b>	<b>POST-01:</b> The announcement will be added successfully and it will be
	sent to the users in the form of notification.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Add".
	<i>NF-02:</i> The user will write announcement.
	NF-03: The user will click on "Save"
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-4.5 Add Announcement

## **UC-4.6: View Notification**

Use Case ID	M4-UC-4.6
Use Case Name	View Notification
Actors	Teacher, Student
Description	The user will be able to view the notifications with details.
Trigger	The user will click on the notification.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> The user will view notifications.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "View".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
_	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-4.6 View Notification** 

## **UC-4.7: Delete Announcement**

Use Case ID	M4-UC-4.7
<b>Use Case Name</b>	Delete Announcement
Actors	Teacher
Description	The teacher will be able to delete the announcement.
Trigger	The admin will click on "Delete" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
	<b>PRE-02:</b> The teacher should have added the announcement.
<b>Post-conditions</b>	<b>POST-01:</b> Announcement deleted successfully.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Delete".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	BR-01: If a teacher deleted an announcement, the students will be
	notified about it.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC- 4.7 Delete Announcement** 

# **UC-4.8: Remove Notification**

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Use Case ID	M4-UC-4.8
<b>Use Case Name</b>	Remove Notification
Actors	Teacher, Students
Description	The user can remove any notification from their notification list.
Trigger	The user will click on "Remove".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<i>POST-01:</i> The notification will be removed.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will click on "Remove".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-4.8 Remove Notification** 

## **UC-4.9: View Events**

Use Case ID	M4-UC-4.9
<b>Use Case Name</b>	View Events
Actors	Teacher, Student
Description	The user will be able to view daily reminders. These reminders will
	refresh daily and will tell user that what is pending for today.
Trigger	The admin will click on "Events".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
	<b>PRE-02:</b> The user has started a conversation with any other user.
Post-conditions	<i>POST-01:</i> The conversation will be deleted successfully.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Events".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-4.9 View Events** 

# 3.2.5 Module 5: Communication Using VOIP

Use case ID	Use case Name
M5-UC-5.1	Start Audio Call
M5-UC-5.2	Join Audio Call
M5-UC-5.3	Push to Talk
M5-UC-5.4	Leave Audio Call
M5-UC-5.5	Stop Audio Call
M5-UC-5.6	Reject Audio Call
M5-UC-5.7	Accept Audio Call

**Table: Module 5: Communication Using VOIP** 

#### **UC-5.1: Start Audio Call**

Use Case ID	M5-UC-5.1
<b>Use Case Name</b>	Start Audio Call
Actors	Teacher, Student
Description	User will be able to start audio call session in message or in Rooms.
Trigger	The User will click on "Make a Call" button.
<b>Pre-conditions</b>	N/A
<b>Post-conditions</b>	<b>POST-01:</b> Call session will be started.

Normal Flow	Normal flow will be:
	<i>NF-01:</i> The user will clicks on "Make a Call" button
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> In Rooms only one person can make a call.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.1 Start Audio Call

## UC-5.2: Join Audio Call

Use Case ID	M5-UC-5.2
<b>Use Case Name</b>	Join Audio Call
Actors	Teacher, Student
Description	User will be able to join in the call session once it has been started by some other user.
Trigger	The User will click on "Join Call" button.
<b>Pre-conditions</b>	PRE-01: Call has been started.
Post-conditions	POST-01: User will be joined in the call.
Normal Flow	Normal flow will be:  NF-01: The user clicks on "Join Call" button
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Join call will only be available in Rooms.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.2 Join Audio Call

## UC-5.3: Push to Talk

Use Case ID	M5-UC-5.3
<b>Use Case Name</b>	Push to Talk
Actors	Teacher, Student
Description	To avoid spamming push to Talk feature will be used. User will be able to speak till he is pressing "Talk" key, upon releasing his voice will be cut off. It is also helpful in avoiding background noises in group calls.
Trigger	The User will push "P" key on the keyboard.
<b>Pre-conditions</b>	POST-01: Call has been be started.

Post-conditions	POST-01: User Mic will be enabled.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> User needs to Speak.
	NF-02: User push "P" key.
	<i>NF-03:</i> User has done talking, will release the "P" key.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.3 Push to Talk

## **UC-5.4: Leave Audio Call**

Use Case ID	M5-UC-5.4
<b>Use Case Name</b>	Leave Audio Call
Actors	Teacher, Student
Description	User will be able to leave the call at any time.
Trigger	The User will click on "Leave Call" icon.
<b>Pre-conditions</b>	PRE-01: Call has been started.
<b>Post-conditions</b>	POST-01: User will be left.
Normal Flow	Normal flow will be:
	NF-01: The user will clicks on "Leave call" icon.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-5.4 Leave Audio Call** 

## **UC-5.5: Stop Audio Call**

Use Case ID	M5-UC-5.5
Use Case Name	Stop Audio Call
Actors	Teacher, Student
Description	User will be able to end audio call session in message or in Rooms once
	it has been started by the same user.
Trigger	The User will click on "End Call" icon.

<b>Pre-conditions</b>	<b>PRE-01:</b> Call has been started.
Post-conditions	<b>POST-01:</b> Call session will be ended and whoever is joined in will be
N. LEN	kicked.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will clicks on "End Call" icon.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only the user who started the call, will be able to stop the call.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.5 Stop Audio Call

## **UC-5.6: Reject Audio Call**

Use Case ID	M5-UC-5.6
Use Case Name	Reject Audio Call
Actors	Teacher, Student
Description	This use case is for one-to-one audio call. The user will have the option of rejecting the audio call.
Trigger	The User will click on "Reject" icon.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user should be logged in.
Post-conditions	<b>POST-01:</b> The user has successfully rejected the call.
Normal Flow	Normal flow will be:
	NF-01: The user will clicks on "Reject" icon.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.6 Reject Audio Call

## **UC-5.7: Accept Audio Call**

Use Case ID	M5-UC-5.7
<b>Use Case Name</b>	Stop Audio Call
Actors	Teacher, Student
Description	This use case is for one-to-one audio call. The user will be able to accept
	the audio call and talk to the user on the other end of audio call

Trigger	The User will click on "Accept" icon.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> Call has been started.
Normal Flow	Normal flow will be:
	NF-01: The user will clicks on "Accept" icon.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
Business Rule	
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-5.7 Accept Audio Call

#### 3.2.6 Module 6: Conference Video Call

Use case ID	Use case Name
M6-UC-6.1	Start live broadcast
M6-UC-6.2	Stop live broadcast
M6-UC-6.3	Join broadcast
M6-UC-6.4	Leave broadcast
M6-UC-6.5	Switch to Screen Sharing
M6-UC-6.6	Lock Room
M6-UC-6.7	Unlock Room

Table: Module 6: Conference Video Call

## **UC-6.1: Start live broadcast**

Use Case ID	M6-UC-6.1
Use Case Name	Start live broadcast
Actors	Teacher
Description	Teacher will be able to start live video conference call.
Trigger	Teacher will click on "Go Live" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> Teacher has joined the room.
<b>Post-conditions</b>	<i>POST-01:</i> Live broadcast will start.
Normal Flow	Normal flow will be:
	NF-02: Teacher clicks on "Go Live" button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher will be able to start live broadcast

Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-6.1 Start live broadcast** 

# **UC-6.2: Stop live broadcast**

Use Case ID	M6-UC-6.2
Use Case Name	Stop live broadcast
Actors	Teacher
Description	Teacher will be able to end the video conference call.
Trigger	Teacher will click on "End Live" button.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> Teacher has joined the room.
	<b>PRE-03:</b> Teacher has started the live broadcast.
<b>Post-conditions</b>	POST-01: Video conference call will end.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The teacher will click on "End Call".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher will be able to end call.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-6.2 Stop live broadcast

## **UC-6.3: Join Broadcast**

Use Case ID	M6-UC-6.3
Use Case Name	Join Broadcast
Actors	Student
Description	As teacher starts the video conference call, student will be able to join
	the video conference call.
Trigger	The student will click on "Join Broadcast".
<b>Pre-conditions</b>	<b>PRE-01:</b> live broadcast is already started.
	<b>PRE-02:</b> Student has joined the room.
	<i>PRE-03:</i> Room should be unlocked.
<b>Post-conditions</b>	<b>POST-01:</b> Student will be joined in the Call.
Normal Flow	Normal flow will be:
	NF-01: Student clicks on "join broadcast".
Alternative Flow	N/A
Exceptions	N/A

<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-6.3 Join Broadcast** 

# **UC-6.4: Leave broadcast**

Use Case ID	M6-UC-6.4
Use Case Name	Leave broadcast
Actors	Student
Description	Student will be able to leave the video conference broadcasting at any
	time.
Trigger	The Student will click on "leave broadcast".
<b>Pre-conditions</b>	<b>PRE-01:</b> The student is logged in.
	<b>PRE-02:</b> Student has already joined the broadcast.
<b>Post-conditions</b>	<b>POST-01:</b> Video streaming won't be forwarded to that student.
Normal Flow	Normal flow will be:
	NF-01: Student clicks on "leave broadcast".
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-6.4 leave broadcast

# **UC-6.5:** Switch to Screen sharing

Use Case ID	M6-UC-6.5
<b>Use Case Name</b>	Switch to Screen Sharing
Actors	Teacher
Description	During the video conference broadcasting, teacher can switch from
	sharing is web camera to sharing his laptop/computer Screen. So that
	teacher may show slides or some other teaching content.
Trigger	The teacher will click on "Screen Share Icon".
<b>Pre-conditions</b>	<b>PRE-01:</b> Teacher has joined the room.
	<b>PRE-01:</b> Teacher has started the live broadcast.
<b>Post-conditions</b>	POST-01: Students will be able to view teacher's laptop/computer
	screen.
Normal Flow	Normal flow will be:
	NF-01: Teacher clicks on "Screen Share Icon".

Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher will be able share laptop/computer screen.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-6.5 Switch to Screen Sharing** 

# UC-6.6: Lock Room

Use Case ID	M6-UC-6.6
<b>Use Case Name</b>	Lock Room
Actors	Admin
Description	Teacher may lock the room after the live broadcasting has started to avoid if he do not want late comers since teacher has to repeat the lecture.
Trigger	Teacher will check the "Lock Room" checkbox.
<b>Pre-conditions</b>	<ul><li>PRE-01: Teacher has joined the room</li><li>PRE-02: The teacher has started the live broadcast.</li></ul>
Post-conditions	<b>POST-01:</b> The room will be locked successfully.
Normal Flow	Normal flow will be: <i>NF-01:</i> The teacher will tick the "Lock Room" checkbox.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher can lock the room.
	<b>BR-02:</b> Teacher can only lock the room after the live broadcasting has
	started.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

Table: UC-6.6 Lock Room

# UC-6.7: Unlock Room

Use Case ID	M6-UC-6.67
Use Case Name	Unlock Room
Actors	Teacher
Description	The admin can unblock any blocked user. The user will get access to his
	portal.
Trigger	The admin will uncheck "Lock Room" checkbox.
<b>Pre-conditions</b>	<b>PRE-01:</b> The teacher is logged in.
	<b>PRE-02:</b> Teacher has joined the room.
	<b>PRE-03:</b> Teacher has started live broadcast.

Post-conditions	<b>POST-01:</b> No student will be able to join once the room is locked.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The teacher shall uncheck the "Lock Room" checkbox.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher can lock the room.
	<b>BR-02:</b> Teacher can only lock the room after the live broadcasting has
	started.
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-6.7 Unlock Room** 

#### 3.2.7 Module 7: Auto Zoom

Use case ID	Use case Name
M7-UC-7.1	Enable Auto Zoom
M7-UC-7.2	Disable Auto Zoom

Table: Module 7: Auto Zoom

# **UC-7.1: Enable Auto Zoom**

Use Case ID	M7-UC-7.1
Use Case Name	Enable Auto Zoom
Actors	Teacher
Description	Enable Auto Zoom will zoom on the white board based on the action of
	the teacher but the teacher will have to enable it first.
Trigger	The teacher will check the "Auto Zoom" checkbox.
<b>Pre-conditions</b>	<b>PRE-01:</b> Teacher is in the room.
Post-conditions	<i>POST-01:</i> Auto Zoom will be enabled.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> Teacher click the Vide Conference Call "settings" button.
	<b>NF-02:</b> Teacher will check the "Auto Zoom" checkbox.
	<b>NF-03:</b> Teacher will click on "Save" to save the settings.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher can use Auto Zoom.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-7.1 Enable Auto Zoom** 

#### **UC-7.2: Disable Auto Zoom**

Use Case ID	M7-UC-7.2
Use Case Name	Disable Auto Zoom
Actors	Teacher
Description	Disabling auto zoom will stop the zooming on the writing board automatically.
Trigger	The teacher will uncheck the "Auto Zoom" checkbox.
<b>Pre-conditions</b>	<b>PRE-01:</b> Teacher is in the room.
	<i>PRE-01:</i> Auto Zoom is enabled.
<b>Post-conditions</b>	<i>POST-01:</i> Auto Zoom will be disabled.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> Teacher click the Vide Conference Call "settings" button.
	NF-02: Teacher will uncheck the "Auto Zoom" checkbox.
	<b>NF-03:</b> Teacher will click on "Save" to save the settings.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
Business Rule	<b>BR-01:</b> only teacher is allowed to use this feature.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

Table: UC-7.2 Disable Auto Zoom

# 3.2.8 Module 8: Screen Sharing

Use case ID	Use case Name
M8-UC-8.1	Start Screen sharing
M8-UC-8.2	Join Screen sharing
M8-UC-8.3	Leave Screen sharing
M8-UC-8.4	Switch to camera sharing
M8-UC-8.5	Stop Screen Sharing

**Table: Module 8: Screen Sharing** 

# **UC-8.1: Start Screen Sharing**

Use Case ID	M8-UC-8.1
<b>Use Case Name</b>	Start Screen Sharing
Actors	Teacher
Description	Teacher will be able to share his laptop/computer screen to the students.
	Through this teacher can easily show PowerPoint slides or other helping
	material.
Trigger	The Teacher will click on "Share Screen" button.

<b>Pre-conditions</b>	<b>PRE-01:</b> The Teacher is logged in.
	<b>PRE-02:</b> The Teacher is in the room.
<b>Post-conditions</b>	<b>POST-01:</b> Students will be able to watch teacher's screen.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The admin will click on "Share Screen" button.
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	<b>BR-01:</b> Only teacher will be allowed to share screen.
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-8.1 Start Screen Sharing** 

# **UC-8.2: Join Screen Sharing**

Use Case ID	M8-UC-8.2
Use Case Name	Join Screen Sharing
Actors	Student
Description	After the Screen sharing is started students can join in. Students will be able to watch whatever is teacher is currently displaying.
Trigger	The Student will click on "Join Screen Sharing" button.
<b>Pre-conditions</b>	PRE-01: Screen Sharing is already started.
	<b>PRE-02:</b> Student is in the room.
<b>Post-conditions</b>	<b>POST-01:</b> Student will get a view of teacher's screen
Normal Flow	Normal flow will be:
	NF-01: The Teacher will click on "Join Screen Sharing" button.
<b>Alternative Flow</b>	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-8.2 Join Screen Sharing** 

# **UC-8.3: Leave Screen Sharing**

Use Case ID	M8-UC-8.3
Use Case Name	Leave Screen Sharing
Actors	Student
Description	Student can stop viewing the teacher's screen sharing session at any time
	after that he won't be able to watch whatever teacher is showing.
Trigger	The Student will click on "Leave Screen Sharing" button.

<b>Pre-conditions</b>	PRE-01: Screen Sharing has been started.	
	<b>PRE-02:</b> The Student has joined the screen sharing session.	
<b>Post-conditions</b>	<b>POST-01:</b> Screen Sharing session will be ended for this student.	
Normal Flow	Normal flow will be:	
	NF-01: The Student will click on "Leave Screen Sharing" button.	
<b>Alternative Flow</b>	N/A	
Exceptions	N/A	
<b>Business Rule</b>	N/A	
Assumptions	1. The user should have basic knowledge of using browser and websites.	
	2. The user should understand English.	
	3. The user should have internet available.	

**Table: UC-8.3 Leave Screen Sharing** 

# **UC-8.4:** Switch to camera sharing

Use Case ID	M8-UC-8.4	
<b>Use Case Name</b>	Switch to Camera Sharing	
Actors	Teacher	
Description	Currently the teacher is sharing his laptop/computer Screen if he wants to switch to video call, it will be easy with just one click.	
Trigger	The teacher will click on "Switch to camera sharing" icon.	
<b>Pre-conditions</b>	<b>PRE-01:</b> Teacher is in the room.	
	<b>PRE-02:</b> The teacher has started screen sharing.	
<b>Post-conditions</b>	<b>POST-01:</b> Now students will be able to view the teacher instead, video	
	conference call will be started.	
Normal Flow	Normal flow will be:	
	<i>NF-01:</i> The Teacher will click on "Switch to camera sharing" icon.	
Alternative Flow	N/A	
	2277	
Exceptions	N/A	
<b>Business Rule</b>	<b>BR-01:</b> Only Teacher is allowed to switch between camera and Screen	
	Sharing.	
Assumptions	1. The user should have basic knowledge of using browser and websites.	
	2. The user should understand English.	
	3. The user should have internet available.	

**Table: UC-8.4 Switch to Screen Sharing** 

# **UC-8.5: Stop Screen sharing**

Use Case ID	M8-UC-8.5
<b>Use Case Name</b>	Stop Screen Sharing
Actors	Teacher

Description	Teacher can end the screen sharing session at any time. All students will	
	automatically leave screen sharing once the session is ended.	
Trigger	The Teacher will click on "End Screen Sharing" button.	
<b>Pre-conditions</b>	<b>PRE-01:</b> Teacher is in the room.	
	<b>PRE-02:</b> Screen sharing has been started.	
<b>Post-conditions</b>	<b>POST-01:</b> Screen Sharing session will be ended.	
Normal Flow	Normal flow will be:	
	NF-01: The Teacher will click on "End Screen Sharing" button.	
<b>Alternative Flow</b>	N/A	
Exceptions	N/A	
<b>Business Rule</b>	<b>BR-01:</b> Only teacher is allowed to end the Screen sharing session.	
Assumptions	1. The user should have basic knowledge of using browser and websites.	
	2. The user should understand English.	
	3. The user should have internet available.	

**Table: UC-8.5 Stop Screen Sharing** 

# 3.2.9 Module 9: E-Learning Analytics

Use case ID	Use case Name	
M9-UC-9.1	View Recommended Courses	
M9-UC-9.2	View Trending Courses	
M9-UC-9.3	View Visitors' Analytics	
M9-UC-9.4	View Top Courses' Analytics	

**Table: Module 9: E-learning Analytics** 

# **UC-9.1: View Recommended Courses**

Use Case ID	M9-UC-9.1
<b>Use Case Name</b>	View Recommended Courses
Actors	Students
Description	The students will be able to view the courses on the basis of his interests, course searching and course taking histories.
Trigger	The student will click on "Recommended Courses".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> The user will be able to view recommended courses.
Normal Flow	Normal flow will be: <i>NF-01:</i> The student will click on "Recommended Courses".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.

2. The user should understand English.
3. The user should have internet available.

**Table: UC- 9.1 View Recommended Courses** 

# **UC-9.2: View Trending Courses**

Use Case ID	M9-UC-9.2
Use Case Name	View Trending Courses
Actors	Students
Description	The students will be able to view the most famous courses with more positive reviews and subscribers.
Trigger	The user will click on view trending courses.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> The students will be able to view the trending courses.
Normal Flow	Normal flow will be:
	<i>NF-01:</i> The student will click on "Trending Courses".
Alternative Flow	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user should have basic knowledge of using browser and websites.
F	2. The user should understand English.
	3. The user should have internet available.

**Table: UC-9.2 View Trending Courses** 

# **UC-9.3: View Visitors' Analytics**

Use Case ID	M9-UC-9.3
Use Case Name	View Visitors' Analytics
Actors	Admin
Description	The admin will be able to view visitors' analytics on the basis of users visiting the site.
Trigger	The admin will click on "Visitors' Analytics".
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> The admin will be able to view visitors' analytics.
Normal Flow	Normal flow will be:
	<b>NF-01:</b> The user will click on "Visitors' Analytics".
Alternative Flow	N/A
Exceptions	N/A
<b>Business Rule</b>	N/A

Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-9.3 View Visitors' Analytics** 

# **UC-9.4: View Top Courses' Analytics**

Use Case ID	M4-UC-9.4
Use Case Name	View Top Courses' Analytics
Actors	Admin
Description	The user shall be able to view the analytics of top courses and.
Trigger	The admin shall click on the user's name to view the conversation with
	that user.
<b>Pre-conditions</b>	<b>PRE-01:</b> The user is logged in.
Post-conditions	<b>POST-01:</b> The admin shall be able to view the top courses' analytics.
Normal Flow	Normal flow will be:
	NF-01: The admin shall click on "Top Courses' Analytics".
Alternative Flow	N/A
Exceptions	N/A
Business Rule	N/A
Assumptions	1. The user has internet availability.
	2. The user understands English language.
	3. The user knows how to use browser and web application.

**Table: UC-9.4 View Courses' Analytics** 

# 4. Functional Requirements

Each of the use case have its own list of functional requirements. Following are all the functional requirements with their relevant use cases.

#### 4.1.1 UC-1.1: REGISTER

Identifier	M1-UC-1.1-FR-001
Title	Display Registration form
Requirement	User will be able to enter his first name, last name, email, password and confirm password. All of these fields are required fields and the user have to fill them in order to register. The email entered by the user should be a unique email and these should not be any other user registered with that email. The password should be a strong 8 letter password.
Source	Team Members
Rationale	The requirement will receive the registration credentials of the
	user.
Restrictions and Risk	User cannot leave any field empty field empty.

Dependencies	N/A
Priority	High

**Table: FR-001 Display Registration Form** 

Identifier	M1-UC-1.1-FR-002
Title	Mismatched Password and Confirm Password
Requirement	The system will not allow the user to register until the password
	and the confirm password match. In case of mismatch between
	the password and the confirm password, the system will display
	"Password and confirm password does not match".
Source	Team members
Rationale	The requirement will notify user is his entered password and
	confirm password does not match.
Restrictions and Risk	N/A
Dependencies	FR-001
Priority	High

Table: FR-002 Mismatched Password and Confirm Password

Identifier	M1-UC-1.1-FR-003
Title	Already registered email
Requirement	A user can use one email address to only make one account. He cannot register more then one time with same email. If the email of the user is already registered the system will display "Email already registered".
Source	Research
Rationale	The system will not let the user register more then two accounts with same email address.
Restrictions and Risk	N/A
Dependencies	FR-001
Priority	High

Table: FR-003 Already registered email

# 4.1.2 UC-1.2: LOGIN

Identifier	M1-UC-1.2-FR-001
Title	Display Login Form
Requirement	User will enter email and password.
Source	Team Members
Rationale	The requirement will receive login credentials of the user.
Restrictions and Risk	1. No field can be left empty.
	2. The email entered should be registered.
Dependencies	N/A
Priority	High

Table: FR-004 Display Login Form

Identifier	M1-UC-1.2-FR-002
Title	Invalid Email or Password
Requirement	If the user enters invalid email or password then he will be
	notified and will be asked to enter his credentials
Source	Research

Rationale	The requirement will notify the user if he has entered wrong
	password or email.
Restrictions and Risk	N/A
Dependencies	FR-004
Priority	High

Table: FR-005 Invalid Email or Password

# 4.1.3 UC-1.3: VERIFY ACCOUNT

Identifier	M1-UC-1.3-FR-001
Title	Send Passcode Via Email
Requirement	As soon as the user will enter all of his credentials properly and
	registered, a passcode will be sent to the email of the user.
Source	Team Members
Rationale	The passcode will be sent to the user through his email.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-006 Send Passcode Via Email

Identifier	M1-UC-1.3-FR-002
Title	Display Verify Account Form
Requirement	User will be able to enter the passcode in text field that is sent to
	him in his email. This passcode will always consist of 16
	characters.
Source	Team Members
Rationale	The passcode will be entered by the user. This passcode will help
	the system to verify the account of user.
Restrictions and Risk	The user will not be able to complete registration process until
	and unless his account is verified.
	If a user enters a wrong passcode then he will be asked to reenter
	the passcode.
Dependencies	FR-006
Priority	High

Table: FR-007 Display Verify Account Form

Identifier	M1-UC-1.3-FR-003
Title	Wrong passcode entered
Requirement	The system will display ma message saying "You have entered wrong passcode" incase the user has entered the wrong passcode.
Source	Team Members
Rationale	The requirement will help the user know that he has entered the wrong passcode.
Restrictions and Risk	N/A
Dependencies	FR-012
Priority	High

Table: FR-008 Wrong passcode entered

#### 4.1.4 UC-1.4: CHANGE PASSWORD

Identifier	M1-UC-1.4-FR-001
Title	Change Password
Requirement	User will click on "Change Password" in order to change his
	password.
Source	Team Members
Rationale	This button will lead the user to the page where he can enter his
	existing password in the password field to verify and then he can
	enter his new password.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-009 Change Password

Identifier	M1-UC-1.4-FR-002
Title	Display Change password Form
Requirement	User shall enter his current password, new password and
	confirm the new password
Source	Team Members
Rationale	The requirement shall receive the current password of the user
	in order to validate that the actual user of the account is
	requesting for change password. Then he will enter his new
	password.
Restrictions and Risk	1. Current password entered should be valid.
	2. New password and confirm new password should match.
	3. All three fields are required fields and hence they should not
	be left empty.
Dependencies	N/A
Priority	High

Table: FR-010 Display Change Password

Identifier	M1-UC-1.4-FR-003
Title	Incorrect Current Password Entered
Requirement	If the user enters wrong password in the "Current Password" password field then he will not be able to change his password.
Source	Team Members
Rationale	The requirement shall display a message to the user that he has entered wrong password.
Restrictions and Risk	N/A
Dependencies	FR-016
Priority	High

**Table: FR-011 Incorrect Current Password Entered** 

# 4.1.5 UC-1.5: FORGOT PASSWORD

Identifier	M1-UC-1.5-FR-001
Title	Set New Password
Requirement	1. The user should write a registered email.
	2. Through the passcode sent in his email, he can verify his
	account and then he can set a new password.
	3. The new password shall contain at least 8 characters.

Source	Team Members
Rationale	The requirement will work as a trigger to send passcode in user's
	email for setting a new password.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-012 Set New Password

Identifier	M1-UC-1.5-FR-002
Title	Send Passcode
Requirement	As soon as the user will enter all of his credentials properly and registered, a passcode will be sent to the email of the user. This passcode will be a combination of upper-case and lower-case characters and digits. The passcode will consist of 6 characters.
Source	Team Members
Rationale	The passcode will be sent to the user through his email.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-013 Send Passcode

Identifier	M1-UC-1.5-FR-003
Title	Wrong passcode entered
Requirement	The system will display ma message saying "You have entered
	wrong passcode" incase the user has entered the wrong
	passcode.
Source	Team Members
Rationale	The requirement will help the user know that he has entered the
	wrong passcode.
Restrictions and Risk	N/A
Dependencies	FR-015
Priority	High

Table: FR-014 Wrong passcode entered

#### 4.1.6 UC-1.6: ADD PROFILE PICTURE

Identifier	M1-UC-1.6-FR-001
Title	Upload picture
Requirement	User shall click on add image button to add profile picture in his
	profile.
Source	Team Members
Rationale	The requirement shall let the user add profile picture.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-015 Upload Picture** 

Identifier	M1-UC-1.6-FR-002
Title	Picture Format Validation

Requirement	User shall not be allowed to upload the image having format
	other then jpg, png, jpeg and gif.
Source	Team Members
Rationale	The requirement shall not take the image if the image have
	format other then jpg, png and jpeg.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-016 Picture Format Validation** 

Identifier	M1-UC-1.6-FR-003
Title	Picture Size Validation
Requirement	If the user tried to upload picture larger then 4MB, then the
_	system shall not allow the user to upload that specific picture.
Source	Team Members
Rationale	The requirement shall not let the user upload image larger then
	4MB.
Restrictions and Risk	N/A
Dependencies	FR-019
Priority	Medium

**Table: FR-017 Picture Size Validation** 

#### 4.1.7 UC-1.7: Delete Profile Picture

Identifier	M1-UC-1.7-FR-001
Title	Delete Picture
Requirement	User shall click on "Delete Picture" to delete his profile picture.
Source	Team Members
Rationale	The requirement will delete user's profile picture.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

Table: FR-018 Delete Picture

#### 4.1.8 UC-1.8: CHANGE PROFILE PICTURE

Identifier	M1-UC-1.8-FR-001
Title	Change Image
Requirement	User will click on "Change Image" Button. On clicking this
	button, the user shall be able to change his profile picture.
Source	Team Members
Rationale	The requirement will let the user change his image.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-019 Change Image** 

#### 4.1.9 UC-1.9: VIEW PROFILE

Identifier	M1-UC-1.9-FR-001
------------	------------------

Title	Display Profile
Requirement	User shall click on "My Profile".
Source	Team Members
Rationale	The requirement shall display the profile of the user.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-020 Display Profile

#### 4.1.10 UC-1.10: ADD EDUCATION INFORMATION

Identifier	M1-UC-1.10-FR-001
Title	Display Education Information Form
Requirement	User shall fill field in the education panel to update his education information.
Source	Team Members
Rationale	The requirement will receive the education information of the
	user.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-021 Display Education Information Form** 

Identifier	M1-UC-1.10-FR-002
Title	Save Education Information
Requirement	The system shall save all the fields entered by the user in
	education panel.
Source	Team Members
Rationale	The requirement shall save the education information of the user
	in the database.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-022 Save Education Information** 

#### 4.1.11 UC-1.11: DELETE EDUCATION INFORMATION

Identifier	M1-UC-1.11-FR-001
Title	Delete Education Information
Requirement	The education information entered by the user will be deleted.
Source	Team Members
Rationale	The requirement will delete the information.
Restrictions and Risk	N/A
Dependencies	FR-037
Priority	Medium

**Table: FR-023 Delete Education Information** 

#### 4.1.12 UC-1.12: ADD WORK EXPERIENCE

Identifier	M1-UC-1.12-FR-001
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Title	Display Work Experience Form
Requirement	User will click on "ADD". By clicking on this button user shall
	be able to add any work experience in his work experience panel.
Source	Team Members
Rationale	The requirement will let the user add work experience in his
	profile.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-024 Display Work Experience Form

Identifier	M1-UC-1.12-FR-002
Title	Save Work Experience
Requirement	The user shall click on "Submit" button to save the information
	entered by him.
Source	Team Members
Rationale	The requirement shall save the work experience entered by the
	user in database.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-025 Save Work Experience

#### 4.1.13 UC-1.13: Delete Work experience

Identifier	M1-UC-1.13-FR-001
Title	Delete Work Experience
Requirement	User will click on "Delete" for deleting any of the information
	that he has entered in the work experience panel.
Source	Team Members
Rationale	The requirement will delete the information.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

Table: FR-026 Delete Work Experience

#### 4.1.14 UC-1.14: ADD PERSONAL INFORMATION

Identifier	M1-UC-1.14-FR-001
Title	Display Personal Information Form
Requirement	User shall enter information in all the fields in the form.
Source	Team Members
Rationale	The requirement will open user's personal information panel.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-027 Display Personal Information Form** 

Identifier	M1-UC-1.14-FR-002
Title	Save Personal Information

Requirement	User shall click on "Submit" button to save all the information.
Source	Team Members
Rationale	The requirement shall save the personal information of the user
	in the database.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-028 Save Personal Information** 

#### 4.1.15 UC-1.15: Delete Personal Information

Identifier	M1-UC-1.15-FR-001
Title	Delete Personal Information
Requirement	User shall click on "Delete" to delete the information.
Source	Team Members
Rationale	The requirement shall delete the information.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-029 Delete Personal Information** 

#### 4.1.16 UC-1.16: CHECK PRIVACY SETTINGS

Identifier	M1-UC-1.16-FR-001
Title	Set Privacy
Requirement	User shall click on "My Privacy Settings" to check and change
	privacy settings.
Source	Team Members
Rationale	The requirement shall set the privacy of the user according to his
	choice.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-030 Set Privacy** 

#### 4.1.17 UC-1.17: EDIT EDUCATION INFORMATION

Identifier	M1-UC-1.17-FR-001
Title	Edit Education Information
Requirement	User shall be able to change the already added education
	information any time by clicking on "Edit" button.
Source	Team Members
Rationale	The requirement shall update the education information of the
	user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-031 Edit Education Information** 

#### 4.1.18 UC-1.18: EDIT WORK EXPERIENCE

Identifier	M1-UC-1.18-FR-001
Title	Edit Work Experience
Requirement	User shall be able to edit the already added work experience by
	clicking the "Edit" button.
Source	Team Members
Rationale	The requirement shall update the work experience.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-032 Edit Work Experience

#### 4.1.19 UC-1.19: EDIT PERSONAL INFORMATION

Identifier	M1-UC-1.19-FR-001
Title	Edit Personal Information
Requirement	User shall be able to edit the already added information by
	clicking the "Edit" button.
Source	Team Members
Rationale	The requirement shall update the personal information.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-033 Edit Personal Information

#### 4.1.20 UC-1.20: CHANGE PRIVACY SETTINGS

Identifier	M1-UC-1.20-FR-001
Title	Update Privacy Settings
Requirement	User shall be able to update the privacy settings.
Source	Team Members
Rationale	The requirement shall let the user update his privacy settings.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-034 Update Privacy Settings** 

#### 4.1.21 UC-1.21: LOGOUT

Identifier	M1-UC-1.21-FR-001
Title	Logout
Requirement	User will click on "Logout" to move out of his account.
Source	Team Members
Rationale	The requirement will let the user logout from his account.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-035 Logout** 

#### 4.1.22 UC-1.22: REPORT USER

Identifier	M1-UC-1.22-FR-001
Title	Report User
Requirement	User shall click on "Report User" if any of the user is bothering
	him.
Source	Team Members
Rationale	The requirement shall report the user.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

Table: FR-036 Report User

Identifier	M1-UC-1.22-FR-002
Title	Report request sent to admin
Requirement	As soon as the user will repost the user, his request will be sent
	to the admin.
Source	Team Members
Rationale	The requirement enable the admin to block any particular user
	(reported by any other user).
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

Table: FR-037 Report request sent to admin

#### 4.1.23 UC-1.23: DELETE ACCOUNT

Identifier	M1-UC-1.23-FR-001
Title	Delete Account
Requirement	User shall click on "Delete My Account" to delete his own
	account.
Source	Team Members
Rationale	The user's account shall be deleted.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-038 Delete Account

#### 4.1.24 UC-2.1: UPLOAD ASSIGNMENT

Identifier	M2-UC-2.1-FR-001
Title	Upload Assignment
Requirement	User will click on "Add Assignment" to upload an assignment.
Source	Team Members
Rationale	The requirement will open a form for uploading the assignment.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-039 Upload Assignment

Identifier	M2-UC-2.1-FR-002

Title	Maximum 4 assignments to be posted
Requirement	If the user has already uploaded 4 assignments for a single
	course then as soon as he will click on "Save" button for
	uploading the 5 <sup>th</sup> assignment, the system will display him
	message "Upload Failed: Already 4 assignments are uploaded in
	the portal".
Source	Team Members
Rationale	The requirement shall not let the user upload more then 4
	assignments for a particular course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-040 Maximum 4 Assignments to Be Posted

Identifier	M2-UC-2.1-FR-003
Title	File Size Validation
Requirement	If the user tries to upload assignment having size more then 4MB
	then the system shall display this message "You cannot upload
	file more the 4MB".
Source	Team Members
Rationale	The requirement shall notify the user that the file is larger then
	4MB.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-041 File Size Validation** 

Identifier	M2-UC-2.1-FR-004
Title	File Format Validation
Requirement	If the user tries to upload assignment having format other than
	pdf, docx or ppt then the system shall not upload the file.
Source	Team Members
Rationale	The requirement shall only upload the assignments of pdf, docx
	or ppt format.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-042 File Format Validation

#### 4.1.25 UC-2.2: VIEW ASSIGNMENT

Identifier	M2-UC-2.2-FR-001
Title	Display Assignment List
Requirement	User will click on "View" to view the assignment.
Source	Team Members
Rationale	The requirement will open the assignment for the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-043 Display Assignment List** 

#### 4.1.26 UC-2.3: DOWNLOAD ASSIGNMENT

Identifier	M2-UC-2.3-FR-001
Title	Download Assignment
Requirement	User will click on "Download".
Source	Team Members
Rationale	The requirement will download the assignment.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-044 Download Assignment** 

#### 4.1.27 UC-2.4: Delete Assignment

Identifier	M2-UC-2.4-FR-001
Title	Delete Assignment
Requirement	User will click on "Delete".
Source	Team Members
Rationale	The requirement will delete the assignment.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-045 Delete Assignment** 

#### 4.1.28 UC-2.5: EDIT ASSIGNMENT

Identifier	M2-UC-2.5-FR-001
Title	Edit Assignment
Requirement	User will click on "Edit" to edit the information of already
	updated assignment.
Source	Team Members
Rationale	The requirement will be able to make changes.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-046 Edit Assignment** 

#### 4.1.29 UC-2.6: SUBMIT ASSIGNMENT

Identifier	M2-UC-2.6-FR-001
Title	Submit Assignment
Requirement	User shall click on "Submit" to submit assignment.
Source	Team Members
Rationale	The requirement shall upload the assignment.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-047 Submit Assignment** 

# 4.1.30 UC-2.7: UPLOAD QUIZ

Identifier	M2-UC-2.7-FR-001
Title	Upload Quiz
Requirement	User shall upload the quiz file.
Source	Team Members
Rationale	The requirement shall let the user upload the quiz file.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-048 Upload Quiz** 

Identifier	M2-UC-2.7-FR-002
Title	Set Quiz Time Duration
Requirement	Teacher shall enter the time duration of the quiz. The students are required to solve the quiz in the given time.
	1 5
Source	Team Members
Rationale	The time duration will be set for the quiz. As soon as the student will open the quiz, the timer will start and when the timer will stop the student will not be able to solve it any further and it will be submitted.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-049 Set Quiz Time Duration

#### 4.1.31 UC-2.9 DELETE QUIZ

Identifier	M2-UC-2.9-FR-001
Title	Delete Quiz
Requirement	User shall click on "Delete" to delete the quiz.
Source	Team Members
Rationale	The requirement will delete the quiz.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

**Table: FR-050 Delete Quiz** 

# 4.1.32 UC-2.10: EDIT QUIZ

Identifier	M2-UC-2.10-FR-001
Title	Edit Quiz
Requirement	User will click on "Edit" to edit the uploaded quiz.
Source	Team Members
Rationale	The requirement shall be able to make the changes.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-051 Edit Quiz

# 4.1.33 UC-2.11: SUBMIT QUIZ

Identifier	M2-UC-2.11-FR-001
Title	Submit Quiz
Requirement	As soon as the timer of the quiz will end the quiz wil be submitted and the students will no more be able to make more changes in the quiz. A student can also submit the quiz prior to the stop time.
Source	Team Members
Rationale	The requirement shall submit the quiz of the student.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-052 Submit Quiz** 

Identifier	M2-UC-2.11-FR-002
Title	Auto Check Quiz
Requirement	If the quiz is MCQ type and its answers will be given then the
	submitted quiz will be checked according to the given answers.
Source	Team Members
Rationale	The requirement shall mark the MCQs
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-053 Auto Check Quiz

Identifier	M2-UC-2.11-FR-003
Title	Auto Submit Quiz
Requirement	If the user changes the tab or window or the time of the quiz ends
	the quiz will be automatically submit the quiz.
Source	Team Members
Rationale	The requirement shall automatically submit the quiz.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-054 Auto Submit Quiz

Identifier	M2-UC-2.11-FR-004
Title	Start Timer
Requirement	As soon as the user will open the quiz, the timer will start (according to the time duration set by the teacher).
Source	Team Members
Rationale	The requirement shall start the quiz.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-055 Start Timer

|--|

Title	Stop Timer
Requirement	As the time duration set by the teacher, the system will end the
	timer
Source	Team Members
Rationale	The requirement shall end the time for quiz.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

Table: FR-056 Stop Timer

#### 4.1.34 UC-2.12: UPLOAD MARKS

Identifier	M2-UC-2.12-FR-001
Title	Upload Marks
Requirement	The teacher shall upload the marks of all the students.
Source	Team Members
Rationale	The requirement shall take marks of each student.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-057 Upload Marks

#### 4.1.35 UC-2.13: VIEW MARKS

Identifier	M2-UC-2.13-FR-001
Title	Display Marks
Requirement	As soon as the user shall click on "View" button for viewing the
	marks, the system shall display him the marks.
Source	Team Members
Rationale	The requirement shall display the marks.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

Table: FR-058 Display Marks

#### 4.1.36 UC-2.14: EDIT MARKS

Identifier	M2-UC-2.14-FR-001
Title	Edit Marks
Requirement	User shall click on "Edit" button to edit the marks.
Source	Team Members
Rationale	The requirement shall let the user update the marks.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-059 Edit Marks** 

#### 4.1.37 UC-2.15: UPLOAD LECTURE FILES

Identifier	M2-UC-2.15-FR-001
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Title	Upload Lecture Files
Requirement	User shall be able to upload the lecture files in a particular
	course.
Source	Team Members
Rationale	The requirement shall let the user upload a lecture file.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-060 Upload Lecture Files** 

Identifier	M2-UC-2.15-FR-002
Title	Lecture File Size Validation
Requirement	If the size of file/folder is exceeding 50MB then the system
	would display "File/Folder is too large".
Source	Team Members
Rationale	The notify the user that the file/folder that he has uploaded is
	larger than the specified size.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-061 Lecture File Size Validation

Identifier	M2-UC-2.15-FR-003
Title	Lecture File Format Validation
Requirement	If the user has uploaded any file of the format that this system
	does not support, then the system would display "System does
	not support the file format".
Source	Team Members
Rationale	The requirement shall let the user know that he has uploaded the
	file of format that the system does not support.
Restrictions and Risk	1. The format of all the lecture files in the folder shall be PDF,
	DOC and PPT.
Dependencies	N/A
Priority	High

Table: FR-062 Lecture File Format Validation

#### 4.1.38 UC-2.16: VIEW LECTURE FILE

Identifier	M2-UC-2.16-FR-001
Title	Display Lecture File
Requirement	The system shall display the lecture file to the user.
Source	Team Members
Rationale	The requirement shall open the lecture file for the user.
Restrictions and Risk	N/A
Dependencies	FR-163
Priority	Medium

Table: FR-063 Display Lecture File

#### 4.1.39 UC-2.17: DOWNLOAD LECTURE FILE

Identifier	M2-UC-2.17-FR-001
Title	Download Lecture File
Requirement	User shall click on "Download".
Source	Team Members
Rationale	The requirement shall download the lecture file.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-064 Download Lecture File

#### 4.1.40 UC-2.18: Delete Lecture File

Identifier	M2-UC-2.18-FR-001
Title	Delete Lecture File
Requirement	User shall click on "Delete".
Source	Team Members
Rationale	The requirement will delete the lecture file.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

Table: FR-065 Delete Lecture File

#### 4.1.41 UC-2.19: SAVE VIDEO

Identifier	M3-UC-2.19-FR-001
Title	Save Video
Requirement	After the live broadcasting is completed, our system would ask the teacher if he wants to save the video or not. If the teacher selects "yes" then the video will be saved in the corresponding course folder.
Source	Team Members
Rationale	The requirement shall be able to save the video after live broadcast.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-066 Save Video

#### 4.1.42 UC-2.20: WATCH VIDEO

Identifier	M3-UC-2.20-FR-001
Title	Watch Video
Requirement	User will click on "Watch" to watch the video
Source	Team Members
Rationale	The requirement shall play the video for the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-067 Watch Video

#### 4.1.43 UC-2.21: DOWNLOAD VIDEO

Identifier	M3-UC-2.21-FR-001
Title	Download Video
Requirement	User shall click on "Download".
Source	Team Members
Rationale	The requirement shall download the video.
<b>Restrictions and Risk</b>	Only the owner of the video can download the video.
Dependencies	N/A
Priority	High

Table: FR-068 Download Video

#### 4.1.44 UC-2.22: UPLOAD VIDEO

Identifier	M2-UC-2.22-FR-001
Title	Upload Video
Requirement	User shall click on "Add" to upload video in the course folder.
Source	Team Members
Rationale	The requirement shall upload a video.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

Table: FR-069 Upload Video

Identifier	M2-UC-2.2-FR-002
Title	Video Size Validation
Requirement	If the user uploads a file larger than the specified size then the
	system will display "The video/folder is too large in size".
Source	Team Members
Rationale	The requirement shall take the video from the user's computer.
Restrictions and Risk	1. The size of the video shall not be more than 200MB.
Dependencies	N/A
Priority	High

Table: FR-070 The video/folder is too large in size

#### 4.1.45 UC-2.23: DELETE VIDEO

Identifier	M2-UC-2.23-FR-001
Title	Delete Video
Requirement	User shall click on "delete".
Source	Team Members
Rationale	The requirement shall delete the video.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-071 Delete Video** 

# 4.1.46 UC-2.24: Subscribe Course

Title	Subscribe Course
Requirement	User shall click on "Subscribe".
Source	Team Members
Rationale	The requirement shall subscribe the user for that course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-072 Subscribe Course** 

#### 4.1.47 UC-2.25: Unsubscribe Course

Identifier	M2-UC-2.25-FR-001
Title	Unsubscribe
Requirement	User will click on "Unsubscribe".
Source	Research
Rationale	The requirement will help the user to unsubscribe the course.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-073 Unsubscribe** 

#### 4.1.48 UC-2.26: RATE TEACHER

Identifier	M2-UC-2.26-FR-001
Title	Rate Teacher
Requirement	User shall click on "Rate Teacher".
Source	Team Members
Rationale	The requirement shall take feedback of the user.
<b>Restrictions and Risk</b>	Only Subscribed users will be able give feedback.
Dependencies	N/A
Priority	High

**Table: FR-074 Rate Teacher** 

#### 4.1.49 UC-2.27: REVIEW TEACHER

Identifier	M2-UC-2.27-FR-001
Title	Review Teacher
Requirement	User will click on "Review Teacher" to give comments about
	the teacher.
Source	Team Members
Rationale	The requirement will take feedback of the user.
<b>Restrictions and Risk</b>	Only Subscribed users will be able give feedback.
Dependencies	N/A
Priority	High

**Table: FR-075 Review Teacher** 

#### 4.1.50 UC-2.28: RATE COURSE

Identifier	M2-UC-2.28-FR-001
Title	Rate Course

Requirement	User will click on "Rate Course".
Source	Team Members
Rationale	The requirement shall take feedback of the user.
<b>Restrictions and Risk</b>	Only Subscribed users will be able give feedback.
Dependencies	N/A
Priority	High

**Table: FR-076 Rate Course** 

#### 4.1.51 UC-2.29: REVIEW COURSE

Identifier	M2-UC-2.29-FR-001
Title	Review Course
Requirement	User will click on "Review Course" to write comments about
	the course.
Source	Team Members
Rationale	The requirement will take feedback of the user.
<b>Restrictions and Risk</b>	Only Subscribed users will be able give feedback.
Dependencies	N/A
Priority	High

**Table: FR-077 Review Course** 

#### 4.1.52 UC-2.30: Add Course

Identifier	M2-UC-2.30-FR-001
Title	Add Course
Requirement	User shall click on "Add Course" to get the form for creating a
	course.
Source	Team Members
Rationale	The requirement shall display the user a form to create the
	course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-078 Add Course

Identifier	M2-UC-2.30-FR-002
Title	Add Course Details
Requirement	User shall enter the details of the course. These details include
	the experience of the teacher, pre requisites required for a course
	etc.
Source	Team Members
Rationale	The requirement shall take details about the course
<b>Restrictions and Risk</b>	1. Required fields cannot be left empty
Dependencies	N/A
Priority	High

**Table: FR-079 Add Course Details** 

Identifier	M2-UC-2.30-FR-003
Title	Course Status Pending

Requirement	Till the time a course is not approved by the admin, its status
	will remain pending.
Source	Team Members
Rationale	The requirement shall keep the status of the course pending.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-080 Course Status Pending** 

#### 4.1.53 UC-2.31: EDIT COURSE

Identifier	M2-UC-2.31-FR-001
Title	Edit Course
Requirement	User shall click on "Edit Course" to make changes in course
	content or course details.
Source	Team Members
Rationale	The requirement shall edit the course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-081 Edit Course

#### 4.1.54 UC-2.32: DELETE COURSE

Identifier	M2-UC-2.32-FR-001
Title	Delete Course
Requirement	User shall click on "Delete" to delete the course.
Source	Team Members
Rationale	The requirement shall delete the course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-082 Delete Course** 

#### 4.1.55 UC-2.33: VIEW COURSE

Identifier	M2-UC-2.33-FR-001
Title	Display Course
Requirement	As soon as user shall click on "View", the system shall display
	the course to the user.
Source	Team Members
Rationale	The requirement shall display the course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-083 Display Course** 

#### 4.1.56 UC-2.34: VIEW COURSE SUBSCRIBERS

Identifier	M2-UC-2.34-FR-001
Title	Display Subscribers
Requirement	User shall be able to view subscribers
Source	Team Members
Rationale	The requirement will display the course subscribers.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-084 Display Subscribers

#### 4.1.57 UC-2.35: VIEW OTHER'S PROFILE

Identifier	M2-UC-2.35-FR-001
Title	Display Profile
Requirement	User shall be able to view his/her profile.
Source	Team Members
Rationale	The requirement will display the profile of the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-085 Display Profile

# 4.1.58 UC-2.36: VIEW MY ROOMS

Identifier	M2-UC-2.36-FR-001
Title	Display Rooms
Requirement	User shall be able to view the rooms on clicking "My Rooms".
Source	Team Members
Rationale	The requirement will display the list of rooms that user has
	joined.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-086 Display Rooms

#### 4.1.59 UC-2.37: JOIN ROOM

Identifier	M2-UC-2.37-FR-001
Title	Join Room
Requirement	User will click on "Join" button to join the room.
Source	Team Members
Rationale	The requirement will let the user join the room.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-087 Join Room** 

Identifier	M2-UC-2.37-FR-002
Title	Wrong Passcode

Requirement	In a private room, the user shall not be able to join with out a
	passcode. If the passcode entered is wrong then he will not join
	the room.
Source	Team Members
Rationale	The requirement will only let the user with correct passcode to
	join a private room.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-088 Wrong Passcode** 

#### 4.1.60 UC-2.38: Leave Room

Identifier	M2-UC-2.38-FR-001
Title	Leave Room
Requirement	User shall click on "Leave" button to leave any room.
Source	Team Members
Rationale	The requirement will let the user leave the room.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-089 Leave Room

#### 4.1.61 UC-2.39: CREATE ROOM

Identifier	M2-UC-2.39-FR-001
Title	Create Room
Requirement	User shall be able to create his own online room.
Source	Team Members
Rationale	The requirement will make online room for the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-090 Create Room

#### 4.1.62 UC-2.40: EDIT ROOM

Identifier	M2-UC-2.40-FR-001
Title	Edit Room
Requirement	User will click on "Edit Room" to edit the information in the
	room.
Source	Team Members
Rationale	The requirement shall edit the room information.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-091 Edit Room** 

#### 4.1.63 UC-2.41: DELETE ROOM

Identifier	M2-UC-2.41-FR-001
Title	Delete Room
Requirement	User will click on "Delete" to delete the room.
Source	Team Members
Rationale	The requirement shall delete the Room.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-092 Delete Room

#### 4.1.64 UC-2.42: VIEW ROOM

Identifier	M2-UC-2.42-FR-001
Title	Display the Room
Requirement	User shall click on room to view the room.
Source	Team Members
Rationale	The system shall display the room.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-093 Display The Room

#### 4.1.65 UC-2.43: Remove Student From Room

Identifier	M2-UC-2.43-FR-001
Title	Remove Student from Room
Requirement	User shall click on "Remove" to remove the student from the
	room.
Source	Team Members
Rationale	The requirement shall remove that particular student from room.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-094 Remove Student from Room

#### 4.1.66 UC-2.44: SEARCH

Identifier	M2-UC-2.44-FR-001
Title	Display Search Results
Requirement	User shall be able to view all the results of the search made.
Source	Team Members
Rationale	The requirement shall display the results of search done by the
	user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-095 Display Search Results** 

#### 4.1.67 UC-2.45: SEND COMPLAINT

Identifier	M2-UC-2.45-FR-001
Title	Send Complaint
Requirement	User shall be able to send complaint.
Source	Team Members
Rationale	The requirement will send the complaint to the admin.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-096 Send Complaint

#### 4.1.68 UC-2.46: OPEN QUIZ

Identifier	M2-UC-2.46-FR-001
Title	Open Quiz
Requirement	User shall click on "Open" to open up the quiz file to fill the
	quiz.
Source	Team Members
Rationale	The requirement trigger the timer to start.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	Medium

Table: FR-097 Open Quiz

# 4.1.69 UC-3.1: APPROVE COURSE

Identifier	M3-UC-3.1-FR-001
Title	Approve Course
Requirement	User shall click on "approve course" to approve a course.
Source	Team Members
Rationale	The requirement shall approve the course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-098 Approve Course

#### 4.1.70 UC-3.2: DISAPPROVE COURSE

Identifier	M3-UC-3.2-FR-001
Title	Disapprove Course
Requirement	User will click on "Disapprove course" to disapprove course.
Source	Team Members
Rationale	The requirement will disapprove the course and the course will
	be deleted automatically.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-099 Disapprove Course

#### 4.1.71 UC-3.3: BLOCK ACCOUNT

Identifier	M3-UC-3.3-FR-001
Title	Block User
Requirement	User will click on "Block" to block the user.
Source	Team Members
Rationale	The requirement shall block the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-100 Block User

#### 4.1.72 UC-3.4: UNBLOCK ACCOUNT

Identifier	M3-UC-3.4-FR-001
Title	Unblock User
Requirement	User will click on "Unblock" the user.
Source	Team Member
Rationale	The requirement will unblock the blocked account.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-101 Unblock User

#### 4.1.73 UC-3.5: VIEW BLOCKED USERS

Identifier	M3-UC-3.5-FR-001
Title	Display List
Requirement	As soon as the user shall click on "Blocked Users", the system
	will display the list of blocked users.
Source	Team Members
Rationale	The requirement shall show list of blocked users.
Restrictions and Risk	N/A
Dependencies	FR-259
Priority	High

Table: FR-102 Display List

#### 4.1.74 UC-3.6: VIEW APPROVED COURSES

Identifier	M3-UC-3.6-FR-001
Title	Display Active Courses
Requirement	As soon as the user shall click on "Approved Courses" button,
	the system shall display him the list of approved courses.
Source	Team Members
Rationale	The requirement shall show list of approved courses.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-103 Display List

#### 4.1.75 UC-3.7: VIEW PENDING COURSE REQUEST

Identifier	M3-UC-3.7-FR-001
Title	Display Pending Course Requests
Requirement	As soon as the user shall click on "Pending request" button, the
	system shall display the list of pending request.
Source	Team Members
Rationale	The requirement shall show the list of pending requests for
	course approval.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-104 Display List** 

#### 4.1.76 UC-3.8: View Pending Block Account Request

Identifier	M3-UC-3.8-FR-001
Title	Display Pending Account Requests
Requirement	As soon as the user shall click on "Pending Request" button, the
	system shall display the list of pending requests.
Source	Team Members
Rationale	The requirement shall show the list of pending requests.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-105 Display List

#### 4.1.77 UC-3.9: VIEW COMPLAINTS

Identifier	M3-UC-3.9-FR-002
Title	Display Complaint
Requirement	As soon as the user shall click on "view" button, the system shall
	display the complaint to the admin.
Source	Team Members
Rationale	The requirement shall show the complaint.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-106 Display Complaint** 

#### 4.1.78 UC-3.10: REPLY COMPLAINT

Identifier	M3-UC-3.10-FR-003
Title	Send Reply
Requirement	The user shall click on send button to send the reply. This button
	shall remain disabled until are the required fields are filled by
	the user.
Source	Team Members
Rationale	The requirement shall send the reply.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-107 Send Reply** 

Identifier	M3-UC-3.10-FR-003
Title	Add Reply To FAQ
Requirement	The reply of the complaint sent by the admin will be displayed
	in the list of FAQs to all the users.
Source	Team Members
Rationale	The requirement shall display the complaint and their replies.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-108 Add Reply To FAQ

#### 4.1.79 UC-4.1: SEND MESSAGE

Identifier	M4-UC-4.1-FR-001
Title	Send Message
Requirement	User shall be able to send the message through this requirement
Source	Team Members
Rationale	The requirement will send the message.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-109 Send Message

#### 4.1.80 UC-4.2: USE ROOM CHAT

Identifier	M4-UC-4.2-FR-001
Title	Send Message in Chat Box
Requirement	User will write his message and send it in online room chat.
Source	Team Members
Rationale	The requirement will take the message of the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-110 Send Message in Chat Box** 

#### 4.1.81 UC-4.3: Delete Conversation

Identifier	M4-UC-4.3-FR-001
Title	Delete Conversion
Requirement	User will click on "Delete Conversation".
Source	Team Members
Rationale	The requirement shall delete the conversation.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-111 Delete Button** 

#### 4.1.82 UC-4.4: VIEW CONVERSATION

Identifier	M4-UC-4.4-FR-001
Title	Display Full Conversation
Requirement	User will click on "Full Conversation" to view the full
_	conversation.
Source	Team Members
Rationale	The requirement will display the conversation of the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-112 View Full Conversation** 

#### 4.1.83 UC-4.5: ADD ANNOUNCEMENT

Identifier	M4-UC-4.5-FR-001
Title	Add Announcement
Requirement	User will click on "Create" to add an announcement. The teacher
	will fill the announcement form and save it. The students linked
	to the course will get this announcement as notification.
Source	Team Members
Rationale	The requirement shall help the teacher to make an
	announcement.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-113 Add Announcement

Identifier	M4-UC-4.5-FR-002
Title	Send Announcement as A Notification
Requirement	The teacher shall add an announcement for a particular course.
Source	Team Members
Rationale	The requirement shall send this announcement as a notification
	to the subscribers of that particular course.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-114 Send Announcement as Notification** 

#### 4.1.84 UC-4.6: VIEW NOTIFICATION

Identifier	M4-UC-4.6-FR-001
Title	Display Notification
Requirement	The system shall display the notification.
Source	Team Members
Rationale	The requirement will display the notification to the user.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-115 Display Notifications** 

#### 4.1.85 UC-4.7: Delete Announcement

Identifier	M4-UC-4.7-FR-001
Title	Delete Announcement
Requirement	User will click on "Delete".
Source	Team Members
Rationale	The requirement will delete the announcement.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-116 Delete Announcement** 

#### 4.1.86 UC-4.8: Remove Notification

Identifier	M4-UC-4.8-FR-001
Title	Remove Notification
Requirement	User shall click on "Bin" icon.
Source	Team Members
Rationale	The requirement shall delete the notification.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-117 Remove Notification** 

#### 4.1.87 UC-4.9: VIEW EVENT

Identifier	M4-UC-4.9-FR-001
Title	Display Events
Requirement	The system shall display the events to the user.
Source	Team Members
Rationale	The requirement will display the daily events to the user.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-118 Display Events** 

#### 4.1.88 UC-5.1: START AUDIO CALL

Identifier	M5-UC-5.1-FR-001
Title	Start Audio call
Requirement	User shall click on "Make a Call" button to start the audio call.
Source	Team Members
Rationale	The requirement shall be able to start an Audio call.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-119 Start Audio Call** 

#### 4.1.89 UC-5.2: JOIN AUDIO CALL

|--|

Title	Join Call
Requirement	User shall click on "Join Call" button to join the call.
Source	Team Members
Rationale	The requirement shall let the user join in the audio call.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-120 Join Call

## 4.1.90 UC-5.3: Push "P" To Talk

Identifier	M5-UC-5.3-FR-001
Title	Push "P" to talk
Requirement	User shall push "P" on the keyboard only when he needs to talk
Source	Team Members
Rationale	The requirement shall let the user talk by enabling his
	microphone.
Restrictions and Risk	N/A
Dependencies	N//A
Priority	High

Table: FR-121 Push "P" to Talk

#### 4.1.91 UC-5.4: LEAVE AUDIO CALL

Identifier	M5-UC-5.4-FR-001
Title	Leave Call
Requirement	User shall click on "Leave Call" button to leave the audio call.
Source	Team Members
Rationale	The requirement shall let the user to leave a call whenever user
	wants.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-122 Leave Call

#### 4.1.92 UC-5.5: STOP AUDIO CALL

Identifier	M5-UC-5.5-FR-001
Title	End Call
Requirement	User shall click on "End Call" button to end the running call.
Source	Team Members
Rationale	The requirement will end the audio call.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-123 End Call

#### 4.1.93 UC-5.6: REJECT AUDIO CALL

Identifier	M5-UC-5.6-FR-001
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Title	Reject Call
Requirement	User will click on "Reject" icon to reject an incoming call.
Source	Team Members
Rationale	The requirement shall provide functionality to user to reject the
	incoming call.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-124 Reject Call

#### 4.1.94 UC-5.7: ACCEPT AUDIO CALL

Identifier	M5-UC-5.7-FR-001
Title	Accept Call
Requirement	User shall click on "Accept" icon on the incoming call to accept
	it and start the audio call.
Source	Team Member
Rationale	The requirement shall provide functionality to user to accept
	the incoming call.
Restrictions and Risk	N/A
Dependencies	M5-UC-5.1-FR-001
Priority	High

**Table: FR-125 Accept Call** 

## 4.1.95 UC-6.1: START LIVE BROADCAST

Identifier	M6-UC-6.1-FR-001
Title	Go live
Requirement	User will click on "Go Live" button to start streaming the live
	broadcast.
Source	Team Members
Rationale	The requirement shall start live video broadcasting.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-126 Go Live

#### 4.1.96 UC-6.2: STOP LIVE BROADCAST

Identifier	M6-UC-6.2-FR-001
Title	End Call
Requirement	User shall click on "End Live" button to end the live
	broadcasting to all the users who are joined in.
Source	Supervisor
Rationale	The requirement shall stop live video broadcasting.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-127 End Call

#### 4.1.97 UC-6.3: JOIN BROADCAST

Identifier	M6- UC-6.3-FR-001
Title	Join Broadcast
Requirement	User shall click on "Join Broadcast" button to join in the live
	broadcast.
Source	Team Members
Rationale	The requirement shall let the user join in the broadcast
	whenever the user wants.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-128 Join Broadcast** 

#### 4.1.98 UC-6.4: LEAVE BROADCAST

Identifier	M6-UC-6.4-FR-001
Title	Leave Broadcast
Requirement	User shall click on "Leave Broadcast" button to leave the
	broadcast.
Source	Research
Rationale	The requirement shall let the user leave the live broadcast.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-129 Join Broadcast** 

#### 4.1.99 UC-6.5: SWITCH TO SCREEN SHARING

Identifier	M6-UC-6.5-FR-001
Title	Screen Share
Requirement	User shall click on "Screen Share" icon to start screen sharing
	mode.
Source	Research
Rationale	The requirement shall provide the functionality to let the user
	switch from live broadcast to Screen sharing anytime.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-130 Screen Share

#### 4.1.100 UC-6.6: LOCK ROOM

Identifier	M6-UC-6.6-FR-001
Title	Lock Room
Requirement	User will check the "Lock Room" checkbox to lock the room.
Source	Team Members
Rationale	The requirement will lock the room and no other student will
	be able to join the room.

Restrictions and Risk	After the live broadcasting session has started while locking
	the room. No one else will be able to join in the room.
Dependencies	N/A
Priority	Medium

Table: FR-131 Lock Room

#### 4.1.101 UC-6.7: UNLOCK ROOM

Identifier	M6-UC-6.7-FR-001
Title	Unlock Room
Requirement	User shall uncheck the "Lock Room" checkbox to unlock the
	room during the live broadcasting session.
Source	Team Members
Rationale	The requirement shall provide the functionality to unlock the
	room at any time.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	Medium

Table: FR-132 Unlock Room

#### 4.1.102 UC-7.1: ENABLE AUTO ZOOM

Identifier	M7-UC-7.1-FR-001
Title	Auto Zoom
Requirement	User will check the "Auto Zoom" checkbox to enable auto
	zoom.
Source	Team Members
Rationale	The requirement shall provide the functionality to enable the
	auto zoom functionality when the user needs.
Restrictions and Risk	Only teacher shall be allowed to enable autozoom.
Dependencies	N/A
Priority	High

Table: FR-133 Auto Zoom

Identifier	M7-UC-7.1-FR-002
Title	Input Video Frame
Requirement	System shall take input Video Frame by Frame to perform other operations.
Source	Research
Rationale	The requirement shall split video in frames.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-134 Input Video Frame** 

Identifier	M7-UC-7.1-FR-003
Title	Feature Extraction
Requirement	System will extract features from the frames to learn the object "Whiteboard".
Source	Research

Rationale	The requirement shall extract whiteboard features from the
	frame.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-135 Feature Extraction** 

Identifier	M7-UC-7.1-FR-004
Title	Classification
Requirement	System will classify the frames and locate if the whiteboard is
	present in that particular frame.
Source	Research
Rationale	The requirement shall classify whiteboard in the frames.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-136 Classification

Identifier	M7-UC-7.1-FR-005
Title	Localization
Requirement	System will draw a bounding box.
Source	Research
Rationale	The requirement will draw a bounding box around the
	whiteboard to get its coordinates.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-137 Localization

Identifier	M7-UC-7.1-FR-006
Title	Preprocessing Training Data
Requirement	System shall preprocess the training data making it fit for the model.
Source	Research
Rationale	The requirement shall preprocess the training data by resizing
	it.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-138 Preprocessing Training Data** 

Identifier	M7-UC-7.1-FR-007
Title	Action label Database
Requirement	System shall create labels for actions that we want to classify.
Source	Research
Rationale	The requirement shall maintain a labels against the actions.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-139 Action label Database

Identifier	M7-UC-7.1-FR-008
Title	Create Model
Requirement	System shall create a CNN Model on which data shall be trained
	on.
Source	Team Members
Rationale	The requirement will create a neural network model.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-140 Create Model

Identifier	M7-UC-7.1-FR-009
Title	Feature Extraction
Requirement	System shall extract features from the frames to make a map of
	features in order to classify the action performed.
Source	Research
Rationale	The requirement shall make a feature map from the frames.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-141 Feature Extraction

Identifier	M7-UC-7.1-FR-010
Title	Compile Model
Requirement	System shall compile the model.
Source	Research
Rationale	The requirement shall define loss function, optimizer and
	metrics for the model. The compiled model will be used for
	training.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-142 Compile Model** 

Identifier	M7-UC-7.1-FR-011
Title	Input Video Frame
Requirement	System shall take input Video Frame by Frame.
Source	Research
Rationale	The requirement will split video in frames.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-143 Input Video Frame

Identifier	M7-UC-7.1-FR-012
Title	Segmentation
Requirement	System will segment the frame

Source	Research
Rationale	The requirement will classify each pixel of the region into an
	object.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-144 Segmentation

Identifier	M7-UC-7.1-FR-013
Title	Feature Extraction
Requirement	System will extract features from the frames.
Source	Research
Rationale	The requirement will extract action features from the frames.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-145 Feature Extraction

Identifier	M7-UC-7.1-FR-014
Title	Action Classification
Requirement	System will classify the actions.
Source	Research
Rationale	The requirement will give labels and accuracy of the actions.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-146 Action Classification** 

Identifier	M7-UC-7.1-FR-015
Title	Zoom on Writing Board
Requirement	System will zoom in on the white board.
Source	Research
Rationale	The requirement will automatically zoom in on the whiteboard
	if writing action is performed.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-147 Zoom on Writing Board

## 4.1.103 UC-7.8: DISABLE AUTO ZOOM

Identifier	M7-UC-7.8-FR-001
Title	Disable Auto Zoom
Requirement	User will uncheck the "Auto Zoom" checkbox.
Source	Research
Rationale	The requirement will stop Auto Zoom based on actions.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-148 Auto Zoom

#### 4.1.104 UC-8.1: START SCREEN SHARING

Identifier	M8-UC-8.1-FR-001
Title	Start Share Screen
Requirement	User will click on the "Share Screen" to start screen sharing.
Source	Research
Rationale	The requirement will start broadcasting teacher's screen to
	students.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-149 Share Screen Button** 

#### 4.1.105 UC-8.2: JOIN SCREEN SHARING

Identifier	M8-UC-8.2-FR-001
Title	Join Screen Sharing
Requirement	User will click on the "Join Screen Sharing" to join screen share.
Source	Research
Rationale	The requirement will let the user join in the screen sharing
	broadcasting session.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-150 Join Screen Sharing

#### 4.1.106 UC-8.3: Leave Screen Sharing

Identifier	M8-UC-8.3-FR-001
Title	Leave Screen Sharing
Requirement	User will click on the "Leave Screen Sharing" to leave screen
	sharing.
Source	Research
Rationale	The requirement will let the leave join in the screen sharing
	broadcasting session.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-151 Leave Screen Sharing** 

#### 4.1.107 UC-8.4: SWITCH TO CAMERA SHARING

Identifier	M8-UC-8.4-FR-001
Title	Switch to Camera Sharing
Requirement	User will click on the "Switch to Camera Sharing" icon.
Source	Research
Rationale	The requirement will let the teacher switch from screen sharing
	to camera sharing.
Restrictions and Risk	N/A
Dependencies	N/A

Priority	High

**Table: FR-152 Switch To Camera Sharing** 

#### 4.1.108 UC-8.5: STOP SCREEN SHARING

Identifier	M8-UC-8.5-FR-001
Title	End Share Screen
Requirement	User will click on the "End Share Screen".
Source	Research
Rationale	The requirement will end broadcasting session.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

Table: FR-153 End Share Screen

#### 4.1.109 UC-9.1: VIEW RECOMMENDED COURSES

Identifier	M9-UC-9.1-FR-001
Title	Display Courses
Requirement	The system shall display the recommended courses to the user.
Source	Research
Rationale	The requirement will display the list of recommended courses to
	the student.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-154 Display Courses** 

#### 4.1.110 UC-9.2: VIEW TRENDING COURSES

Identifier	M9-UC-9.2-FR-001
Title	Display Trending Courses
Requirement	User will click on "Trending Courses" button.
Source	Research
Rationale	The requirement will display the list of tending courses to the
	user.
<b>Restrictions and Risk</b>	N/A
Dependencies	N/A
Priority	High

**Table: FR-155 Trending Courses** 

#### 4.1.111 UC-9.3: VIEW VISITOR'S ANALYTICS

Identifier	M9-UC-9.3-FR-001
Title	Display Visitor's Analytics
Requirement	System will display visitor's analytics to the admin.
Source	Research
Rationale	The requirement will display the visitor's analytics.
Restrictions and Risk	N/A

Dependencies	N/A
Priority	High

**Table: FR-156 Display Visitor's Analytics** 

#### 4.1.112 UC-9.4: VIEW TOP COURSES' ANALYTICS

Identifier	M9-UC-9.4-FR-001
Title	Display Top Courses
Requirement	User will click on "Top Courses".
Source	Research
Rationale	The requirement will display the table of top courses on the basis
	of subscribers.
Restrictions and Risk	N/A
Dependencies	N/A
Priority	High

**Table: FR-157 Display Top Courses** 

# 5. Non-Functional Requirements

## 5.1 Usability:

Identifier	<u>UR-1</u>
Title	Ease Of Use
Requirement	Users shall be able to understand the system fully in half an hour.

**Table: UR-1 Description** 

Identifier	UR-2
Title	Ease Of Use
Requirement	User shall be able to navigate through the system by making an average of 4
	errors in every session.

**Table: UR-2 Description** 

## 5.2 Efficiency

Identifier	<u>ER-1</u>
Title	Response Time
Requirement	System shall require 5sec to fulfil a request over an internet of 6Mbps Speed.

**Table: ER-1 Description** 

Identifier	<u>ER-2</u>
Title	Through Put
Requirement	System will support maximum of 100 simultaneous transactions per second.

**Table: ER-2 Description** 

Identifier	ER-3

Title	Connections
Requirement	System will support maximum of 100 connections simultaneously.

**Table: ER-3 Description** 

Identifier	<u>ER-4</u>
Title	Performance
Requirement	System shall broadcast screen sharing with 1 sec latency.

**Table: ER-4 Description** 

Identifier	<u>ER-5</u>
Title	Performance
Requirement	System shall broadcast video call with 1 sec latency.

Table: ER-4 Description

## 5.3 Reliability:

Identifier	<u>RR-1</u>
Title	Availability
Requirement	System shall be available 99% of the 24/7 hours.

**Table: RR-1 Description** 

Identifier	<u>RR-2</u>
Title	MTBF
Requirement	Mean time between failures shall be once in a week.

**Table: RR-3 Description** 

Identifier	<u>RR-3</u>
Title	MTTP
Requirement	Mean time to repair shall be two hours.

**Table: RR-3 Description** 

# 5.4 Supportability:

Identifier	<u>SR-1</u>
Title	Supportability
Requirement	Web Application shall support Firefox 68 or higher; Google Chrome 76 or
	higher; Edge 44 or higher.

Table: SR-1 Description

## 5.5 Security:

Identifier	<u>SR-2</u>
Title	Security

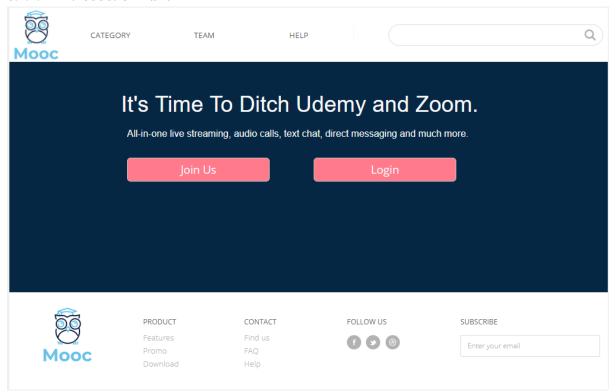
Requirement	User's	passwords	and	critical	information	stored	in	database	shall	be
	encryp	ted and hash								

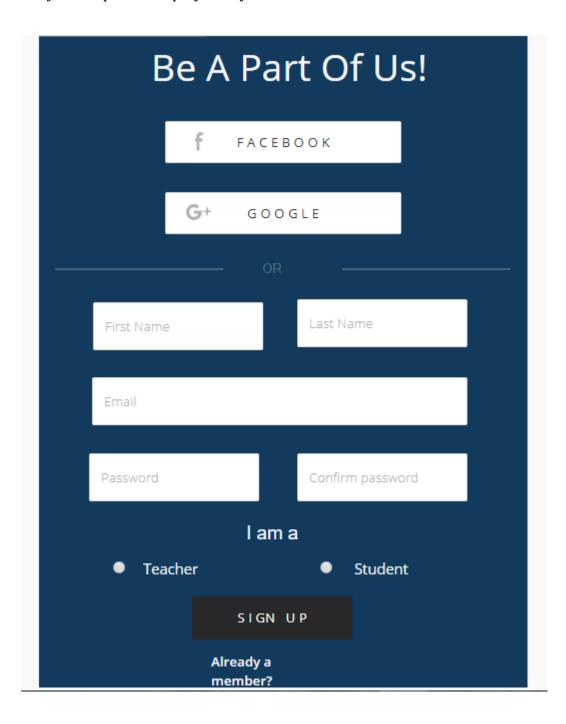
**Table: SR-1 Description** 

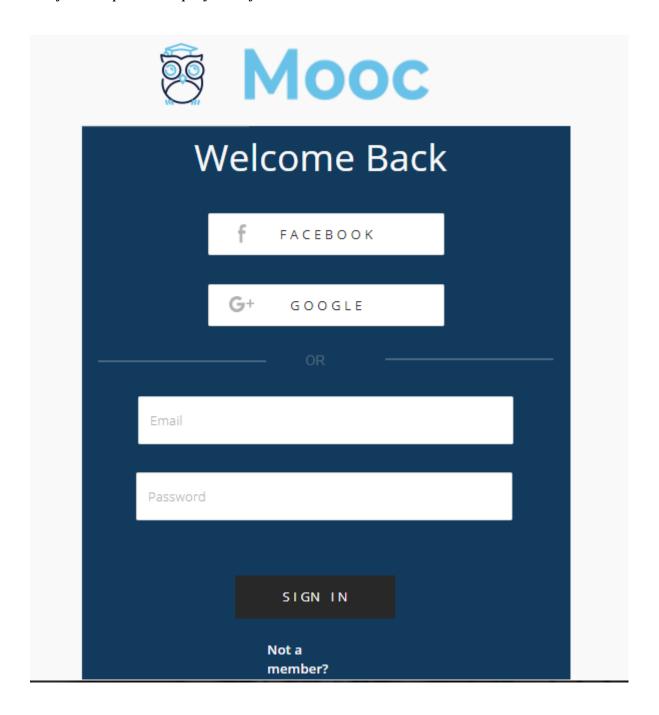
## **6.** External Interface Requirements:

#### **6.1 User Interface:**

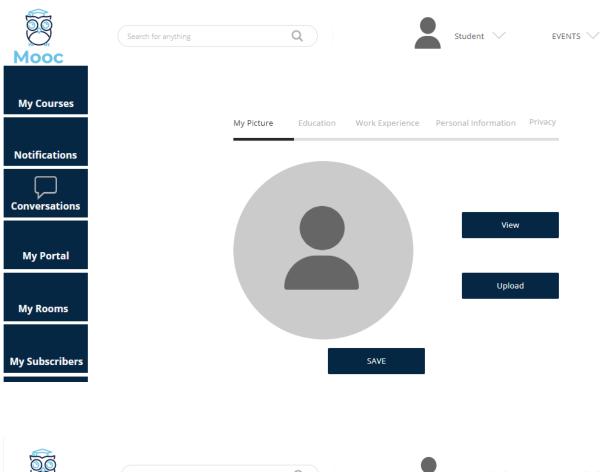
#### **6.1.1.1 Introduction Panel**

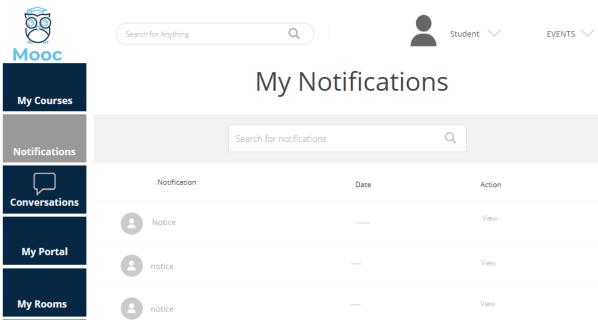


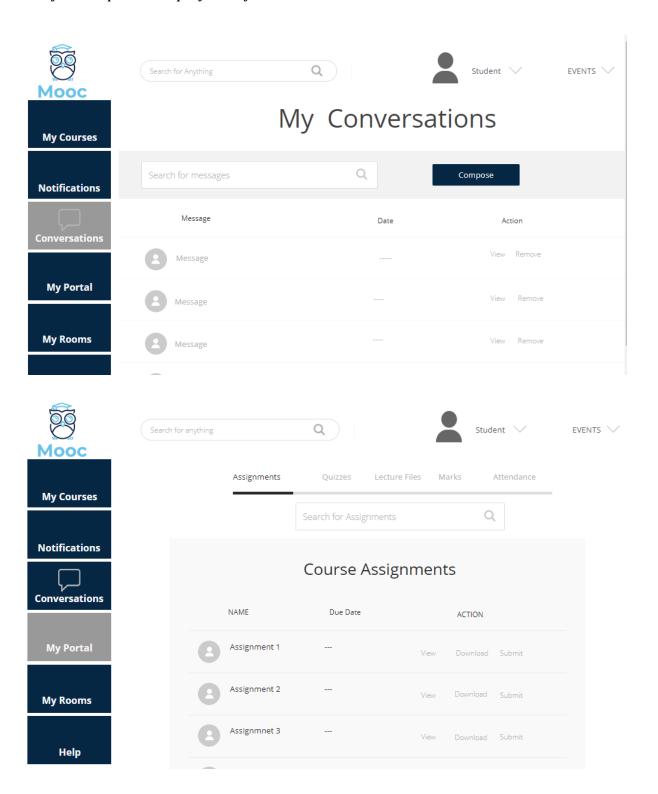


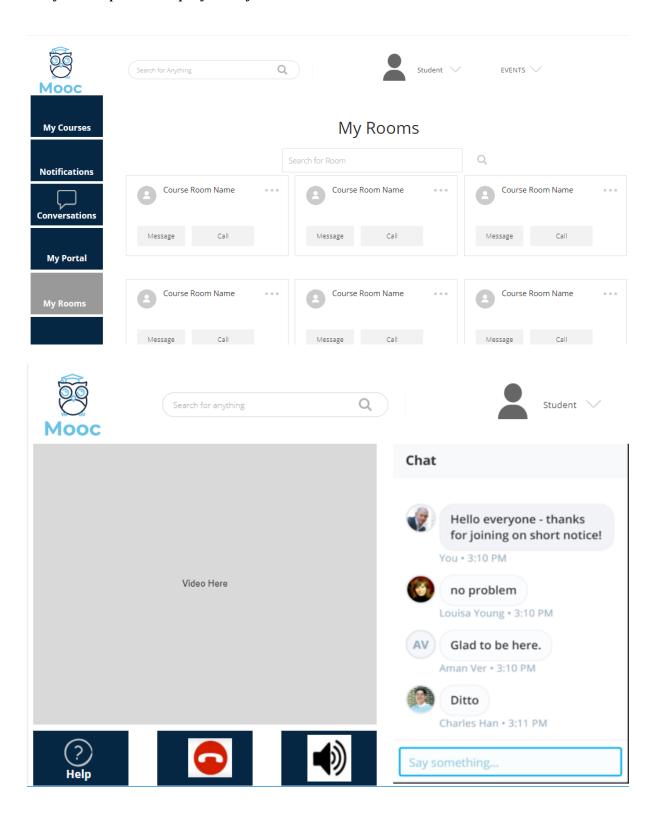


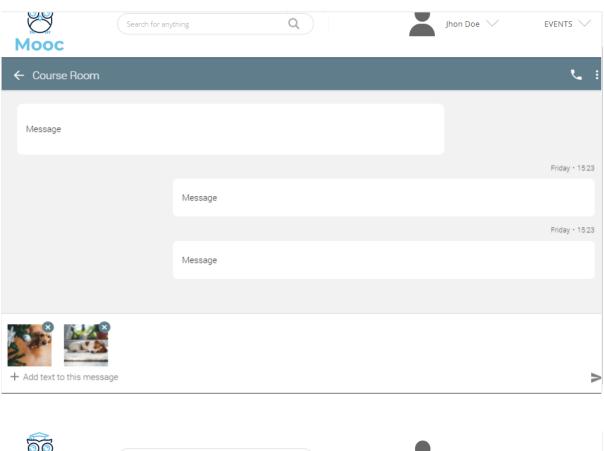
#### 6.1.2 Student View

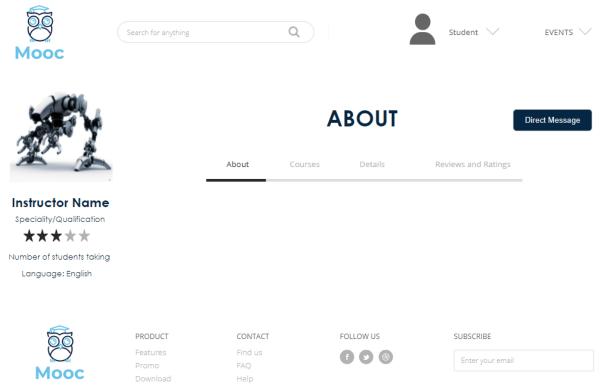


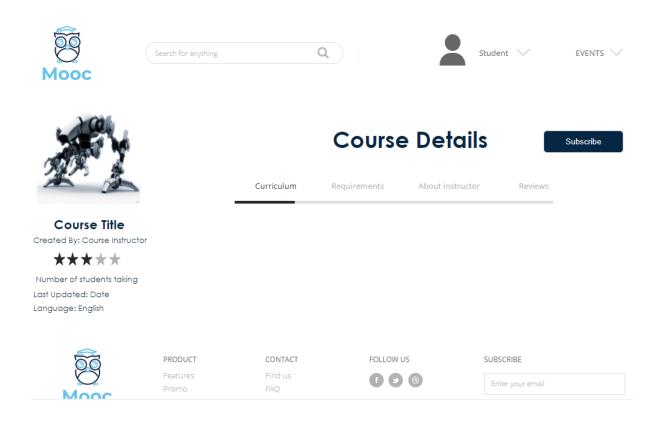




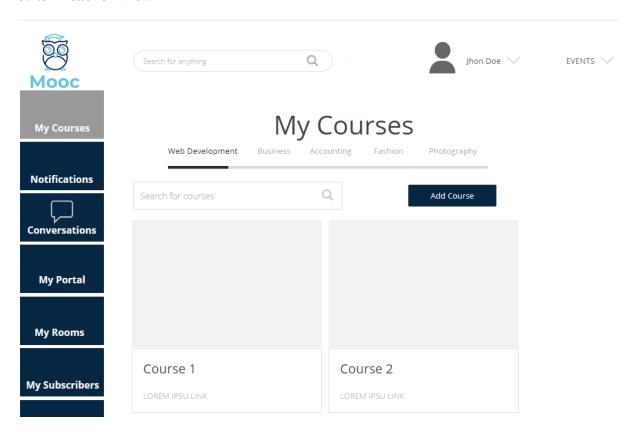


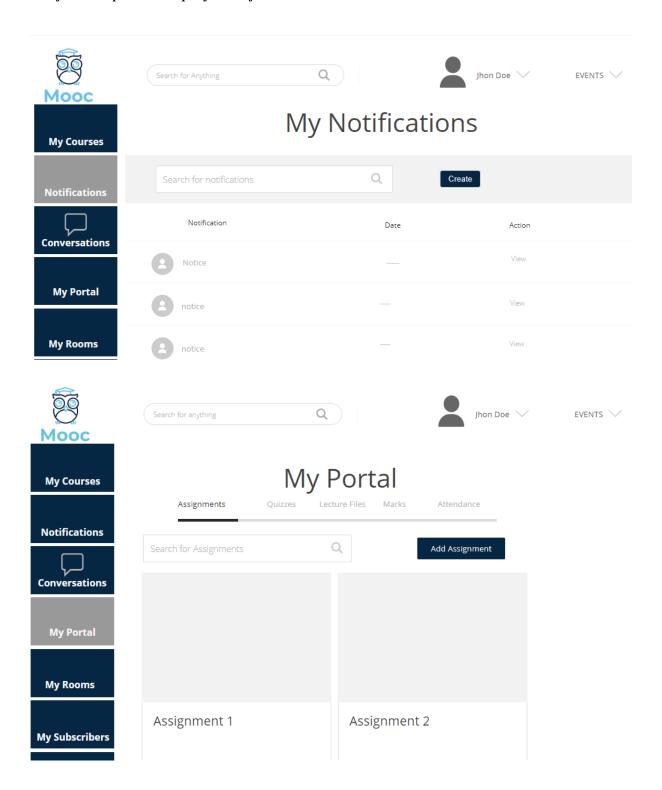


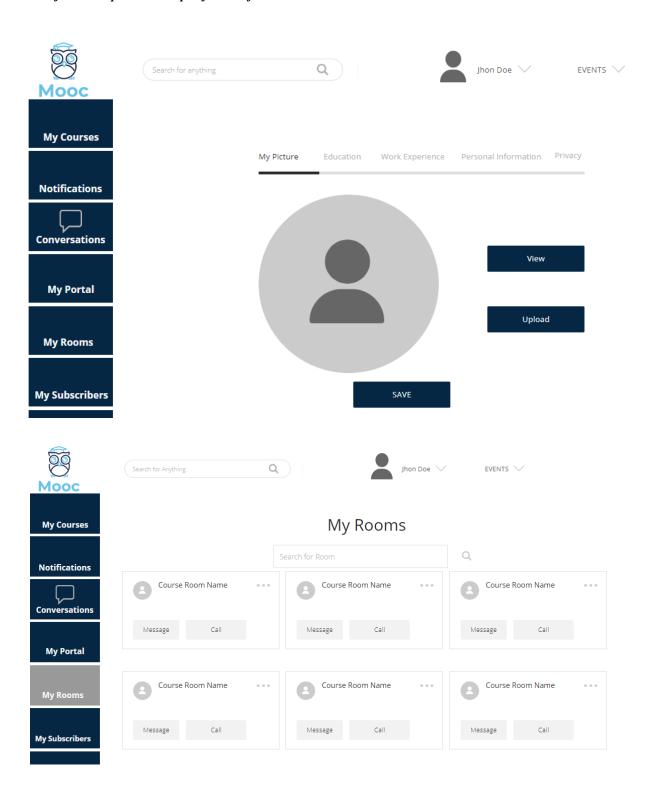


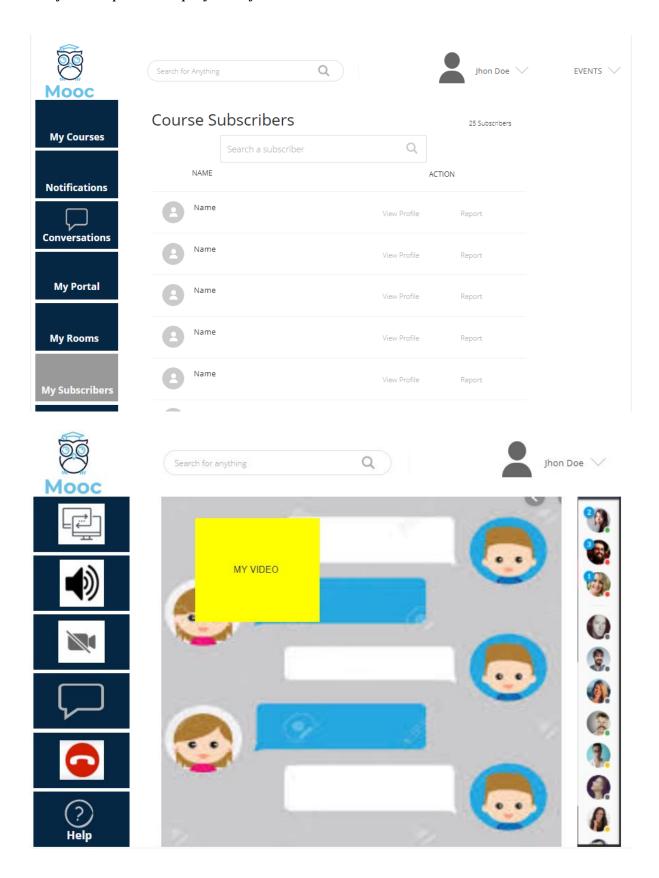


#### 6.1.3 Teacher View









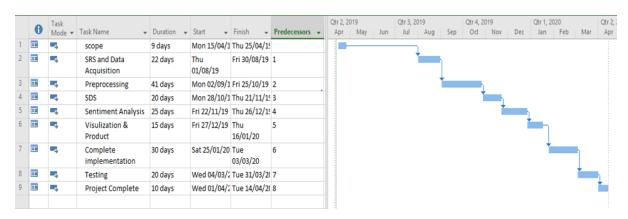
#### 6.1.4 Admin View



#### **6.2 Communication Interface:**

Following are the communication interfaces of our system: *CI-1: The system shall.....* 

# 7. Project Gantt chart



## 8. References

https://www.udemy.com/ https://www.udacity.com/ https://www.wiziq.com/

https://zoom.us/

https://discordapp.com/