

SWE216 - T231 - PROJECT PHASE 1- Group 4

Name:	ID:	Contribution
MOSA ALSHAKHOURI	202016000	Interviews and func, non func req and Use case descriptions
MAHAR AL SHAKESALEH	202155210	GUI and Use case descriptions
FALEH AL-KHALDI	201680740	Use case diagram
TURKI ALGHURAIRI	202015760	Interview questionnaires
RAYAN ALHARBI	202015380	Requirements documentation using Confluence, a Jira tool.
MESHARI ALHEJAILI	202173450	Interviews and func, non func req and Use case descriptions
MOHAMMED CADURA	201916710	No contribution

Table of Content:

I. Requirements Elicitation:	3
A. Stakeholders:	3
B. Interviews:	3
C. Functional & non-functional requirements	12
II. Use case diagram:	15
Use case descriptions:	16
III. Requirement Analysis and Prioritization:	40
A- Analysis of existing requirements	40
B- Identify Importance, Feasibility, and Dependencies.	40
C- Establish traceability links.	41
Traceability Table:	41
Traceability Matrix:	41
D: prioritization	43
IV. Change Control and Versioning	44
1. Change Request Form	45
2. Request Validity Guidelines	46
3. Find Directly Affected & Dependant Requirements	47
Change Request Example:	48

I. Requirements Elicitation:

A. Stakeholders:

- a. Students
- b. Instructors
- c. App administrators
- d. IT experts
- e. KFUPM student affairs

B. Interviews:

Interviewee name: Meshari Alhejaili (student) Date: 30 - October - 2023 Time: 12:30 PM Place: Building 24, main hall Subject: KFUPM Tutoring App		
Time allocated	Interviewer Question or Objective	Interviewee response
2 min	Open the interview: <ul style="list-style-type: none">● Introduce ourselves● Thank the interviewee for his/her time● State the purpose of the interview	
2-3 min	Question 1:	The main problem is finding a suitable explanation to a certain topic online

	What academic challenges do you have that you hope to address with this app?	
3 min	Question 2: What features would you like to have regarding the user interface?	I would like to know what videos that i have watched and have a quick way to contact the instructor.
2 min	Question 3: What do you think is the best way to communicate with the instructors?	I think sending a question through the app directly and receiving a notification when it has been answered is the best way.
4 min	Question 4: What subjects or courses do you think this app should primarily focus on for tutoring and support?	I think that the courses with the fewest tutoring videos should be the primary focus, e.g. advance major courses.
9-10 mins	Question 5: What would be your preferred method for scheduling tutoring sessions or appointments through the app?	I would like the instructors to schedule it at their preferred time, and I would like the system to send a notification when the session starts. Even if I miss the beginning, I can catch up later as the session will be recorded, and communicating with the instructor will be easy.

1 min	Question 6: Do you have any specific preferences for the type of tutors (e.g., students, instructure, experts) you'd like to connect with through the app?	Instructure is better but students or experts are also okay.
2 min	Question 7: What other apps or platforms do you currently use for academic support or communication with instructors, and what do you like or dislike about them?	I mostly use the email, because i can write my whole question into one email and receive a notification when i got a replay.
3 min	Question 8: Would you prefer one-on-one tutoring or group study sessions, and do you have any specific preferences for the group size if group sessions are an option?	Either one is fine but the group size shouldn't be more than 10 so everyone can answer without any extra noise.
5 min	Question 9: What platforms and devices do you primarily use for your academic work (e.g., smartphones, laptops, tablets), and how important is mobile accessibility for the app?	I mostly use laptop but a lot of times i need to quickly revise something so i use my mobile for easy access, and it's very important to be quick and efficient in the mobile.
2 min	Question 10: What kind of resources or supplementary materials (e.g., practice quizzes, video tutorials) do you believe would enhance your learning experience with the app?	The best thing is a video tutorial with a quiz after finishing the video to test what i have learnd
37 mins	Time allotted for questions and objectives	

2 mins	Time allotted for follow-up questions and redirection
39 mins	Time allotted for interview (12:30 p.m. - 1:09 p.m.)
General Comments and Notes:	

Interviewee name: Sultan Al-Faris (Student Affairs) Date: 31 - October - 2023 Time: 12:30 PM Place: Building 24, main hall Subject: KFUPM Tutoring App		
Time allocated	Interviewer Question or Objective	Interviewee response
2 mins	Open the interview: <ul style="list-style-type: none"> • Introduce ourselves • Thank the interviewee for his/her time • State the purpose of the interview 	
1 min	Question 1 Who will use this program?	KFUPM students KFUPM instructors System administrators
1 min	Question 2 Will there be recorded sessions?	Yes, after each live session it will be released as a video that can be accessed at any time.
6-7 mins	Question 3 Describe how the student will access a tutoring material?	The student will log in to his / her account, then will choose the course from the list, then will choose Qualified instructors or A+ student, then he will choose the name of

		instructor/studnet and finally he will choose the lesson he wants assistance with.
2 mins	Question 4 Will the system be only for KFUPM students?	Yes, we will not allow students outside KFUPM to create an account or watch any of the videos
1-2 mins	Question 5 Does the system need the user to create an account? Elaborate.	No, the system should be linked to the KFUPM portal and the user will use his KFUPM account to log in.
3-4 mins	Question 6 How will the system filter different courses? Follow-up question	There will be a list for each department and after clicking on the department name its courses will appear. No search feature will be implemented.
3-4 mins	Question 7: How will the student communicate with the instructors/ A+ students?	There will be a questions section at the bottom of the video player that allows students to ask questions and instructors to answer these questions.
1 min	Question 8 What is the primary goal of this project?	To help those who need assistance to increase their knowledge and increase their GPA
2 mins	Question 9 Should this system be free or paid ? Follow-up question	The system should be free to students. The government provides the student affairs with funding

		for such projects
2-3 mins	Question 10 Are there any specific performance metrics you would like the system to have?	Yes. The system should be responsive and efficient. Also users should receive the notification in less than 5 mins.
1 min	Question 11 What level of security the system should have	Since we don't have any private data, basic security measures should be implemented.
1 min	Question 12 When should the app launch?	The app should launch before the start of the first semester next year(2024) by 1 week. Around 15th of august 2024.
2-3 mins	Question 13 How will the instructor/A+ student communicate with students who need assistance	There will be a section where the students will put their questions and instructors will have a menu to receive these questions and answer them seamlessly
2 mins	Question 14 Will there be rewards for the users ? Follow-up question	Yes, instructors who recieve the most views on their videos/live sessions will be rewarded with complimentary coupons and discounts from selected stores. There will not be rewards for students getting the assistance.
3-4 mins	Question 15	

	What resources (financial, technical) do you think should be available for the development and maintenance of the app?	
1 min	Objective Conclude the interview <ul style="list-style-type: none">• Thank the interviewee for his time and cooperation	
41 mins	Time allotted for questions and objectives	
9 mins	Time allotted for follow-up questions and redirection	
50 mins	Time allotted for interview (12:30 p.m. - 1:20 p.m.)	
General Comments and Notes:		

Interviewee name: Yahya Garout (Instructor)

Date: 1 - November - 2023

Time: 12:30 PM

Place: Building 22, main hall

Subject: KFUPM Tutoring App

Time allocated	Interviewer Question or Objective	Interviewee response
2 mins	Open the interview: <ul style="list-style-type: none">● Introduce ourselves● Thank the interviewee for his/her time● State the purpose of the interview	
1 min	Question 1 Who will use this program?	KFUPM students, instructors and IT experts
2 mins	Question 2 Will there be recorded sessions?	Yes, we should consider students with different schedules by uploading these live sessions.
2 mins	Question 3 Describe how the student will access a tutoring material?	The student will navigate through the main page to reach the material that he needs.
2 mins	Question 4 Will the system be only for KFUPM students?	Yes, the material is specific for KFUPM students thus it should only be accessed by KFUPM students.
2 mins	Question 5 Does the system need the user to create an account?	No, since the app is for KFUPM students only, the app should utilize the KFUPM accounts.

3-4 mins	Question 6 How will the system filter different courses?	They should be filtered by the department name.
4 mins	Question 7: How would the student communicate with the instructor?	The app should provide the instructor's contact information.
1 min	Question 8: is the system linked to the KFUPM portal?	Yes, the app should allow the user to login using his KFUPM credentials.
2-3 mins	Question 9: Can the user distinguish between A+ students and Qualified instructors.	Yes, the app should provide the user with the choice of either A+ students or qualified instructors.
4-5 mins	Question 10 Will the system allow A+ students to publish videos ? Describe how will it work.	Yes, we would like have the ability to give access to A+ students to publish videos and answer questions
5 mins	Question 11 Will the app allow the user to give rating for the instructor?	No, I think the rating system will over complicate the app without real benefit because it is subjective.
33 mins	Time allotted for questions and objectives	
9 mins	Time allotted for follow-up questions and redirection	
42 mins	Time allotted for interview (12:30 p.m. - 1:12 p.m.)	
General Comments and Notes:		

C. Functional & non-functional requirements

[Confluence](#), which was used to document the requirements of this project, is a collaborative workspace by Atlassian that integrates with Jira for project management. It allows teams to create, capture, and organize project-related content.

Requirements of this project can be found [here](#).

The table below provides an explanation of the coding system:

Stakeholder	Code
Student	ST-00
Instructor	IN-00
App administrator	AA-00
IT expert	IT-00
KFUPM student affairs	SA-00
System/ generic user*	U-00

Used for a requirement which involves all users or non-functional requirements*

Requirement

ST-01: The system shall allow students to send questions to instructors.

ST-02: The system shall send a notification to the student if his question is answered.

ST-03: The system shall allow students to watch any of the videos published on the app.

IN-01: The system shall allow instructors to answer student questions.

IN-02: The system shall send a notification to the instructor if he received a question.

IN-03: The system shall show the contact information of all instructors separately.

IN-04: The system shall allow instructors to give selected students access to publish videos on the app.

IN-05: The system should allow instructors to create polls

IN-06: The system shall allow instructors to create flashcards

IN-07: The system shall allow instructors to create practice questions

IN-08: The system shall allow the instructor to their contact information.

AA-01: The system shall allow administrators to give selected students access to publish videos on the app.

IT-01: The system should have high testability

IT-02: The system should have high maintainability

SA-01: The system shall allow student affairs to access the educational content

SA-02: The system shall allow student affairs to access engagement statistics

U-01: The system shall show the contact information of all instructors separately.

U-02: The system shall cluster all similar questions using AI to one question.

U-03: The system shall allow the user to select one of the department names.

U-04: The system shall display an appropriate message if there are no videos available.

U-05: The system shall display the live session when available on top of recorded videos.

Requirement

U-05: The system shall display the live session when available on top of recorded videos.

U-06: The system shall allow the user to log in their account.

U-07: The system shall allow the user to log out of their account.

U-08: The system shall allow the user to select one of the course names.

U-09: The system shall allow the user to select between lecturer types (A+ students or instructors).

U-10: The system shall allow the user to select one of the lecturer names.

U-11: The system shall allow the user to select one of the topics for the selected course

U-12: The system shall display the recorded video for the selected topic.

U-13: The system shall hide the live session if the user selected a topic.

U-14: Users should be able to ask a question with a response time of under 5 seconds.

U-15: The app must run on both iOS and Android platforms.

U-16: The app should be available 24/7 with at least 90% uptime.

U-17: User data must be securely encrypted.

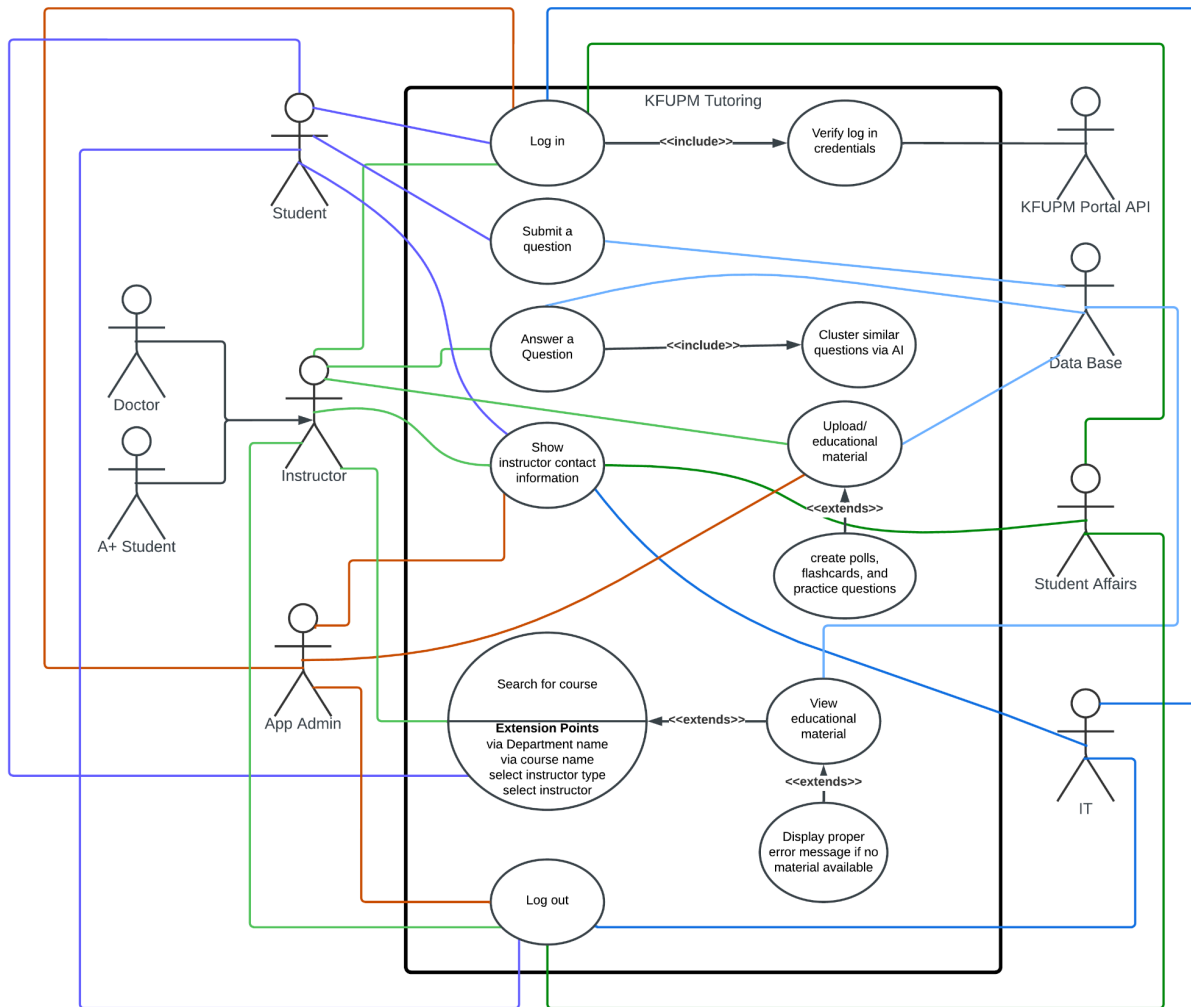
U-18: The user interface should be designed to be intuitive and easy to navigate.

U-19: The system shall implement two factor authentication.

U-20: The system shall load videos within 5 seconds

II. Use case diagram:

[View the chart here](#)



Use case descriptions:

Use case ID:	UC-001		
Use Case Name:	Login		
Created by:	Maher Alshakesaleh	Last Updated by:	Maher AlshakeSaleh
Date Created:	2/11/2023	Last Revision Date:	10/11/2023
Actors:	Students & Instructors		
Description:	The ability to be recognized by the system and to use its functionalities afterwards		
Trigger:	Click log in button		
Preconditions:			
Postconditions:	<ul style="list-style-type: none">• The main page is shown to the user• The user can now use the system as it fits them		
Normal Flow:	<ol style="list-style-type: none">1. The system displays the first page2. The system asks the user for email address and password3. The user enters the email address and the password4. The user clicks log in5. The system checks if the account exist6. The system displays the main page		
Alternative Flows:			
Exceptions:	<p>In normal flow step 5</p> <ol style="list-style-type: none">1. The account entered does not exist		

	2. The system shows an error message
Assumptions:	
Notes and Issues:	

Use case ID:	UC-002		
Use Case Name:	Submit a question		
Created by:	Maher AlshakeSaleh	Last Updated by:	Maher AlshakeSaleh
Date Created:	5/11/2023	Last Revision Date:	12/11/2023
Actors:	Students		
Description:	The ability for students to submit a question.		
Trigger:	Submit a question button		
Preconditions:	The student is logged in		
Postconditions:	The question is available in the questions page		
Normal Flow:	1-The System show the departments page 2-User select the desired department 3-The System show the courses page 5-User Select the desired course 6- The System show the detailed course page 7- User click on the “question section” button 8- The System show the Questions page 9-User click on the (+ icon) button 10-The Sytem show the QuestionForm page 11-User enter the question in the textfield. 12- User click on submit button		
Alternative Flows:			
Exceptions:			
Assumptions:			
Notes and Issues:			

Use case ID:	UC-003		
Use Case Name:	Answer a question		
Created by:	Maher AlshakeSaleh	Last Updated by:	Maher AlshakeSaleh
Date Created:	8/11/2023	Last Revision Date:	14/11/2023
Actors:	Instructors/ A+Students		
Description:	The ability for Instructors to answer a question.		
Trigger:	Submit a answer button		
Preconditions:	The user is logged in		
Postconditions:	The answer is shown for its questions		
Normal Flow:	1-The System show the departments page 2-The User select the desired department 3-The System show the courses page 5-The User Select the desired course 6- The System show the detailed course page 7- The User click on the “question section” button 8- The System show the Questions page 9-The User click on the (correct icon) button 10-The Sytem show the AnswerForm page 11-The User enter the answer in the textfield. 12- The User click on submit button		
Alternative Flows:			
Exceptions:			
Assumptions:			
Notes and Issues:			

Use case ID:	UC-004		
Use Case Name:	Show instructor contact information		
Created by:	MOSA ALSHAKHOURI	Last Updated by:	MOSA ALSHAKHOURI
Date Created:	5/11/2023	Last Revision Date:	14/11/2023
Actors:	Students, App admin, IT, Student affairs		
Description:	Displaying the KFUPM email, office location and office hours alongside the instructor name to the user.		
Trigger:	Clicking on the button containing the name of the instructor		
Preconditions:	The student is logged in		
Postconditions:	The user is able to read the information displayed on the screen		
Normal Flow:	1- The System shows the topics of the course 2- The User selects the desired topic 3- The System displays the instructor information on top of the screen above the recorded and live sessions if available.		
Alternative Flows:	none		
Exceptions:			
Assumptions:	The system should extract the instructor information using an API. The system shall allow the instructor to edit his/her information.		
Notes and Issues:			

Use case ID:	UC-005		
Use Case Name:	Log out		
Created by:	Meshari Alhejaili	Last Updated by:	MOSA ALSHAKHOURI
Date Created:	7/11/2023	Last Revision Date:	14/11/2023
Actors:	Students & Instructors		
Description:	The ability to log out from the system		
Trigger:	Click log out button		
Preconditions:	The user must be logged in to the system		
Postconditions:	<ul style="list-style-type: none"> • The log in page is shown to the user 		
Normal Flow:	<ol style="list-style-type: none"> 1. The user will click log out button 2. The system shows confirmation message for the user 3. The user click on confirm 3. The system will send the user to the log in page 4. The user cannot use the functionality of the system until logged in again 		
Alternative Flows:	<ol style="list-style-type: none"> 1. The User clicks the back button provided by the Operating system 2. The System displays a conformation popup stating “are you sure you want to leave the app?” 3. The User clicks “Yes” 4. The app closes and the User is logged out 		
Exceptions:	In normal flow step 3		

	1. The user click cancel 2. The system will close the confirmation message 3. The user can reuse the functionality of the system
Assumptions:	
Notes and Issues:	

Use case ID:	UC-006		
Use Case Name:	Upload educational material		
Created by:	Meshari Alhejaili	Last Updated by:	Meshari Alhejaili
Date Created:	7/11/2023	Last Revision Date:	14/11/2023
Actors:	App admins & Instructors		
Description:	The ability to upload videos to the app		
Trigger:	Click upload video button		
Preconditions:	1- The user must be logged in to the system 2- The user must be an instructor or admin 3- The user must be in a specific chapter of a course		
Postconditions:	<ul style="list-style-type: none"> The video is uploaded to the system The student can see and watch the video		
Normal Flow:	1. The user go to a specific chapter in any course 2. The user click on upload video 3. The system will check If The user is an instructor or admin. 4. The system will show the user the upload screen		

	5. The user enter the lecture name 6. The user upload the video from the upload field 7. The user click on confirm 8. The system close the upload screen 9. The system shows the video
Alternative Flows:	
Exceptions:	In normal flow 3: 3.1 the user is neither an instructor nor an admin 3.2 the system will show an error message 3.3 the system will show the chapter screen
Assumptions:	
Notes and Issues:	

Use case ID:	UC-007		
Use Case Name:	Display proper error message if no material available		
Created by:	MOSA ALSHAKHOURI	Last Updated by:	MOSA ALSHAKHOURI
Date Created:	6/11/2023	Last Revision Date:	14/11/2023
Actors:	Data Base		
Description:	Displaying an error message that informs the user that there are no videos available at the moment while giving the User directions to what to do next.		
Trigger:	Clicking on a topic name that has no videos available.		
Preconditions:	The student is logged in, no videos available for the selected topic		
Postconditions:	The system displays an error message informing the User that there are no videos available at the moment.		
Normal Flow:	1- The System shows the topics of the course		

	2- The User selects the desired topic 3- The System displays an error message that informs the User that there are no videos available at the moment while giving the user directions to what to do next.
Alternative Flows:	none
Exceptions:	If there is a live session available while the User is viewing the desired topic, the error message shall not be displayed.
Assumptions:	
Notes and Issues:	

Use case ID:	UC-008		
Use Case Name:	Search for course		
Created by:	MOSA ALSHAKHOURI	Last Updated by:	MOSA ALSHAKHOURI
Date Created:	7/11/2023	Last Revision Date:	14/11/2023
Actors:	Student, Instructor		
Description:	Allowing the User to navigate through different options to reach live and recorded sessions regarding the desired topic.		
Trigger:	Opening the KFUPM Tutoring app		
Preconditions:	The User is logged in		
Postconditions:	The System shall display the desired topic name, live session and recorded sessions if available.		
Normal Flow:	1- The System shows the departments page 2- The User selects the desired department 3- The System shows the courses page 5- The User selects the desired course 6- The System allows the user to choose between A+ students and instructors(doctors) 7- The User selects the desired instructor type		

	8- The System displays a page containing a list of available instructors names of the chosen type 9- The User selects one of the available instructors 10- The System shows the page containing the course topics 11- The User selects the desired topic 12- The System displays the live session on top if available 13- The System displays the recorded sessions below the live session if available.
Alternative Flows:	After step 9 in the normal flow: 10- The selected topic has no videos available 11- The system displays an error message: “There are no videos available for this topic at the moment. Try choosing another instructor”
Exceptions:	If there is a live session available while the User is viewing the desired topic, the error message shall not be displayed.
Assumptions:	
Notes and Issues:	

Use case ID:	UC-009		
Use Case Name:	Verify login credentials		
Created by:	Mahar AL-ShakeSaleh	Last Updated by:	Mahar Al-ShakeSaleh
Date Created:	10/11/2023	Last Revision Date:	15/11/2023
Actors:	Students, Instructors		
Description:	Verifying the email and password input after clicking login button		
Trigger:	Login button		
Preconditions:			
Postconditions:	The users would be alerted of their with the status of their login		
Normal Flow:	1- The System will send the email & password to FireBase Authentication 2- FIREBASE Authentication will return the result of signing in with the entered email & password		

	3- The System will show the appropriate message regarding the logging in status
Alternative Flows:	
Exceptions:	
Assumptions:	The FireBase Authentication of the System is up and running.
Notes and Issues:	

Use case ID:	UC-010		
Use Case Name:	Cluster similar questions via AI		
Created by:	Meshari Alhejaili	Last Updated by:	Meshari Alhejaili
Date Created:	7/11/2023	Last Revision Date:	14/11/2023
Actors:	No actors for this use case		
Description:	The system will gather all similar questions to one question in the instructor question section		
Trigger:	click question section button		
Preconditions:	The user is logged in		
Postconditions:	There is no similar questions in a specific section		
Normal Flow:	1- the user click on question section 2- The system check all available questions 3- the system will make the duplicated questions as one 4- the system show the question to the user 5- the user answer the question 6- the system send the answer to all the users that have similar question		
Alternative Flows:			
Exceptions:			
Assumptions:			
Notes and Issues:			


Use case ID:	UC-011		
Use Case Name:	Create polls, flashcards and practice questions		
Created by:	Meshari Alhejaili	Last Updated by:	Meshari Alhejaili
Date Created:	7/11/2023	Last Revision Date:	14/11/2023
Actors:	Instructors		
Description:	The instructors will make interactive content (polls, flashcards, practice question) content for the students		
Trigger:	Click create interactive content		
Preconditions:	1- The user must be logged in to the system 2- The user must be an instructor or admin 3- The user must be in a specific chapter of a course		
Postconditions:	<ul style="list-style-type: none"> The pools, flashcards, or practice question is available in the system The student can see the created content (polls, flashcards, practice question)		
Normal Flow:	1- the user go to a specific lecture 2- The system check if the user is an Instructors 3- the system open the creation window 4- the user select one type (polls, flashcards, practice question) 5- the system shows the proper screen with the required field 6- the user complete the fields 7- the user click confirm 8- the system close the screen 9 - the system shows the created interactive content 10- the user click okay 11- the system return to the lecture screen		
Alternative Flows:			
Exceptions:	In normal flow 2: <ol style="list-style-type: none"> The user is not an Instructors The system shows error message The system return to the lecture screen 		

Assumptions:	
Notes and Issues:	

Use case ID:	UC-012		
Use Case Name:	View educational material		
Created by:	MOSA ALSHAKHOURI	Last Updated by:	MOSA ALSHAKHOURI
Date Created:	10/11/2023	Last Revision Date:	14/11/2023
Actors:	Student, Instructor, Data Base		
Description:	Allow the User to start playing the educational video/live session		
Trigger:	Opening the KFUPM Tutoring app		
Preconditions:	The User is logged in		
Postconditions:	The video is playing		
Normal Flow:	1- The User enters his/her credentials 2- The System verifies the credentials successfully 3- The System displays the available departments 4- The User selects the desired department 5- The System displays the available courses from the selected department 6- The User selects the desired course 7- The System displays two buttons for the type of instructor (doctor or A+ student) 8- The User selects the desired type of instructor 9- The System displays the available instructor names for the selected type 10- The User selects the desired instructor name 11- The System displays a list containing the topic names available for the selected course 12- The User selects the desired topic		

	<p>13- The System displays the available recorded sessions and live sessions if available</p> <p>14- The User selects the desired video</p> <p>15- The System starts playing the video</p>
Alternative Flows:	<p>After step 1 in the normal flow</p> <p>2- The System does not recognize the User credentials</p> <p>3- The System asks the User to provide proper credentials</p> <p>After step 7 in the normal flow</p> <p>8- The System provides an error message informing the User that there are no instructor names available for the selected instructor type.</p> <p>After step 12 in the normal flow</p> <p>13- The System provides an error message informing the user that no videos are available at the moment.</p>
Exceptions:	
Assumptions:	
Notes and Issues:	

III. GUI validation:

10:34 

DEBUG

Welcome to KFUPMTutoring!

I don't have an account [SignUp](#)

login

4:19



SignOut



Accounting

Chemistry

Physics

Computer
Science

Math & Stats

Industrial
Engineering

Mechanical
Engineering

Chemistry
Engineering

Software
Engineering

4:19



DEBUG



Select your Course

[SignOut](#)

Physics 101

Physics 102

Physics 204

Physics 205

Physics 215

Physics 300

Physics 305



4:19



Want to be Teached by ...

[SignOut](#)



Student



Instructor

4:19



Select your instructor

SignOut

RADITYA BOMANTARA

AYMAN EL-SAID

MOHAMMAD AL-KUHAILI

MUHAMMED GONDAL

Ahmed Salem

5:13



DEBUG



Questions Section

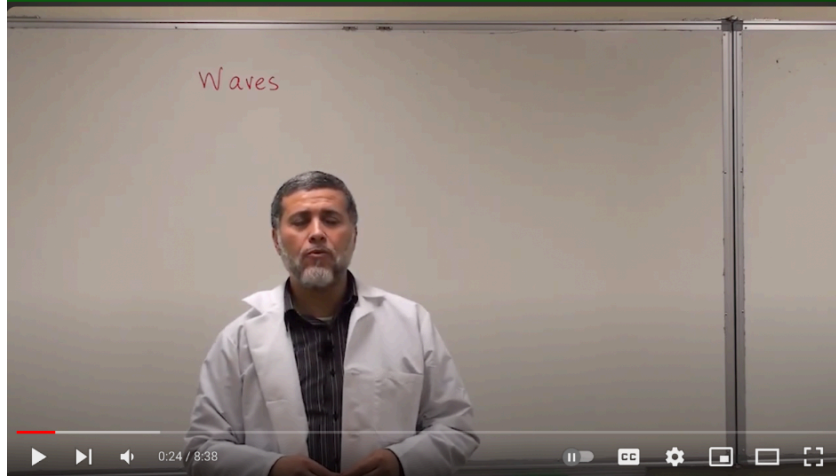
SignOut

Instructor: A-Aljalal

Office Hours: UTR 10:00-10:50

Office: 28-147

Email: aljalal@kfupm.edu.sa



p.1 Transverse waves

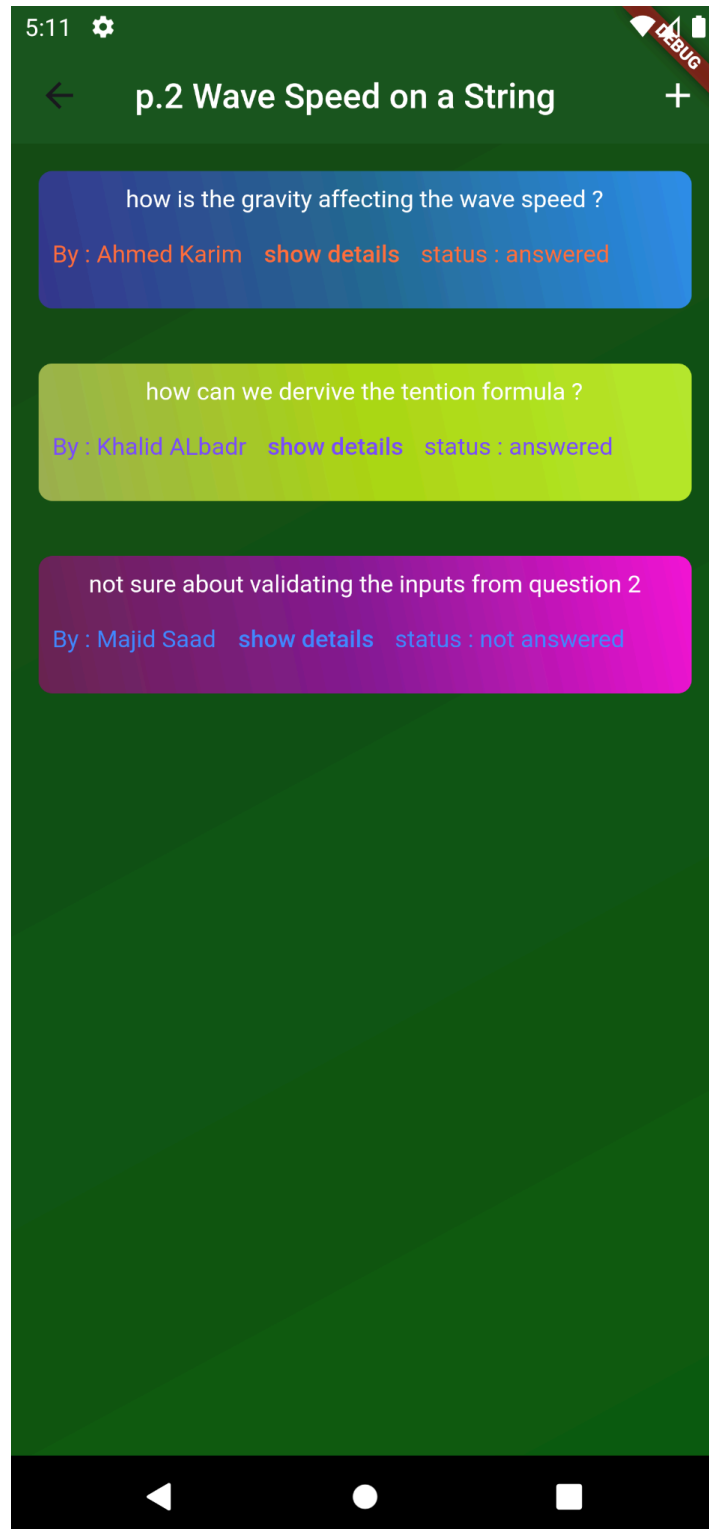
p.2 Wave speed on a string , Energy and power

p.3 Interference of waves

p.4 Standing waves and resonance

p.5 Traveling sound waves, Interference

p.6 Intensity and Sound Level, Sources of



— END OF PHASE 1 —

SWE216 - T231 - PROJECT PHASE 2- Group 4

Name:	ID:	Contribution
MOSA ALSHAKHOURI	202016000	Establish a traceability matrix for the requirements of the project
MAHAR AL SHAKESALEH	202155210	Scenarios table
FALEH AL-KHALDI	201680740	Requirement Analysis and Prioritization
TURKI ALGHURAIRI	202015760	Requirement Analysis and Prioritization
RAYAN ALHARBI	202015380	Implement change control process
MESHARI ALHEJAILI	202173450	Requirment prioritization
MOHAMMED CADURA	201916710	Requirment prioritization

III. Requirement Analysis and Prioritization:

A- Analysis of existing requirements

We have analyzed the requirements and found no major conflicts between them.

B- Identify Importance, Feasibility, and Dependencies.

Table of importance, feasibility, and dependencies for requirements:

	A	B	C	D	E
1	Req ID	Description	Importance	Feasibility	Dependencies
2	ST-01	The system shall allow students to send questions to instructors.	High	High	None
3	ST-02	The system shall send a notification to the student if his question is answered	Low	Medium	ST-01
4	ST-03	The system shall allow students to watch any of the videos published on the app.	High	High	None
5	IN-01	The system shall allow instructors to answer student questions	Medium	High	ST-01
6	IN-02	The system shall send a notification to the instructor if he received a question	Low	Medium	ST-01, IN-01
7	IN-03	The system shall show the contact information of all instructors separately.	Low	High	None
8	IN-04	The system shall allow instructors to give selected students access to publish videos on the app.	Medium	Medium	ST-03, IN-01
9	IN-05	The system should allow instructors to create polls	Medium	High	None
10	IN-06	The system shall allow instructors to create flashcards	Low	High	None
11	IN-07	The system shall allow instructors to create practice questions	Medium	High	None
12	IN-08	The system shall allow the instructor to their contact information	Low	High	None
13	AA-01	The system shall allow administrators to give selected students access to publish videos on the app	Medium	Medium	ST-03, IN-01
14	IT-01	The system should have high testability	High	Medium	None
15	IT-02	The system should have high maintainability	High	Medium	None
16	SA-01	The system shall allow student affairs to access the educational content.	Medium	Medium	None
17	SA-02	The system shall allow student affairs to access engagement statistics.	Medium	Medium	None
18	U-01	The system shall show the contact information of all instructors separately.	High	High	None
19	U-02	The system shall cluster all similar questions using AI into one question.	Medium	Medium	None
20	U-03	The system shall allow the user to select one of the department names.	Medium	High	None
21	U-04	The system shall display an appropriate message if there are no videos available.	High	Medium	U-11, U-12
22	U-05	The system shall display the live session when available on top of recorded videos.	Medium	High	None
23	U-06	The system shall allow the user to log in to their account.	Low	High	None
24	U-07	The system shall allow the user to log out of their account.	Medium	High	None
25	U-08	The system shall allow the user to select one of the course names.	Medium	High	U-03
26	U-09	The system shall allow the user to select between lecturer types (A+ students or instructors).	Medium	High	U-08
27	U-10	The system shall allow the user to select one of the lecturer names.	Medium	High	U-09, U-10
28	U-11	The system shall allow the user to select one of the topics for the selected course.	Medium	High	U-08, U-11
29	U-12	The system shall display the recorded video for the selected topic.	Medium	Medium	U-11, U-12, U-13
30	U-13	The system shall hide the live session if the user selected a topic.	High	Low	None
31	U-14	Users should be able to ask a question with a response time of under 5 seconds.	Medium	Medium	None
32	U-15	The app must run on both iOS and Android platforms.	Medium	Low	None
33	U-16	The app should be available 24/7 with at least 90% uptime.	Medium	Medium	None
34	U-17	User data must be securely encrypted.	Medium	Low	None
35	U-18	The user interface should be designed to be intuitive and easy to navigate.	Medium	High	None
36	U-19	The system shall implement two-factor authentication.	High	Low	None
37	U-20	The system shall load videos within 5 seconds.	Medium	Medium	None

You can access the spreadsheet [here](#).

C- Establish traceability links.

Traceability Table:

Req ID	Description	Type	Priority	Status	Dependencies	Version	Assigned To	Risk Level	Test Cases	Test Results	Last Updated By	Last Updated When	Comments/Notes
ST-01	The system shall allow students to send questions to instructors.	Functional	High	In Progress	None	v1.2.3	TURKI ALGHURAIRI	Low	TC-001, TC-002, TC-003, TC-004	In Progress	TURKI ALGHURAIRI	7/12/2023	
ST-02	The system shall send a notification to the student if his question is answered	Functional	Low	Done	ST-01	v2.1.0	FALEH AL-KHALDI	Medium	TC-001, TC-005, TC-006	Pass	FALEH AL-KHALDI	11/12/2023	
ST-03	The system shall allow students to watch any of the videos published on the app.	Functional	High	In Progress	None	v1.5.2	MOHAMMED CADURA	Low	TC-002, TC-003, TC-007, TC-008	In Progress	MOHAMMED CADURA	5/12/2023	
IN-01	The system shall allow instructors to answer student questions	Functional	Medium	In Progress	ST-01	v3.0.1	RAYAN ALHARBI	Low	TC-005, TC-009	In Progress	RAYAN ALHARBI	2/12/2023	
IN-02	The system shall send a notification to the instructor if he received a question	Functional	Low	Done	ST-01, IN-01	v2.3.4	MAHAR AL SHAKSALEH	Medium	TC-010	Pass	MAHAR AL SHAKSALEH	14/12/2023	
IN-03	The system shall show the contact information of all instructors separately.	Functional	Low	Done	None	v1.0.5	MOSA ALSHAKHOURI	Low	TC-011, TC-012	Pass	MOSA ALSHAKHOURI	8/12/2023	
IN-04	The system shall allow instructors to give selected students access to publish videos on the app.	Functional	Medium	On Hold	ST-03, IN-01	v3.2.1	MESHARI ALHEJALI	Medium	TC-004, TC-007, TC-013	Fail	MESHARI ALHEJALI	1/12/2023	
IN-05	The system should allow instructors to create polls	Functional	Medium	In Progress	None	v2.1.1	FALEH AL-KHALDI	Low	TC-011, TC-012, TC-0014, TC-015	In Progress	FALEH AL-KHALDI	12/12/2023	
IN-06	The system shall allow instructors to create flashcards	Functional	Low	On Hold	None	v1.3.2	MOHAMMED CADURA	Low	TC-011, TC-012, TC-013	Fail	MOHAMMED CADURA	4/12/2023	
IN-07	The system shall allow instructors to create practice questions	Functional	Medium	In Progress	None	v3.0.0	MOSA ALSHAKHOURI	Low	TC-015, TC-016, TC-017, TC-018	In Progress	MOSA ALSHAKHOURI	9/12/2023	
IN-08	The system shall allow the instructor to their contact information	Functional	Low	Done	None	v2.2.2	RAYAN ALHARBI	Low	TC-004, TC-008, TC-013, TC-014	Pass	RAYAN ALHARBI	10/12/2023	
AA-01	The system shall allow administrators to give selected students access to publish videos on the app	Functional	Medium	In Progress	ST-03, IN-01	v1.1.1	TURKI ALGHURAIRI	Medium	TC-002, TC-004, TC-0017, TC-019	In Progress	TURKI ALGHURAIRI	6/12/2023	
IT-01	The system should have high testability	Non-Functional	High	In Progress	None	v3.1.0	MAHAR AL SHAKSALEH	Medium	None	In Progress	MAHAR AL SHAKSALEH	13/12/2023	
IT-02	The system should have high maintainability	Non-Functional	High	On Hold	None	v2.0.3	MESHARI ALHEJALI	Medium	None	Fail	MESHARI ALHEJALI	3/12/2023	
SA-01	The system shall allow student affairs to access the educational content.	Functional	Medium	Done	None	v1.5.2	TURKI ALGHURAIRI	Medium	TC-027	Pass	TURKI ALGHURAIRI	11/12/2023	
SA-02	The system shall allow student affairs to access engagement statistics.	Functional	Medium	Done	None	v3.1.0	FALEH AL-KHALDI	Medium	TC-028, TC-029	Pass	FALEH AL-KHALDI	8/12/2023	
U-01	The system shall show the contact information of all instructors separately.	Functional	High	In Progress	None	v2.2.1	MOHAMMED CADURA	Low	TC-030	In Progress	MOHAMMED CADURA	4/12/2023	
U-02	The system shall cluster all similar questions using AI into one question.	Functional	Medium	In Progress	None	v3.0.2	RAYAN ALHARBI	Medium	TC-031, TC-032	In Progress	RAYAN ALHARBI	9/12/2023	
U-03	The system shall allow the user to select one of the department names.	Functional	Medium	In Progress	None	v3.0.2	MAHAR AL SHAKSALEH	Low	TC-033	In Progress	MAHAR AL SHAKSALEH	1/12/2023	
U-04	The system shall display an appropriate message if there are no videos available.	Functional	High	On Hold	U-11, U-12	v2.1.3	MOSA ALSHAKHOURI	Medium	TC-034, TC-035	In Progress	MOSA ALSHAKHOURI	14/12/2023	
U-05	The system shall display the live session when available on top of recorded videos.	Functional	Medium	In Progress	None	v1.3.0	RAYAN ALHARBI	Low	TC-036	In Progress	RAYAN ALHARBI	2/12/2023	
U-06	The system shall allow the user to log in to their account.	Functional	Low	Done	None	v3.2.1	TURKI ALGHURAIRI	Low	TC-037, TC-038	Pass	TURKI ALGHURAIRI	6/12/2023	
U-07	The system shall allow the user to log out of their account.	Functional	Medium	In Progress	None	v2.0.1	MAHAR AL SHAKSALEH	Low	TC-039	In Progress	MAHAR AL SHAKSALEH	12/12/2023	
U-08	The system shall allow the user to select one of the course names.	Functional	Medium	Done	U-03	v1.4.3	FALEH AL-KHALDI	Low	TC-040	Pass	FALEH AL-KHALDI	5/12/2023	
U-09	The system shall allow the user to select between lecturer types (A+ students or instructors).	Functional	Medium	In Progress	U-06	v3.0.0	MOSA ALSHAKHOURI	Low	TC-041, TC-042, TC-043	In Progress	MOSA ALSHAKHOURI	10/12/2023	
U-10	The system shall allow the user to select one of the lecturer names.	Functional	Medium	In Progress	U-06, U-10	v2.2.0	FALEH AL-KHALDI	Low	TC-044	In Progress	FALEH AL-KHALDI	13/12/2023	
U-11	The system shall allow the user to select one of the topics for the selected course.	Functional	Medium	In Progress	U-06, U-11	v1.1.2	MOHAMMED CADURA	Low	TC-045, TC-046	In Progress	MOHAMMED CADURA	1/12/2023	
U-12	The system shall display the recorded video for the selected topic.	Functional	Medium	Done	U-11, U-12, U-13	v3.1.1	MOSA ALSHAKHOURI	Medium	TC-047	Pass	MOSA ALSHAKHOURI	8/12/2023	
U-13	The system shall hide the live session if the user selected a topic.	Non-Functional	High	In Progress	None	v2.3.4	MAHAR AL SHAKSALEH	High	TC-048, TC-049	In Progress	MAHAR AL SHAKSALEH	9/12/2023	
U-14	Users should be able to ask a question with a response time of under 5 seconds.	Non-Functional	Medium	In Progress	None	v1.2.3	RAYAN ALHARBI	Medium	TC-050	In Progress	RAYAN ALHARBI	3/12/2023	
U-15	The app must run on both iOS and Android platforms.	Non-Functional	Medium	In Progress	None	v3.2.0	TURKI ALGHURAIRI	High	None	In Progress	TURKI ALGHURAIRI	2/12/2023	
U-16	The app should be available 24/7 with at least 90% uptime.	Non-Functional	Medium	In Progress	None	v2.4.1	FALEH AL-KHALDI	Medium	TC-052	In Progress	FALEH AL-KHALDI	7/12/2023	
U-17	User data must be securely encrypted.	Non-Functional	Medium	In Progress	None	v1.0.2	MOHAMMED CADURA	High	None	In Progress	MOHAMMED CADURA	14/12/2023	
U-18	The user interface should be designed to be intuitive and easy to navigate.	Non-Functional	Medium	In Progress	None	v3.3.0	MOSA ALSHAKHOURI	Low	None	In Progress	MOSA ALSHAKHOURI	11/12/2023	
U-19	The system shall implement two-factor authentication.	Non-Functional	High	Done	None	v2.1.0	MAHAR AL SHAKSALEH	High	TC-058, TC-059	Pass	MAHAR AL SHAKSALEH	6/12/2023	
U-20	The system shall load videos within 5 seconds.	Non-Functional	Medium	In Progress	None	v1.2.1	RAYAN ALHARBI	Medium	TC-060	In Progress	RAYAN ALHARBI	4/12/2023	
												13/12/2023	

You can access the spreadsheet [here](#).

Traceability Matrix:

Scenario	login	Admin & user	Answer a question	View history	Search for content	Logout	Answer another	Speed course	Share path, etc.	View material	Display answer	Verify login	
ST-01	satisfies	satisfies	satisfies					satisfies				satisfies	ST-01: The system shall allow students to send questions to instructors.
ST-02	based_on		satisfies						satisfies			satisfies	ST-02: The system shall send a notification to the student if his question is answered
ST-03	satisfies									satisfies		satisfies	ST-03: The system shall allow students to watch any of the videos published on the app.
IN-01	satisfies		satisfies	satisfies								satisfies	IN-01: The system shall allow instructors to answer student questions
IN-02	based_on		satisfies							satisfies		satisfies	IN-02: The system shall send a notification to the instructor if he received a question
IN-03	satisfies		satisfies									satisfies	IN-03: The system shall show the contact information of all instructors separately.
IN-04	satisfies			satisfies				satisfies		satisfies		satisfies	IN-04: The system shall allow instructors to give selected students access to publish videos on the app.
IN-05	satisfies								satisfies	satisfies		satisfies	IN-05: The system should allow instructors to create polls
IN-06	satisfies							satisfies	satisfies		based_on	satisfies	IN-06: The system shall allow instructors to create flashcards
IN-07	satisfies							satisfies			based_on	satisfies	IN-07: The system shall allow instructors to create practice questions
IN-08	satisfies		satisfies								based_on	satisfies	IN-08: The system shall allow the instructor to their contact information
AA-01	satisfies										based_on	satisfies	AA-01: The system shall allow administrators to give selected students access to publish videos on the app.
SA-01	satisfies		satisfies							satisfies	based_on	satisfies	
SA-02	satisfies			satisfies	based_on							satisfies	
U-01	satisfies		satisfies						satisfies	based_on		satisfies	SA-01: The system shall allow student affairs to access the educational content
U-02	satisfies					satisfied				based_on		satisfied	SA-02: The system shall allow student affairs to access engagement statistics
U-03	satisfies			satisfies							based_on	satisfied	U-01: The system shall show the contact information of all instructors separately
U-04	satisfies									based_on	satisfied	satisfied	U-02: The system shall cluster all similar questions using AI to one question
U-05	satisfies		satisfies							satisfies	based_on	satisfied	U-03: The system shall allow the user to select one of the department names
U-06	satisfies											satisfied	U-04: The system shall display an appropriate message if there are no videos available.
U-07	satisfies				satisfies						based_on	satisfied	U-05: The system shall display the live session when available on top of recorded videos.
U-08	satisfies			satisfies					satisfies	based_on		satisfied	U-06: The system shall allow the user to log in their account.
U-09	satisfies		satisfies	satisfies					satisfies			satisfied	U-07: The system shall allow the user to log out of their account.
U-10	satisfies		satisfies									satisfied	U-08: The system shall allow the user to select one of the course names.
U-11	satisfies			satisfies							based_on	satisfied	U-09: The system shall allow the user to select between lecturer types (A+ students or instructors)
U-12	satisfies		satisfies	satisfies					satisfies	based_on		satisfied	U-10: The system shall allow the user to select one of the lecturer names.
U-13	satisfies								satisfies	based_on		satisfied	U-11: The system shall allow the user to select one of the topics for the selected course
													U-12: The system shall display the recorded video for the selected topic.
													U-13: The system shall hide the live session if the user selected a topic.

You can access the spreadsheet [here](#).

D: prioritization

	A	B	C	D
1	ID	Requirement Description	Category	Priority
2	U-06	The system shall allow the user to log in to their account.	Basic Needs (Must-haves)	High
3	U-07	The system shall allow the user to log out of their account.	Basic Needs (Must-haves)	High
4	U-17	User data must be securely encrypted.	Basic Needs (Must-haves)	High
5	U-03	The system shall allow the user to select one of the department names.	Basic Needs (Must-haves)	High
6	U-19	The system shall implement two-factor authentication.	Basic Needs (Must-haves)	High
7	ST-01	The system shall allow students to send questions to instructors.	Basic Needs (Must-haves)	High
8	IN-01	The system shall allow instructors to answer student questions.	Basic Needs (Must-haves)	High
9	U-01	The system shall show the contact information of all instructors separately.	Basic Needs (Must-haves)	High
10	U-18	The user interface should be designed to be intuitive and easy to navigate.	Basic Needs (Must-haves)	High
11	U-08	The system shall allow the user to select one of the course names.	Basic Needs (Must-haves)	High
12	U-09	The system shall allow the user to select between lecturer types (A+ students or instructors).	Basic Needs (Must-haves)	High
13	U-15	The app must run on both iOS and Android platforms.	Basic Needs (Must-haves)	High
14	AA-01	The system shall allow administrators to give selected students access to publish videos on the app.	Basic Needs (Must-haves)	High
15	IN-04	The system shall allow instructors to give selected students access to publish videos on the app.	Basic Needs (Must-haves)	High
16	U-11	The system shall allow the user to select one of the topics for the selected course.	Basic Needs (Must-haves)	High
17	U-10	The system shall allow the user to select one of the lecturer names.	Basic Needs (Must-haves)	High
18	U-12	The system shall display the recorded video for the selected topic.	Basic Needs (Must-haves)	High
19	ST-02	The system shall send a notification to the student if his question is answered.	Performance Needs (More is better)	Medium
20	IT-02	The system should have high maintainability.	Performance Needs (More is better)	Medium
21	U-16	The app should be available 24/7 with at least 90% uptime.	Performance Needs (More is better)	Medium
22	IT-01	The system should have high testability.	Performance Needs (More is better)	Medium
23	U-20	The system shall load videos within 5 seconds.	Performance Needs (More is better)	Medium
24	IN-02	The system shall send a notification to the instructor if he received a question.	Performance Needs (More is better)	Medium
25	U-14	Users should be able to ask a question with a response time of under 5 seconds.	Performance Needs (More is better)	Medium
26	SA-01	The system shall allow student affairs to access educational content.	Performance Needs (More is better)	Medium
27	SA-02	The system shall allow student affairs to access engagement statistics.	Performance Needs (More is better)	Medium
28	U-13	The system shall hide the live session if the user selected a topic.	Performance Needs (More is better)	Medium
29	U-05	The system shall display the live session when available on top of recorded videos.	Performance Needs (More is better)	Medium
30	IN-05	The system should allow instructors to create polls.	Excitement Needs (Delighters):	Low
31	IN-06	The system shall allow instructors to create flashcards.	Excitement Needs (Delighters):	Low
32	IN-07	The system shall allow instructors to create practice questions.	Excitement Needs (Delighters):	Low
33	IN-08	The system shall allow the instructor to display their contact information.	Excitement Needs (Delighters):	Low
34	U-02	The system shall cluster all similar questions using AI into one question.	Excitement Needs (Delighters):	Low

You can access it from [here](#)

IV.Change Control and Versioning

The process of changing is as follows:

1. **Submit Change Request Through Form:** The requester fills out the appropriate [form](#), providing the needed details of this change.
2. **Check Request Validity:** The change request is then reviewed to check its validity according to the [guidelines](#). This involves ensuring that the request is complete, clear, and necessary.
3. **Find Directly Affected Requirements:** If the change request is valid, the next step is to identify the requirements that are directly affected by the proposed change. The request could be rejected if the change proportionally affects a significant number of requirements. The affected requirements are documented in the [requirements change list](#).
4. **Find Dependent Requirements:** Identify the dependent requirements using the list of directly affected requirements and traceability information. The dependent requirements are documented in the [requirements change list](#).
5. **Propose Requirements Change:** Based on the identified directly affected and dependent requirements, a requirements change is proposed. This proposal takes into account the customer information and the potential impact of the change on the system.
6. **Assess Cost of Change:** This includes the cost of modifying the system, testing the changes, and any potential impacts on the project schedule.
7. **Assess Cost Acceptability:** Using the cost information and customer information, the acceptability of the cost is assessed. This involves determining whether the benefits of the change outweigh the costs.
8. **Final decision:** The customer accepts if the risk is acceptable, and the cost and time required to implement the change are reasonable. If the risk is too high, or the cost and time are too high or long, the customer will reject the change.

1.Change Request Form

Request # _____

Requester Name & Staff ID	
Customer Name	
Request Date (dd/mm/yyyy)	
Product (including version)	

Change Request Information	
Target Feature/module	
Description	
Details of Change	
Reason for Change	
Impact Analysis	
Comments	
Deadline (dd/mm/yyyy)	

Name/Signature of Requester

Name/Signature of Customer

Status
<input type="checkbox"/> Approved <input type="checkbox"/> Postponed <input type="checkbox"/> Approved with modifications <input type="checkbox"/> Rejected
Justification:

2.Request Validity Guidelines

To validate the change request, the change request must be compliant with the following criteria:

1. Completeness, Clarity, and specificity of the request
 - a. Is the request clear and concise?
 - b. Does the request specify in detail what should/must be changed?
 - c. Are all required resources/documents provided?
2. Alignment with project goals and objectives
 - a. Does this change stray from the goals of the project?
 - b. Does this change interfere with completion of the project's objectives?
3. Feasibility
 - a. Does the team have the required knowledge and technical skills to incorporate this change?
 - b. Does the team have the required resources/time to incorporate this change?
 - c. Is there a cost-effective way to apply this change?/
4. Regulatory and compliance check
 - a. Does this change abide by the relevant regulations?
5. Primary Stakeholder impact and acceptance
 - a. Does this change affect other stakeholders?
 - b. Do other stakeholders comply with the change?
6. Relevance and consistency with existing requirements
 - a. Is this change related to the requirement which it is supposed to change?
 - b. Does this change interfere with existing requirements?
 - c. Does the application already incorporate the seeked change?
7. Risk assessment
 - a. Identify and document technical risks
 - b. Identify and document management risks
 - c. Identify and document business risks
8. Primary Cost-benefit analysis
 - a. Identify and document potential costs
 - b. Identify and document the foreseen benefits of this change
9. Prioritization
 - a. How important/time sensitive is this requirement?
 - b. Tag the request with the appropriate priority

Note: If some details are ambiguous, the request submitter should be contacted for more information/context. **The goal of this step, check request validity, is to ensure the fundamentals are met.** The details shall be investigated in the following steps. **If the request was determined to be invalid, an Email shall be sent to inform the requester.**

3. Find Directly Affected & Dependant Requirements

Requirements Change List

Request # _____

Requester Name & Staff ID	
Customer Name	
Request Date (dd/mm/yyyy)	
Product (including version)	
Assigned Requirements Engineer Name & Staff ID	

Affected requirements	Dependant requirements

Notes:	

Change Request Example:

Request # 001

(step 1)

Requester Name & Staff ID	Khalid Ahmed, 201012345
Customer Name	KFUPM
Request Date (dd/mm/yyyy)	9/12/2023
Product (including version)	3.2.1

Change Request Information	
Target Feature/module	U-09
Description	We would like to add an extra option for online educators.
Details of Change	The added option, online educators, is meant to view educational content from other online courses. Thus, this change requires a special UI to accommodate the embedding of online material.
Reason for Change	Adding this option enriches the content of our application, as a lot of courses may not have sufficient content to cover all the educational material.
Impact Analysis	This change is expected to cause minimal disturbance to the current requirements and their dependencies. However, the new UI and implementation requires a significant amount of testing
Comments	Addition of online material can be done only through an instructor. Students can upload online material with the approval of an instructor
Deadline (dd/mm/yyyy)	9/1/2023

Name/Signature of Requester

_____K.A_____

Name/Signature of Customer

_____M.S_____

(step 2, after ensuring the request comply with the guidelines [here](#))

Status	
<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Postponed
<input type="checkbox"/> Approved with modifications	<input type="checkbox"/> Rejected
Justification: This change complies with the guidelines of submitting a change request. It	

seems to be reasonable in terms of cost/benefit. Also, the deadline is manageable.

Requirements Change List

(Step 3 and 4)

Request # 001

Requester Name & Staff ID	Khalid Ahmed, 201012345
Customer Name	KFUPM
Request Date (dd/mm/yyyy)	9/12/2023
Product (including version)	3.2.1
Assigned Requirements Engineer Name & Staff ID	Ahmed Fouzy, 201714320

Affected requirements	Dependant requirements
U-09	U-08

Notes:

--	--

