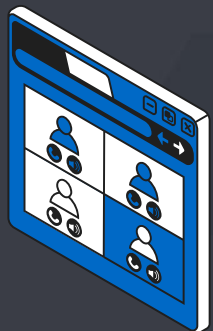
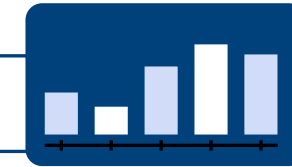
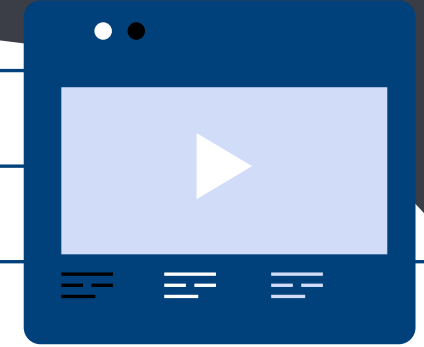
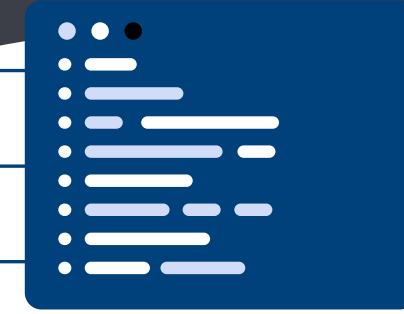
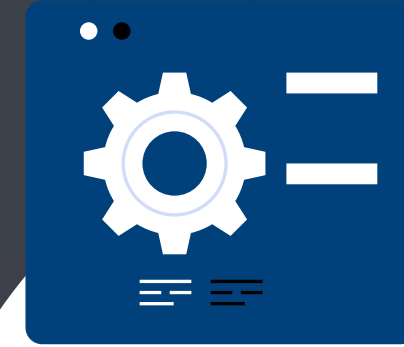
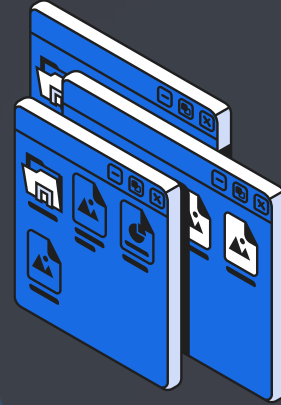


KFUPM

STUDENT IMPACT HUB



Team Members



Software Engineer

**Mohammed
Alshammasi**



Software Engineer

Ali Al Ramadan



Software Engineer

Jassim Alhumaid



Software Engineer

Firas Almashama



Software Engineer

Ali AlZaki



Software Engineer

Amjad Alsadiq





Introduction



Requirements Gathering Process



1

Conducted an initial online meeting via Microsoft Teams

3

Performed a brainstorming session to gather the requirements

2

Acted as temporary stakeholders to simulate user needs

4

Determined the real stakeholders for the application

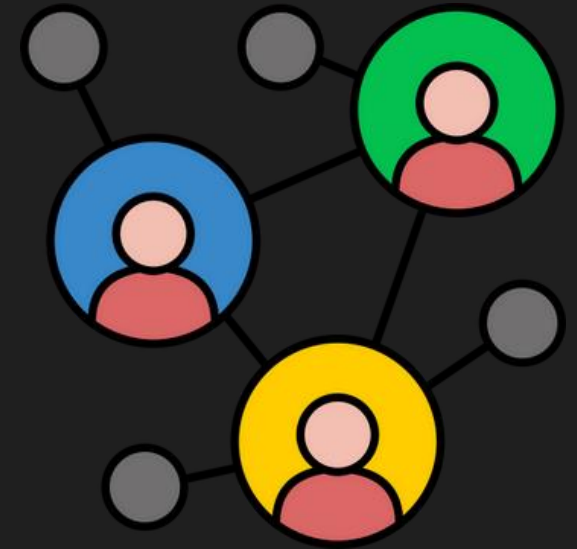


Stakeholders



Primary Stakeholders

- Students
- Admin
- Event Manager
- Event Organizer (University Events Organization)
Community Organization



Secondary Stakeholders

- Development Team
- Testing Team
- Managers
- Volunteers



Functional Requirements

01

The students shall be able to modify their profiles through the settings (e.g., interests, contact details).

02

Teams shall accommodate two to five people, and all members must confirm their participation after invitations are delivered through in-app notifications.

03

The system should make project recommendations based on the interests and past activities of the students.

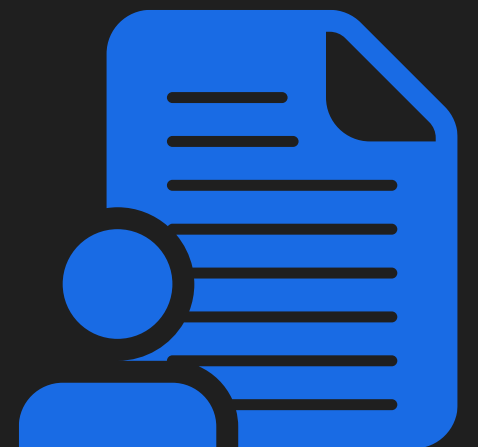


04

Admins shall be able to set minimum/maximum participant limits per project.

05

Students shall not join more than 2 projects simultaneously.



Non Functional Requirements



01

Usability

Navigation shall follow Nielsen's Usability Heuristics (e.g., error prevention, consistency).

02

Maintainability

The system should allow automatic logging and monitoring, allowing developers to effectively track problems.

03

Reliability

The system shall implement automated daily backups and ensure data recovery within 1 hour of a failure, with no more than 5 minutes of data loss.

04

Flexibility

Future updates shall not disrupt existing features.

05

Performance

The KFUPM Student Impact Hub shall return search queries for projects within 2 seconds.



Phase II



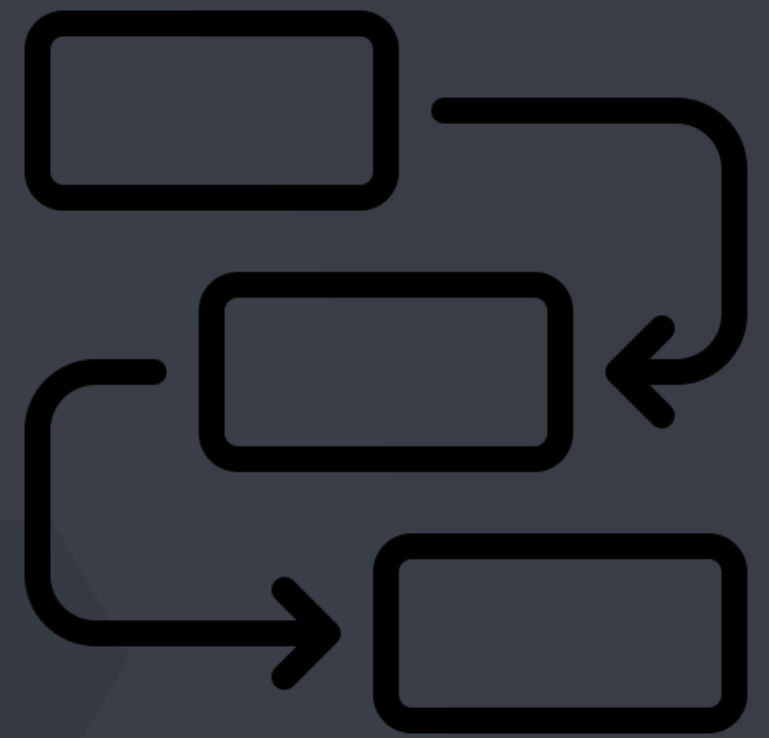
Requirement Analysis



Requirement ID	Requirement	Issue	Issue Description	Proposed Fix	Priority
R10	The system shall notify students via email or push notifications about: i. Event updates. ii. New events matching their interests. iii. Registration confirmations.	Over-specification	Email notifications and push notifications	Let the user select a preferred way to receive notifications either by Email or push	Important
R11, R12	11) Students should be able to enable or disable notifications. 12) The system shall allow event organizers to notify students when new activities are added.	Contradiction	Enabled and disabled notifications	There should be two types of notifications. 1- In App notifications (can't be disabled) 2- Device notifications (can be disabled)	Important

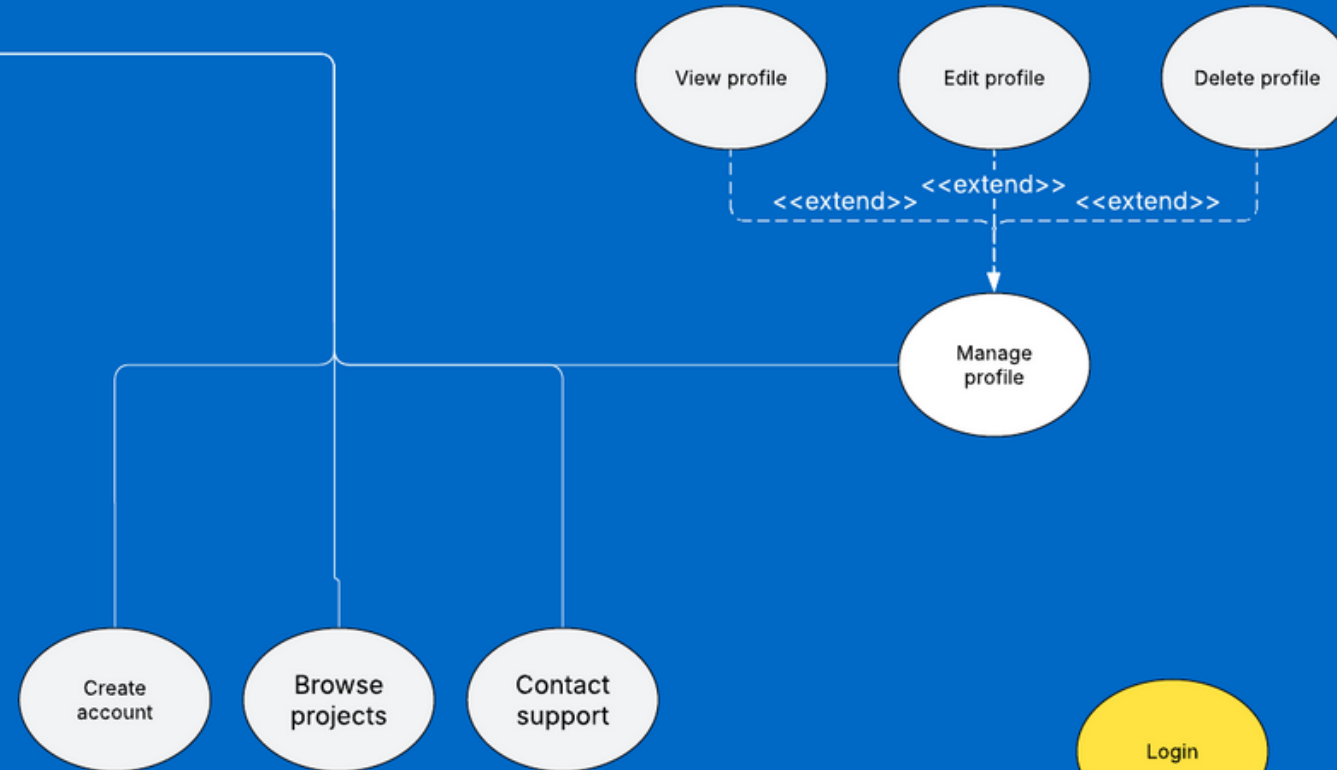


Use Case Diagram

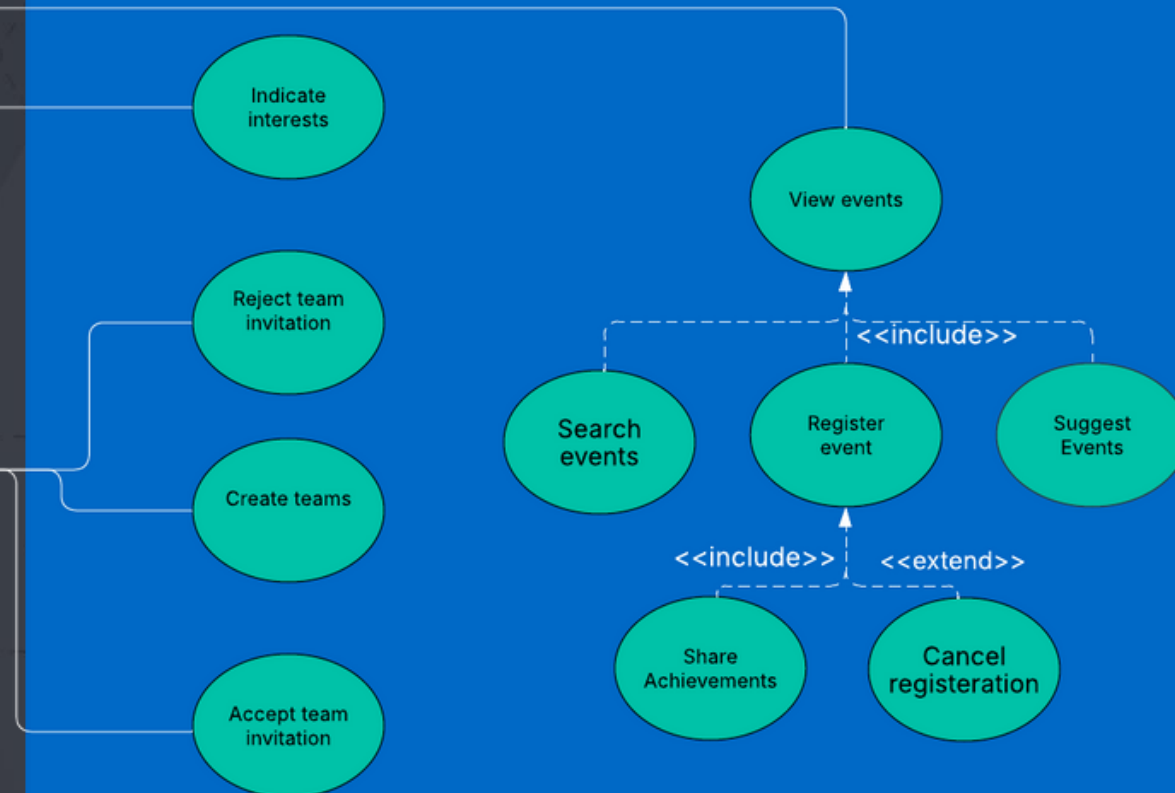


KFUPM Student Impact Hub App

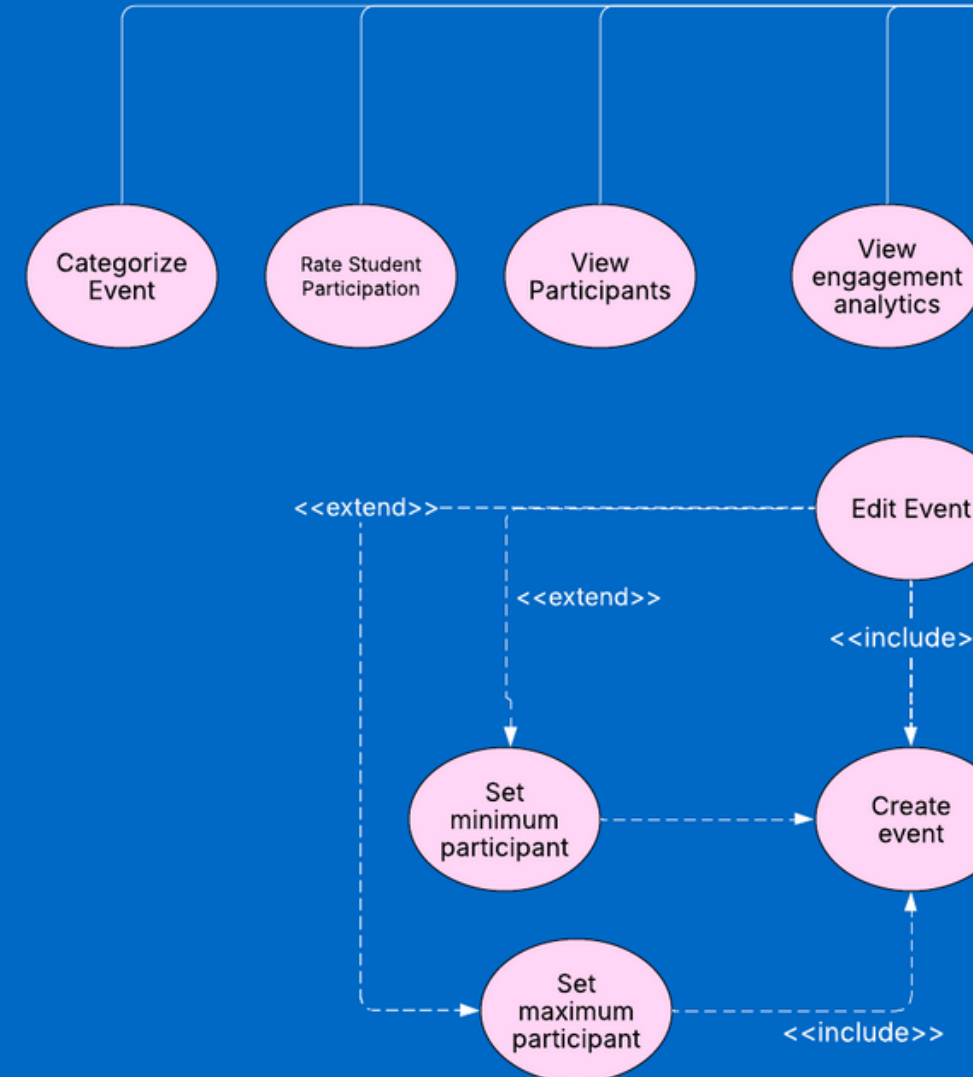
Generic



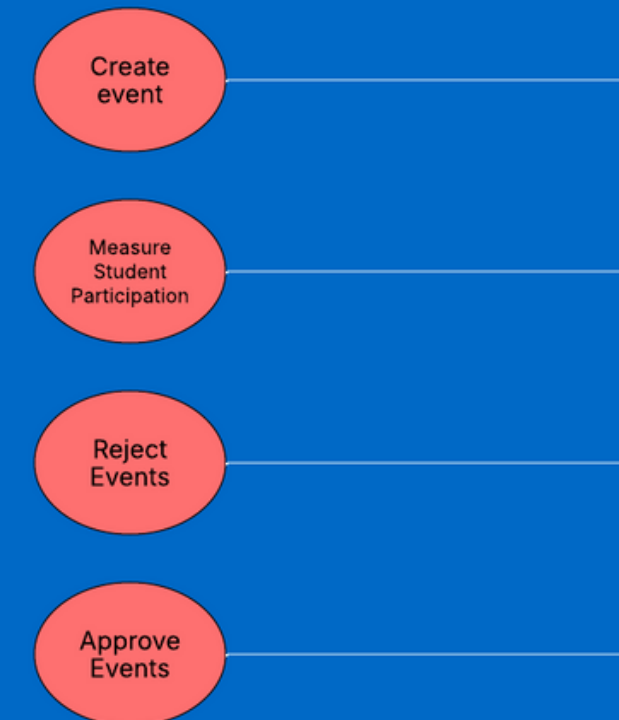
Student



Event organizer



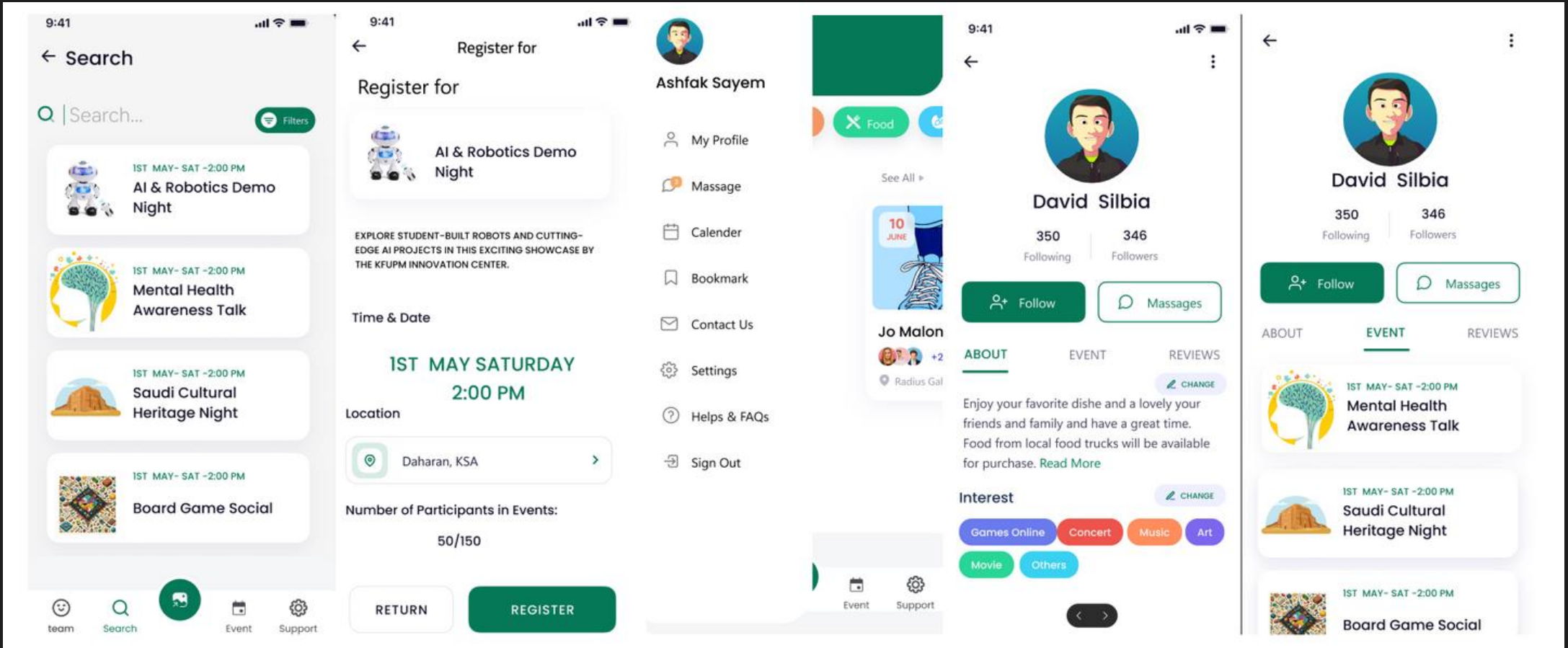
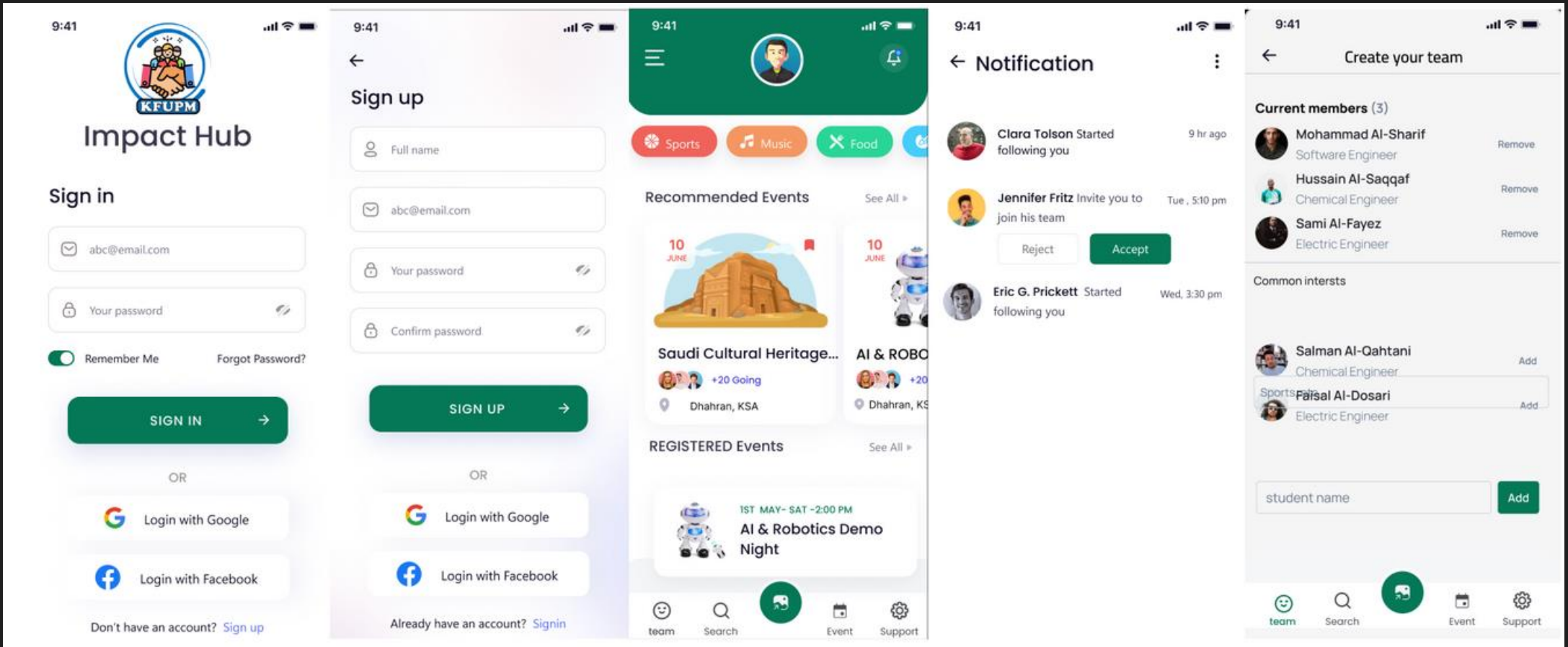
Admin



Use Case Template



Use case ID:	1.0		
Use Case Name:	View Profile		
Created by:	Ali Al Ramadan	Last Updated by:	Ali AlZaki
Date Created:	4/14/2025	Last Revision Date:	4/15/2025
Actors:	Generic User		
Description:	Allow the user to view his profile		
Dependencies:	User must log in to the system		
Trigger:	User selects the "view profile" option from the main menu or dashboard.		
Preconditions:	<ol style="list-style-type: none">1. The user has access to the internet2. The user has successfully logged in.3. The system has stored profile data for the user.		
Postconditions:	<ol style="list-style-type: none">1. The system displays the user's up-to-date profile information on screen.2. No changes are made to the user's profile data.		
Normal Flow:	<ol style="list-style-type: none">1. The user is authenticated via the Log in use case.2. The user navigates to the profile section from the main menu/dashboard.3. The system retrieves the user's profile data from the database.4. The system displays the profile details (including personal information, volunteer hours, achievements, etc....)		
Alternative Flows:	Profile Data Unavailable: <ol style="list-style-type: none">1. If the system fails to retrieve the profile data, an error message is displayed.2. The user is prompted to try again or contact support. User Not Authenticated: <ol style="list-style-type: none">3. If the user is not logged in, the system redirects the user to the Log in page before allowing access to the profile.		
Frequency of Use:	High		
Special Requirements:	<ol style="list-style-type: none">1. The profile page must adhere to KFUPM's visual identity guidelines.2. The interface should be responsive and load within 2-3 seconds.		
Assumptions:	The user's profile exists and has been previously set up.		




GUI Validation



GUI Scenario



9:41



Impact Hub

Sign in

abc@email.com

Your password

Remember Me

Forgot Password?

SIGN IN

→

OR

Login with Google

Login with Facebook

Don't have an account?

Sign up

9:41

←

Sign up

Full name

abc@email.com

Your password

Confirm password

SIGN UP

→

OR


Login with Google

Login with Facebook

Already have an account?

Signin

9:41



Sports


Music

Food

Recommended Events

See All ▶

10 JUNE




Saudi Cultural Heritage...

+20 Going

Dahran, KSA

10 JUNE




AI & ROBO

+20

Dahran, KS


REGISTERED Events

See All ▶



1ST MAY- SAT -2:00 PM

AI & Robotics Demo Night




1ST MAY- SAT -2:00 PM

Board Game Social

team

Search



Event

Support


9:41

←

Search


Q | Search...

Filters




1ST MAY- SAT -2:00 PM

AI & Robotics Demo Night




1ST MAY- SAT -2:00 PM

Mental Health Awareness Talk



1ST MAY- SAT -2:00 PM

Saudi Cultural Heritage Night




1ST MAY- SAT -2:00 PM

Board Game Social

9:41

←

Register for



AI & Robotics Demo Night

EXPLORE STUDENT-BUILT ROBOTS AND CUTTING-EDGE AI PROJECTS IN THIS EXCITING SHOWCASE BY THE KFUPM INNOVATION CENTER.

Time & Date

1ST MAY SATURDAY 2:00 PM

Location

Daharan, KSA

→

Number of Participants in Events:

50/150


RETURN

REGISTER

9:41

←

Add Event



EVENT ADDED SUCCESSFULLY!

THANK YOU


RETURN

CONTINUE

9:41

←

Cancel Events



1ST MAY- SAT -2:00 PM

AI & Robotics Demo Night

Reason for Cancellation:

Schedule Conflict

Not Feeling Well

Family or Personal Emergenc

Transportation Issues

Other

RETURN

SUBMIT

Phase III



Requirements Prioritization



Requirement ID	Importance (1-5)	Feasibility	Dependencies
R1	5	Feasible	-
R2	3	Feasible	R1
R3	5	Not Feasible	R1
R4	4	Feasible	R1, R6
R5	3	Feasible	R4
R6	5	Feasible	R1
R7	2	Not Feasible	R1
R8	4	Feasible	R4, R6
R9	4	Feasible	R6
R10	4	Feasible	R4, R9
R11	3	Feasible	R10
R12	3	Feasible	R6
R13	4	Feasible	R1
R14	3	Feasible	R2, R13
R15	5	Feasible	R1
R16	4	Feasible	R10, R15
R17	3	Feasible	R4
R18	3	Feasible	R2, R5
R19	2	Feasible	R17
R20	2	Feasible	R18
R21	4	Feasible	R6
R22	3	Not Feasible	R5, R17
R23	3	Feasible	R1, R21

Requirements Traceability

Matrix 1

Requirements ID	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	R 14	R 15	R 16	R 17	R 18	R 19	R 20	R 21	R 22	R 23
R1																							
R2	X																						
R3	X																						
R4	X					X																	
R5				X																			
R6	X																						
R7	X																						
R8				X		X																	
R9						X																	
R10				X					X														
R11										X													
R12						X																	
R13	X																						
R14		X										X											
R15	X																						
R16									X					X									
R17				X																			
R18		X			X																		
R19																	X						
R20																		X					
R21						X																	
R22					X												X						
R23	X																			X			

Matrix 2

Requirements ID	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	R 14	R 15	R 16	R 17	R 18	R 19	R 20	R 21	R 22	R 23
UC1																		X					
UC2		X																					
UC3																							
UC4		X	X								X												
UC5																							
UC6												X	X										
UC7											X												
UC8		X											X										
UC9																X							
UC10										X					X								
UC11																X							
UC12										X													
UC13			X																				
UC14			X	X						X													
UC15																							X
UC16				X													X		X				
UC17			X				X																
UC18	X																						
UC19								X															
UC20																X							
UC21																							
UC22																	X				X		
UC23																							
UC24							X													X			
UC25					X	X					X												
UC26																			X				
UC27					X	X																	
UC28				X												X					X		
UC29																						X	
UC30											X												

Requirements Traceability

Change Control Process

1 Change Request Submission

2 Impact Analysis

3 Approval/Rejection

4 Implementation

5 Versioning & Documentation



Conclusion





KFUPM
STUDENT IMPACT HUB

Thank You

by Team 03

