Software Requirements Specification

for

mIIT-Kute

Version 1.0

Prepared by :

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Course: **CS253- Software Development and Operations**

Mentor TA: **Mr. Sri Madhan**

Date: **30/01/2022**

Revisions

Version	Primary Author(s)	Description of Version	Date Completed
1.0	Vedasree Tatimanu Gutta Raghavendra Chowdary Akshat Garg Janhvi Rochwani Deepak Sangle Yeginati Vinay Teja Bugada Ashritha Jayaprakash Napa Kembasaram Nitin Sai Charan Modem	Information about the revision. This table does not need to be filled in whenever a document is touched, only when the version is being upgraded.	30/01/22

1 Introduction

1.1 Product Scope

mIIT-Kute is a website developed for the IIT-K junta, which serves as a platform that aims to connect people with similar interests , so they can collaborate and pursue them together.

It provides information to the users about the ongoing and upcoming events in the campus so they can join any event they are interested in based on the time and availability.

Users can select the events from a wide range of categories like sports , study groups,watch parties etc.

Temporary chat servers are created for every event where the existing participants can communicate with each other.

Users can even create a specific event in an existing category.

The community tab can be used to request for the inclusion of new categories , to “like” the existing requests by other users and also to give feedback.

It also tries to solve the problem of people abandoning their interests due to the lack of a peer group.

1.2 Intended Audience and Document Overview

Intended Audience*:*

In the early stages of a project, developers,project managers can use this document. In later stages, testers can use the document for testing. Then finally the user can view it in the form of a user manual.

Document Overview: -
This document consists of brief information on hardware, software, constraints, requirements, and usage. It has five sections that a user can go through depending on their need.
Section 1 is the introduction that every user must read to understand the document.
Section 2 is intended for project managers and marketing staff, it briefly describes the functionality, assumptions, and constraints.
Section 3 has external interface requirements, functional requirements and use case model, they describe things in more detail for a developer to go through before starting the project.
Section 4 has non-functional requirements that help developers make their choices of design and marketing staff to be aware of threats in the project.

1.3 Definitions, Acronyms and Abbreviations

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.

- *TO DO: Please provide a list of all abbreviations and acronyms used in this document sorted in alphabetical order.>*

1.4 Document Conventions

Formatting Conventions:
The font used in making this document is Arial font with size 10 with single spacing and 1-inch margins.
Italics highlight has been used for comments.
Words highlighted with bold in the same font size are the title of the particular section.
The headings in the subsections are highlighted with bold and underlined.

Naming Conventions*:*
User: IITK junta
Super User: Developers

1.5 References and Acknowledgments

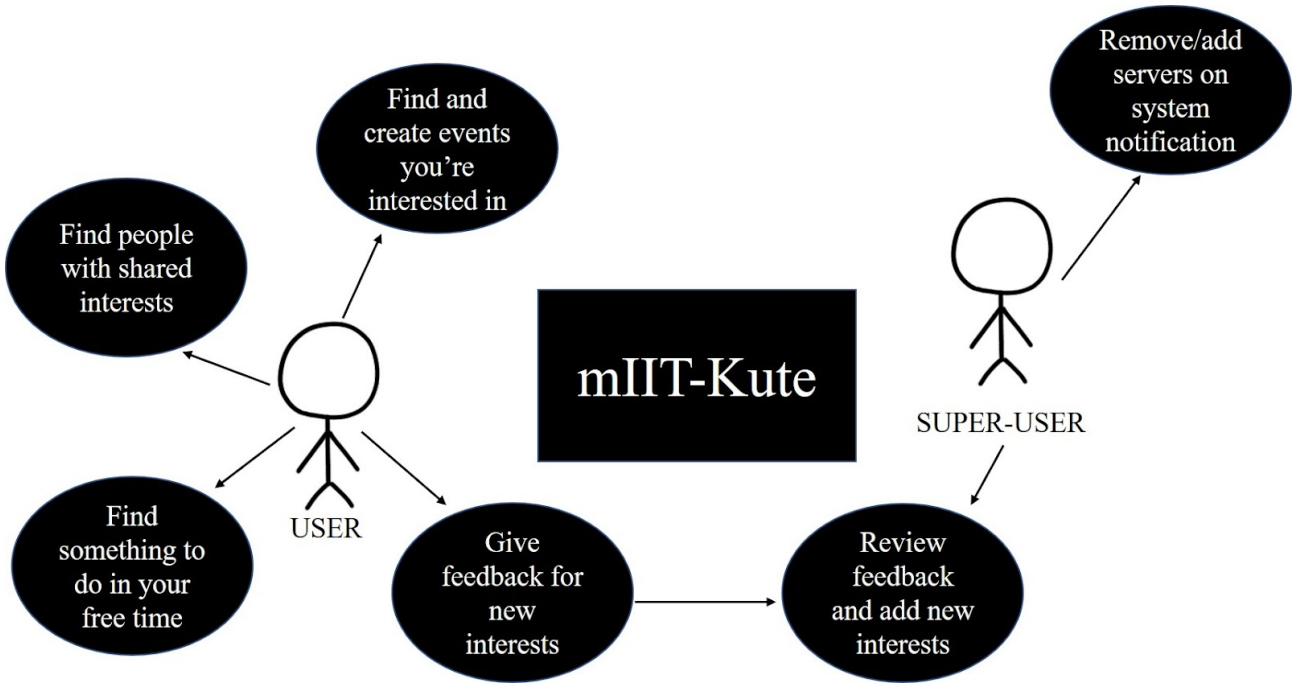
References:
The following websites/tools were used in making this document.
User interface: Mockflow
Use case diagram: PowerPoint Presentation

Acknowledgments:
We would like to earnestly acknowledge the sincere efforts and valuable time given by our Prof. Indranil Saha for teaching us the concepts and giving us an opportunity to work on this document.
Also, we would like to mention the support of our T.A Mr.Sri Madhan for his constant guidance in making this document.

2 Overall Description

2.1 Product Overview

When working or interacting in a team, frequently, it is difficult to find a time that suits everyone. Moreover, for students in IITK junta with varied groups of friends and batchmates, it is not always easy to find people with shared interests. Our application was designed keeping these issues in mind. We were inspired by the 'Meetup' app, and hence we are trying to create such a platform exclusively for IITK. The chat function of our product will be similar to that of 'Discord'. This is a self-contained product which will allow students with IITK email ID and Roll Number to find people who are into the same things as them and willing to participate at the same time as them.



2.2 Product Functionality

- Allow the user to register/login using iitk credentials.
- Allow users to retrieve forgotten passwords using iitk mail id.
- Information about interested events will be collected at the time of registration to improve the user experience.
- After logging in, users will be provided with a list of ongoing events sorted from most interested to least interested.
- Users can search for a specific event from the “find an event tab”.
- Events are divided into various categories , for e.g. sports, study groups,
- Events can be filtered based on time and category.
- Once the user joins a particular event, it will appear in the “my events” section, where he/she can join the respective chat server(active until half an hour after the event ends) for the event to communicate with the other participants.

- Users can even request for the inclusion of an interest that is not already present, in the community section.
- Users can even “like” a particular interest request by another person to express his/her interest about the same.

2.3 Design and Implementation Constraints

- Not allowed to use various third-party frameworks which would have made the development process easier and faster.
- The product must be made accessible only to IITK students, so we cannot allow guest users to use our product.
- Cannot use the IITK student database or the data from any other official IITK website.

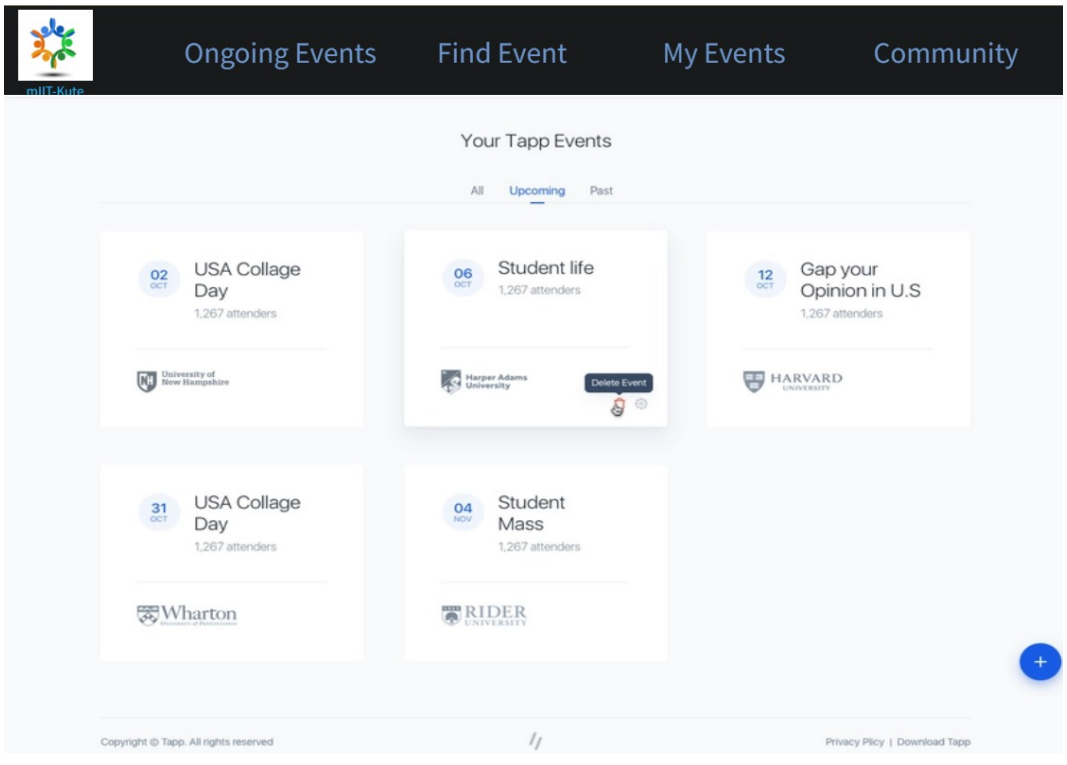
2.4 Assumptions and Dependencies

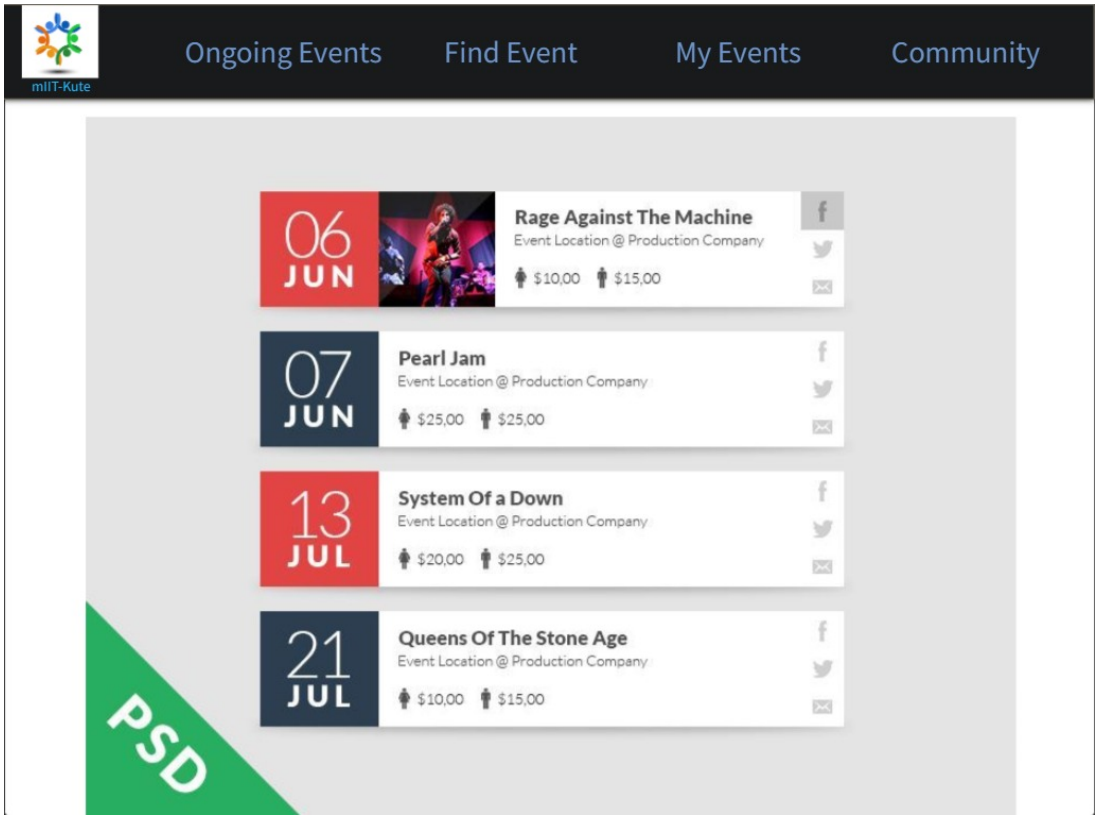
- We assume enough students use our app so that every student finds server related to their interest.
- The website will be able to handle the load of multiple servers without lagging or getting crashed.

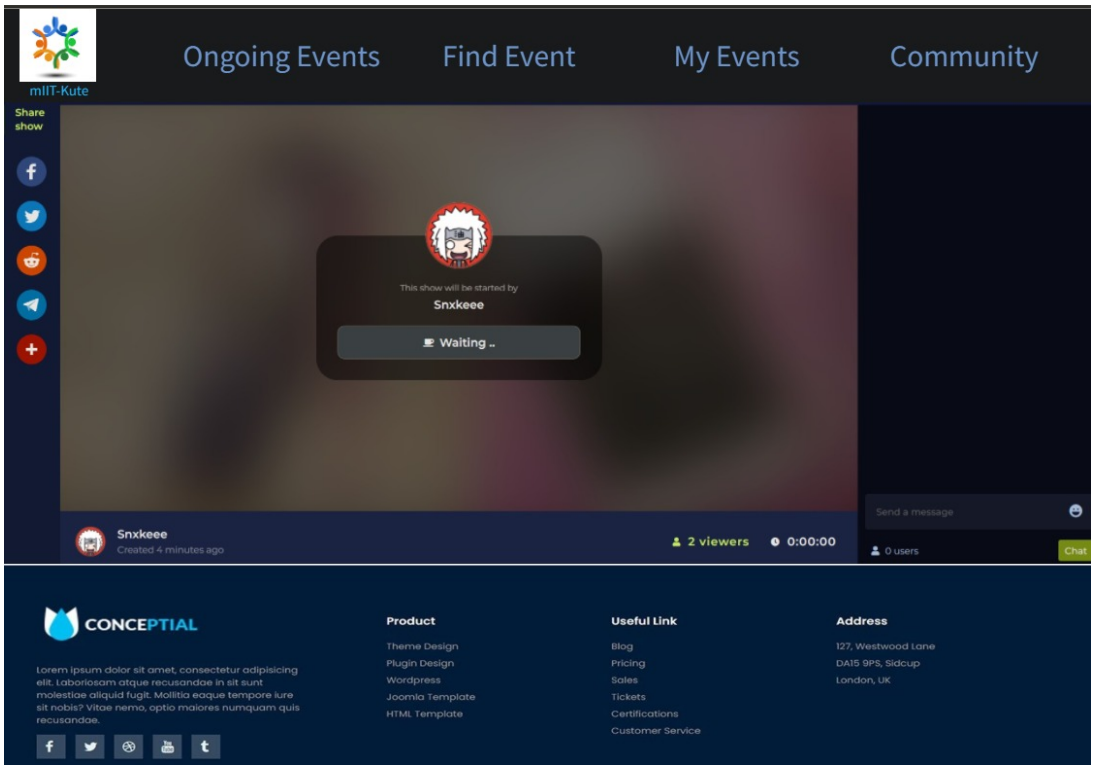
3 Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces




mIIT-Kute
Ongoing Events
Find Event
My Events
Community
06 JUN
Rage Against The Machine
Event Location @ Production Company
$10,00 $15,00
07 JUN
Pearl Jam
Event Location @ Production Company
$25,00 $25,00
13 JUL
System Of a Down
Event Location @ Production Company
$20,00 $25,00
21 JUL
Queens Of The Stone Age
Event Location @ Production Company
$10,00 $15,00
PSD


mIIT-Kute
Ongoing Events
Find Event
My Events
Community
Share show
This show will be started by
Snxkeee
Waiting ..
Snxkeee
Created 4 minutes ago
2 viewers
0:00:00
Send a message
0 users
Chat
CONCEPTIAL
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Laboriosam atque recusandae in sit sunt molestiae aliquid fugit. Mollitia eaque tempore iure sit nobis? Vitae nemo, optio maiores numquam quis recusandae.
Product
Theme Design
Plugin Design
Wordpress
Joomla Template
HTML Template
Useful Link
Blog
Pricing
Sales
Tickets
Certifications
Customer Service
Address
127, Westwood Lane
DA15 9PS, Sidcup
London, UK

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3.1.2 Hardware Interfaces

There are no specific Hardware interfaces required. Any web browser can be used.

3.1.3 Software Interfaces

There are no specific software interfaces involved in this project.

3.2 Functional Requirements

3.2.1 Login: The user shall enter a valid email ID/roll no. and password to login.
The system will be able to recognize an invalid e-mail ID and pop an error message.
If the password is incorrect, the user will be able to access the “forgot password” option.
Register: The user shall be able to register with iitk email ID, roll No. and create a password.
On registration, the user shall be able to select his/her interests.

3.2.2 The user shall be able to search for events from ongoing events.
The user shall be able to find an ongoing event by entering interest or time slot or both.

3.2.3 The user shall be able to create a new event with interest and time slot.
In case such an event already exists, the system will ask the user to join the existing event.

3.2.4 The user shall be able to send and receive messages in the chat of the event.
When the number of participants for an event is optimal, the system will be able to send a notification about the same.
The super user will be able to remove people from a server in case of breach of community guidelines.

3.2.5 The user shall be able to enter subjective feedback about the application.
The system will also allow users to suggest new interests.
Other users shall be able to like/support these feedbacks and suggestions.
If an interest is sufficiently popular (at least __ people), the system will be able to notify the super users.

3.2.6 The system will be able to delete an event and its corresponding chat 30 minutes after its completion.

3.2.7 The super-users will be able to add a new interest if it is supported by sufficient number of people and does not violate any community guidelines.

3.2.8 The user shall be able to add/edit their interests via their profile section.

3.2.9 The system shall be able to display ongoing events based on the user's interests.

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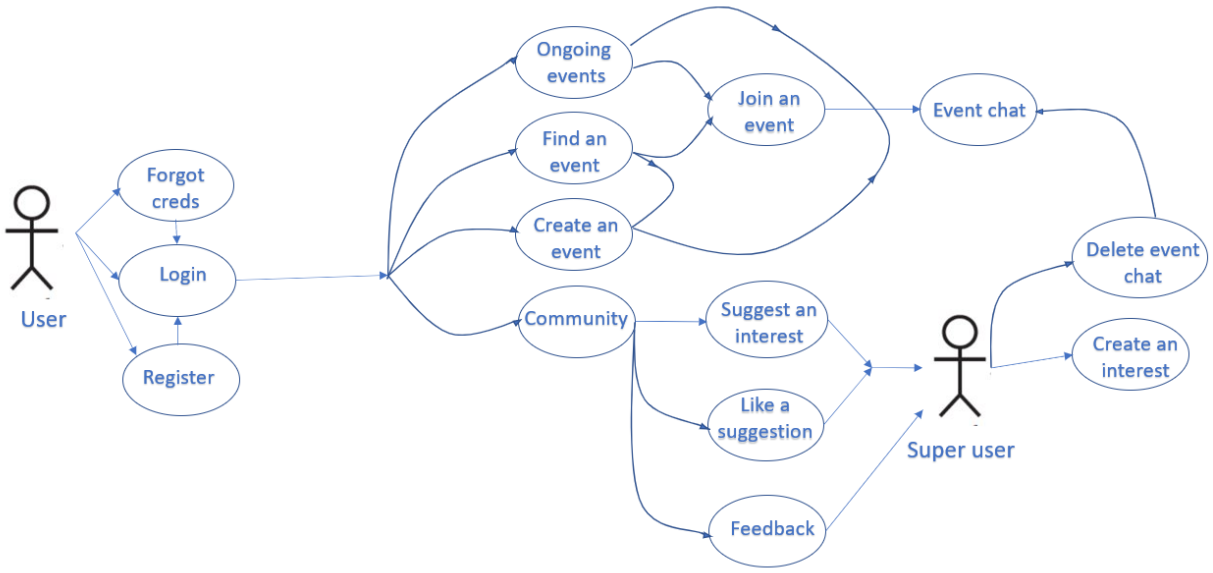
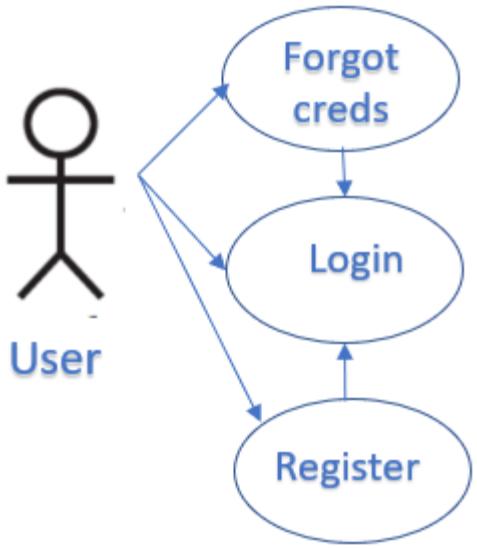
3.3 Use Case Model

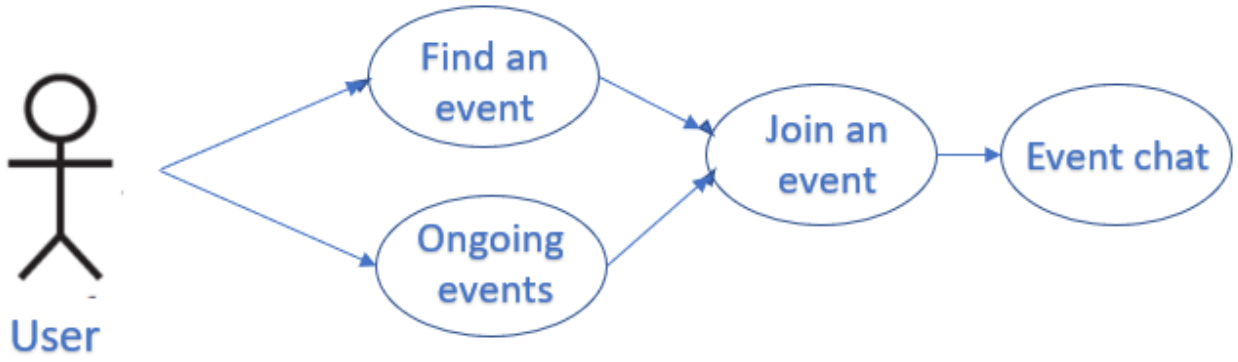


3.3.1 Use Case #1



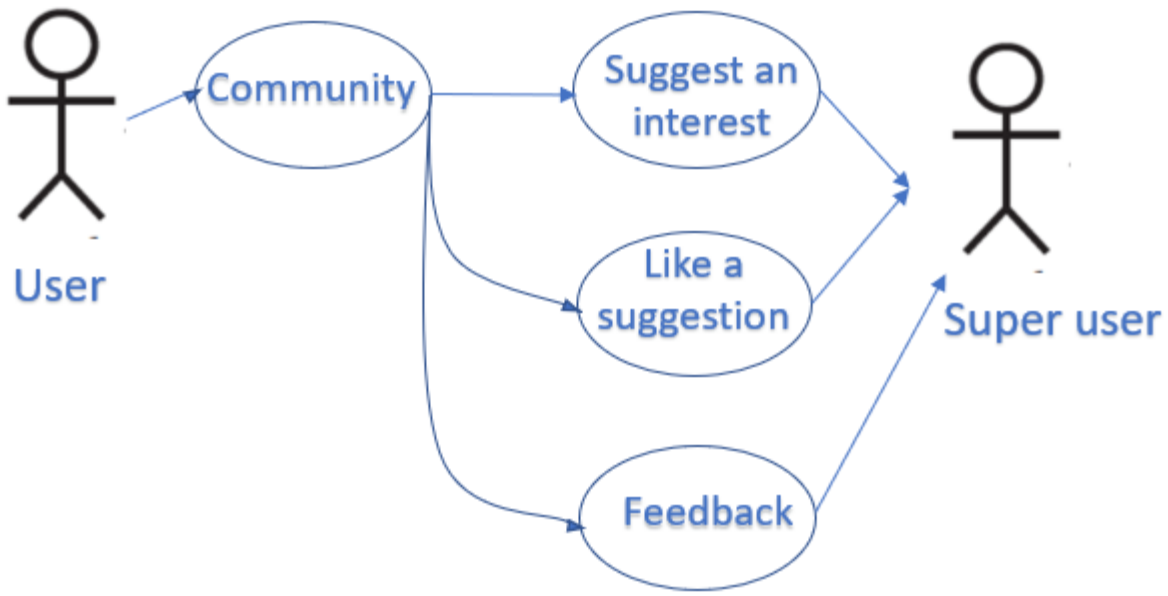
Use Case S.no	Use Case #1
Purpose	User registration or login
Requirements Traceability	IIT-K mail id for new users and login info for registered users.
Priority	High
Preconditions	None
Post conditions	User logs in
Actors	User
Exceptions	None
Includes	None
Notes/Issues	Assumed that the user belongs to IIT-K.

3.3.2 Use Case #2



Use Case S.no	Use Case #2
Purpose	Join an event
Requirements Traceability	User id, user interests,event schedule
Priority	high
Preconditions	User is logged in
Post conditions	User joins an event
Actors	User
Exceptions	Required event is not available
Includes	Use case #1
Notes/Issues	All the events should be visible.

3.3.3 Use Case #3



Use Case S.no	Use Case #3
Purpose	To take feedback and create new interest
Requirements Traceability	User id,Existing requests
Priority	Medium
Preconditions	User must be logged in
Post conditions	New interest will be created if there are enough likes,a new interest request is made.
Actors	User,Super user
Exceptions	Existing request
Includes	Use Case #1
Notes/Issues	None

4 Other Non-functional Requirements

4.1 Performance Requirements

- **Response time:** The response time of the servers should be less than 2s.
- **Workload:** The above response time is under the condition that 200 or less users use this app at the same time. This app is intended for IITK-Junta whose strength is in thousands. So, the website should be able to handle users with optimal response time though the traffic is high.
- **Platform:** To register in this app, we use iitk mail id, the app sends an otp to iitk mail id and validates it.

4.2 Safety and Security Requirements

- IITK mail id is the only authentication requirement.It doesn't ask to download any additional files either. So, no chance of malware getting installed in the users device.
- This app doesn't contain any sensitive information about the users.
- The chat server in the app should not allow the users to use abusive languages and NSFW contents.
- The app should satisfy the ISO 13849 , a standard which defines all parts of a functional safety analysis and IEC 16511 a process safety standard which mandates the creation of an SRS for all safety instrumented systems.

4.3 Software Quality Attributes

<Specify any additional quality characteristics for the product that will be important to either the customers or the developers. Some to consider are: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability. Write these to be specific, quantitative, and verifiable when possible. At the least, clarify the relative preferences for various attributes, such as ease of use over ease of learning.
TODO: Use subsections (e.g., 4.3.1 Reliability, 4.3.2 Adaptability, etc…) to provide requirements related to the different software quality attributes. Make sure that you do not just write "This software shall be maintainable…" Indicate how you plan to achieve it, & etc…
Please note that you need to include ***at least*** *2 quality attributes. You can Google for examples that may pertain to your system.>*

5 Other Requirements

*<This section is **Optional**. Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>*

Appendix A – Data Dictionary

Will be updated later.

Appendix B - Group Log

<Please include here all the minutes from your group meetings, your group activities, and any other relevant information that will assist in determining the effort put forth to produce this document>

January 7, 2022	9:30 - 10:30 PM	Discussed many ideas and shortlisted a few.
January 15, 2022	11 - 11:55 AM	Had a zoom meeting with the instructor and finalized our project as **mIIT-Kute.**
January 22, 2022	8 - 11 PM	Worked on some parts of the Software Requirement Specifications Document.
January 23, 2022	8:30 - 9:30 PM	Had a meeting with TA and discussed the challenges faced and how to deal with them.
January 28, 2022	8 - 9 PM	Had another meeting with TA to show our version of the Software Requirement Specifications Document and took some suggestions.
January 30, 2022	12 Noon - 3 PM	Made changes suggested by TA. Final Software Requirement Specifications Document made.