

Requirement Specification

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Introduction

1.1 Goal

The goal of this document is to delineate the even tracker system and clarify its relation to design model of the application. In this document, the desired functionalities are stated for the development phase of software. Additionally, functional requirements, non-functional requirements, user types with related user scenario, and finally use cases are included.

1.2 Contents

[Introduction](#)

[1.1 Goal](#)

[1.2 Contents](#)

[1.3 Organization](#)

[System Requirements](#)

[Functional Requirements](#)

[Non-functional Requirements](#)

[Use Cases](#)

[User Types](#)

[User Scenarios](#)

[Use Case Diagram](#)

[Whole System Use Case Diagram](#)

[Use Case Flow Diagram](#)

[Use Cases](#)

1.3 Organization

In the section “System Requirements”, functional and non-functional requirements are presented.

In the section “Use Cases”, all kinds of user types with their associated scenarios and uses cases and related diagrams are included. User types defines the authorization of different users. Thinking possible events to be handled, user scenarios are prepared. Considering the requirements, use cases and their diagrams are provided.

System Requirements

Functional Requirements

- Create, Read, Update, Delete operations on users
 - by Admin
 - We shall have these operations to give authority to admins for manage users
- Create, Read, Update, Delete operations on events
 - by Admin
 - We shall have these operations to give authority to admins for manage events
- Create, Read, Update, Delete operations on event groups
 - by Admin
 - We shall have these operations to give authority to admins for manage groups
- The admins can add user to any group and delete user from any group
 - by Admin
 - We shall have these operations to give authority to admins for manage people in user groups

- Read operation on logs
 - by Admin
 - We shall have these operations to give ability to admins for keeping track of all app activities
- Create special events to promote company events among all users
 - by Admin
 - We may have these operations to create events that will be seen in every group via request of companies
- Create operation on logs
 - by System
 - We shall have these operations to produce trackable app activity information for admins and users
- Delete operation on logs (2 weeks after the event's finished date)
 - by System
 - We shall have these operations to use database more frugal and save money by cleaning logs after a certain period
- Notify users when they are invited to a group
 - by System
 - not mandatory (desirable)
 - We may implement this operation to make users informed about received group invitations
- Notify users as the time of the event approaches
 - by System
 - not mandatory (desirable)
 - We may implement this operation to make users informed about upcoming events
- Update member status of event invitation after a user action

- by System
- We shall have this operation to announce user participation to all other users in same group
- Automatically set all member statuses as pending when an event is created
 - by System
 - We shall have this operation to mark user participation status as unknown
- Create an account using email, username and password
 - by User
 - We shall have these operations to give users the ability of creating their own accounts
- Update their account details
 - by User
 - We shall have this operation for users to be able to change their account information
- Delete their accounts
 - by User
 - We shall have these operations to give users the ability of deleting their own accounts
- Sign in to a created account
 - by User
 - We shall have these operations to give users the ability of reaching out to their own accounts
- Sign out from the account
 - by User
 - We shall have these operations to give users the ability of finishing their current activity on app
- Create and read operations on event groups

- by User
- We shall have these operations in order to give users the ability of creating event groups at will and browse the already existing one
- The group owner can invite a person to the group
 - by User
 - We shall have these operations in order to give group owners the ability of add other users to the group
- Update and delete operations on event groups if the user is the owner of the group
 - by User
 - We shall have these operations in order to give group owners the ability of editing information of group and also deleting the existing group
- Create, Read, Update, Delete operations on the belonging account
 - by User
 - We shall have these operations to give users the ability of manage their own accounts
- Read operations on logs of joined groups
 - by User
 - We shall have these operations to give ability to users for keeping track of app activities in belonged groups
- Accept, reject an event invitation or update the status
 - by User
 - We shall have these operations to give ability to users to be able to indicate their response about received event invitations
- Add or remove a user from group
 - by User
 - We should have these operations in order to give ability to group creator user to add or remove others
- Quit group

- by User
- We shall have this operation in order to make users able to exit from an already existing joined group
- Read operation on today's invited events
 - by User
 - We shall have this operation in order to make users able to keep track of current events and their information
- Create, Read, Update, Delete operations by event owners on events in joined groups
 - by User
 - We shall have these operations to give authority to event owner users for manage events
- Read operation on events in joined groups
 - by User
 - We shall have this operation to give ability to users for learning details of the events which were organized in belonged groups

Non-functional Requirements

Aa No.	≡ Type	≡ Description
<u>1</u>	Performance	The application should not require unnecessary computing power and should respond to the actions of users fastly (60-90ms)
<u>2</u>	Performance	The load time for fetching event groups should not exceed 2 seconds
<u>3</u>	Security	The personal information of users and admins' must be secured by the software
<u>4</u>	Security	The actions that a person can take must be determined by a role assigned to their account.
<u>5</u>	Usability & Appearance	The application's user interface should be user-friendly as much as possible and the colors used in the application should be as simple as possible.

Aa No.	≡ Type	≡ Description
<u>6</u>	Data Integrity	Consistency and continuous integration are the musts of the system.
<u>7</u>	Reusability	The code repository must obey the principles of software engineering and the written modules should be reusable.
<u>8</u>	Reliability	The application should be running properly and must be reliable.

Use Cases

User Types

Specify the list of user profiles of the software.

- Admin: Role for system managers who have *god mode* abilities on the system. They can read and manipulate any data kept in databases.
- User: Role for ordinary end-users who use the application to track their events in their friend groups.

User Scenarios

Admin: Turgut

- Turgut wants to access his account
- Turgut wants to see all registered users and manipulate them
- Turgut wants to see all events and manipulate them
- Turgut wants to see all groups and manipulate them

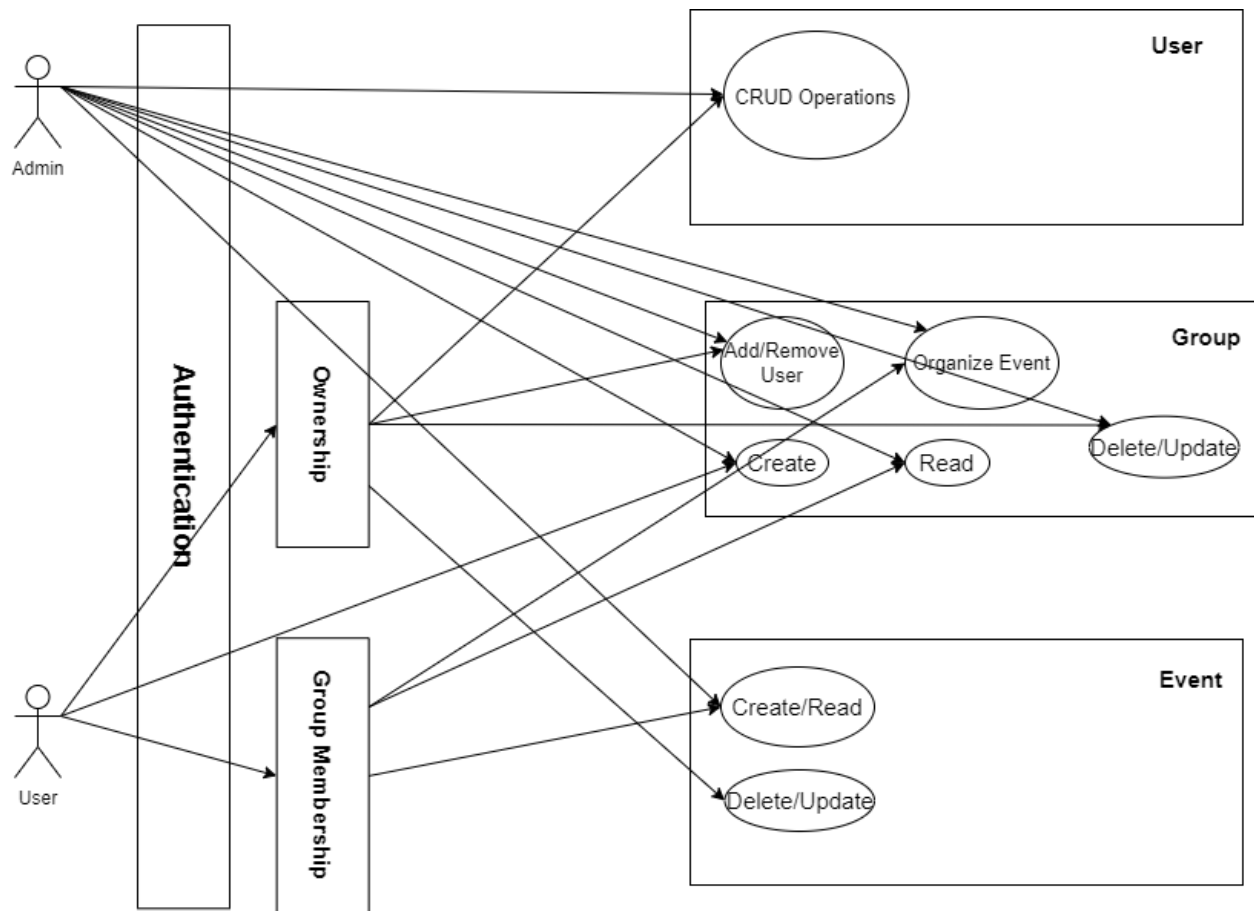
User: Uyar

- Uyar wants to create an account
- Uyar wants to access his account
- Uyar wants to see all accepted and invited events
- Uyar wants to respond to an event invitation
- Uyar wants to see details of an event

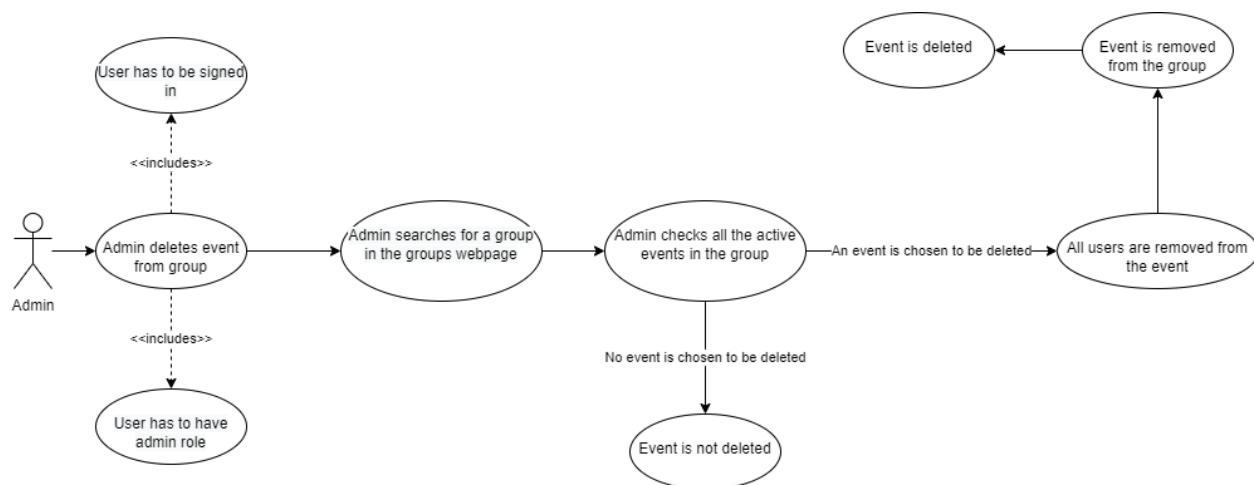
- Uyar wants to see his groups
- Uyar wants to details of one of his groups
- Uyar wants to create an event in one of his groups
- Uyar wants to invite all friends in one of his groups to the event
- Uyar wants to add people to the group
- Uyar wants to update one of his groups
- Uyar wants leave from one of his groups
- Uyar wants to update his profile
- Uyar wants to logout from his account
- Uyar wants to delete his account

Use Case Diagram

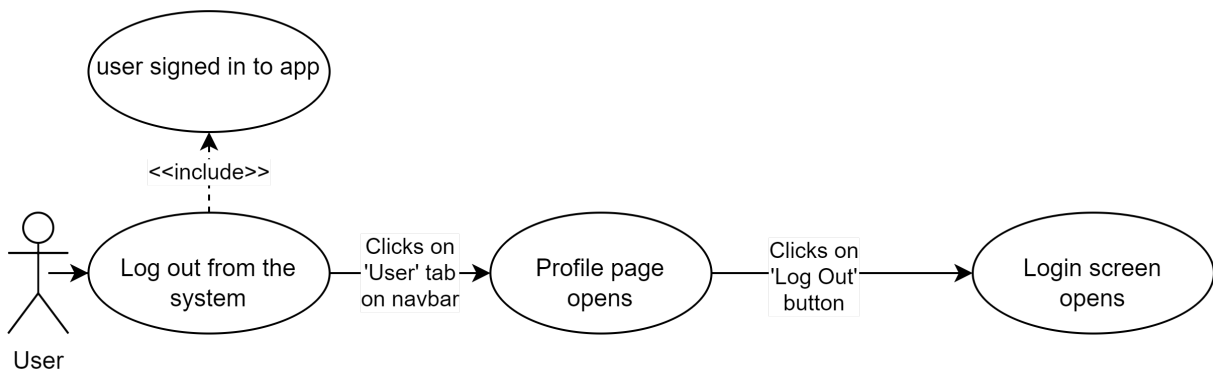
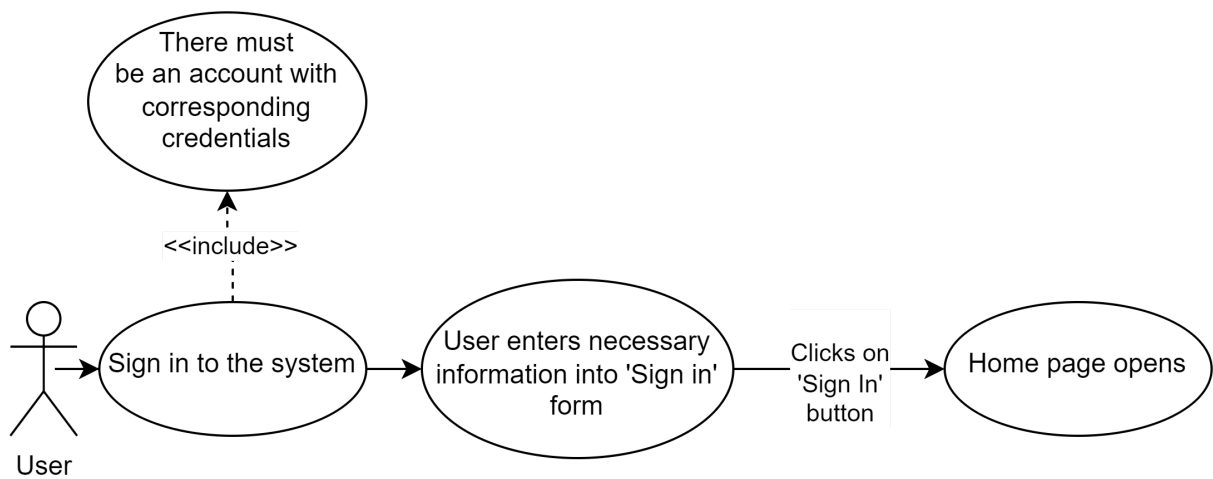
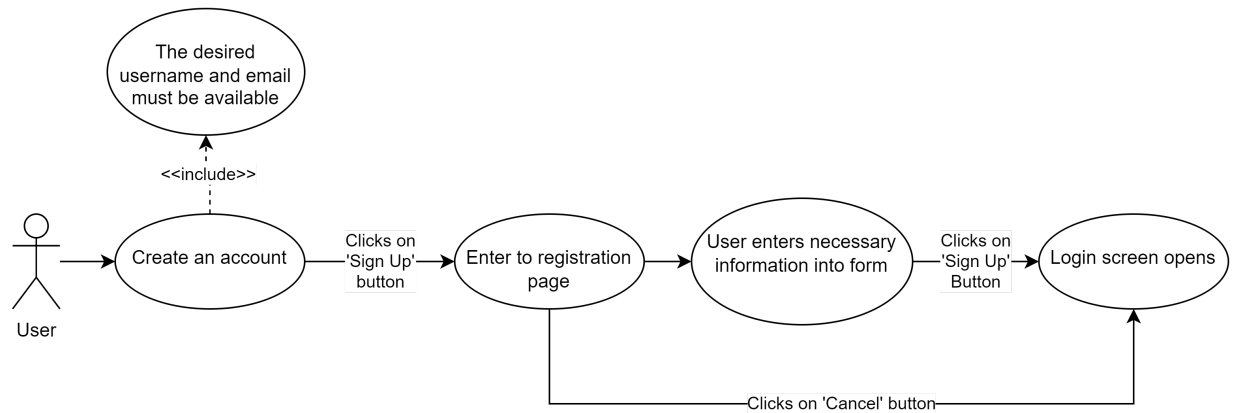
Whole System Use Case Diagram

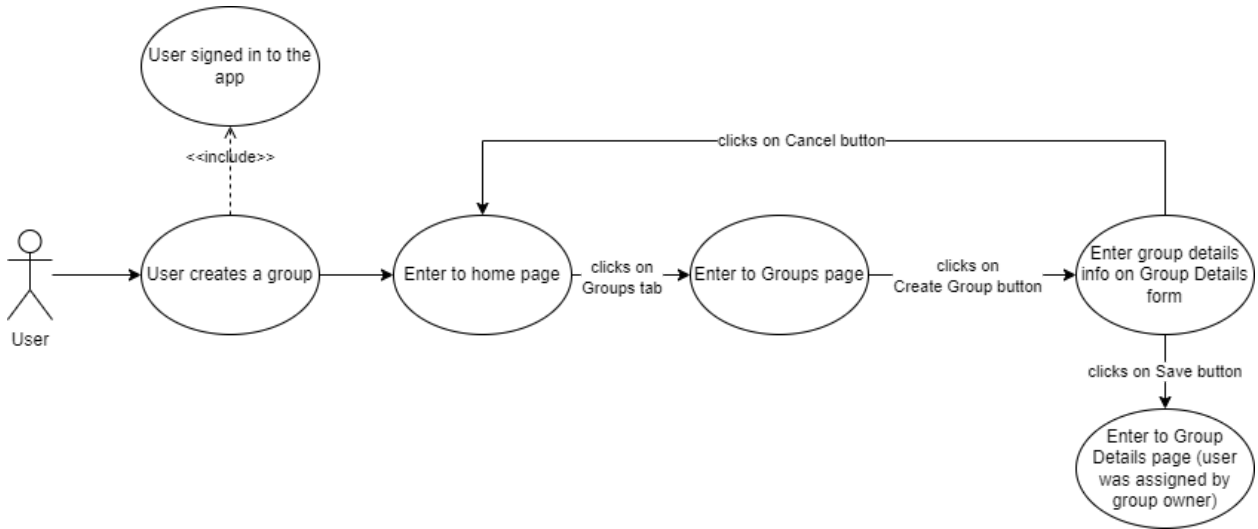
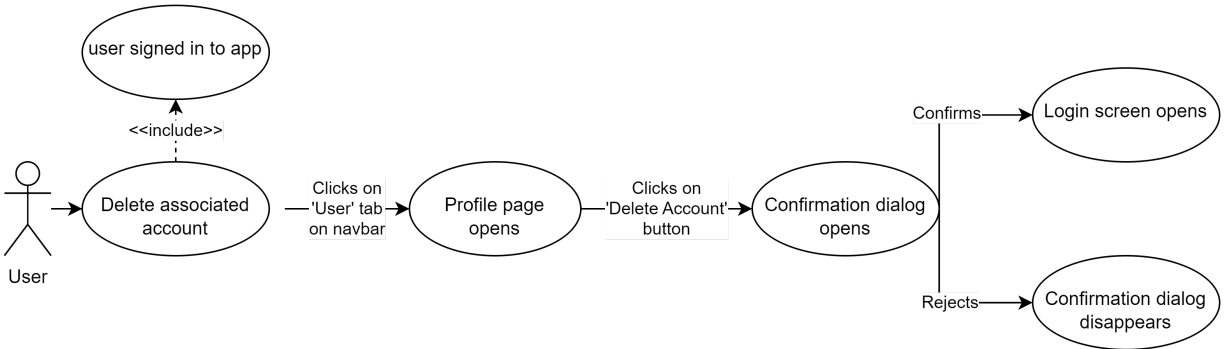
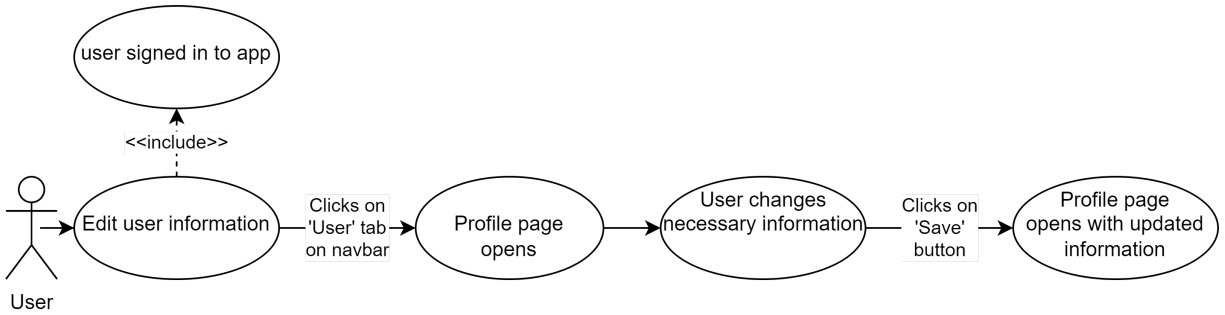


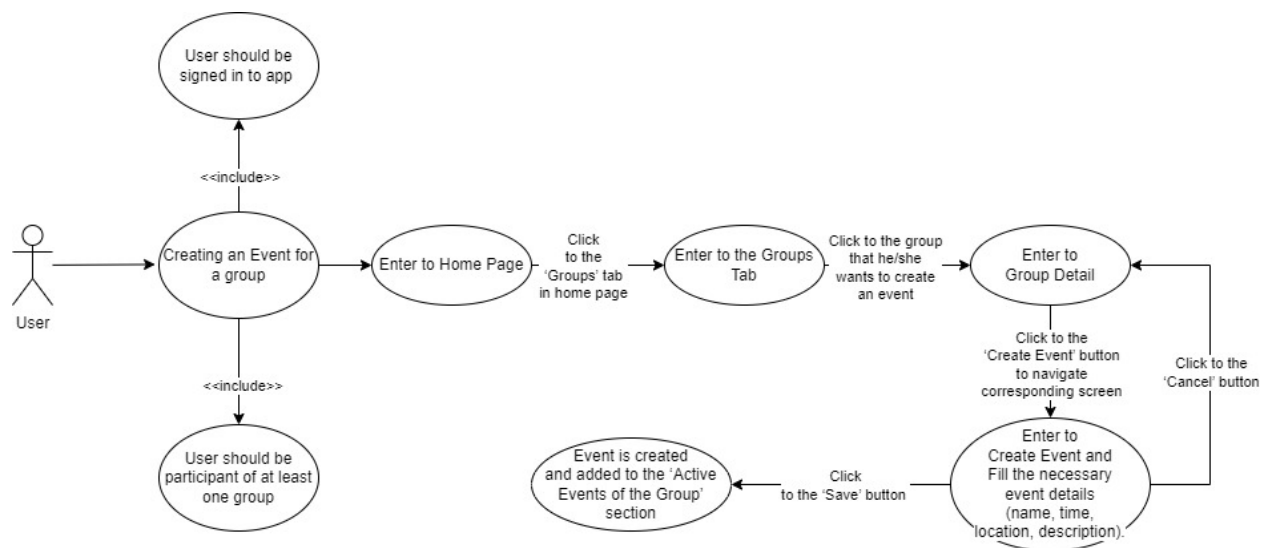
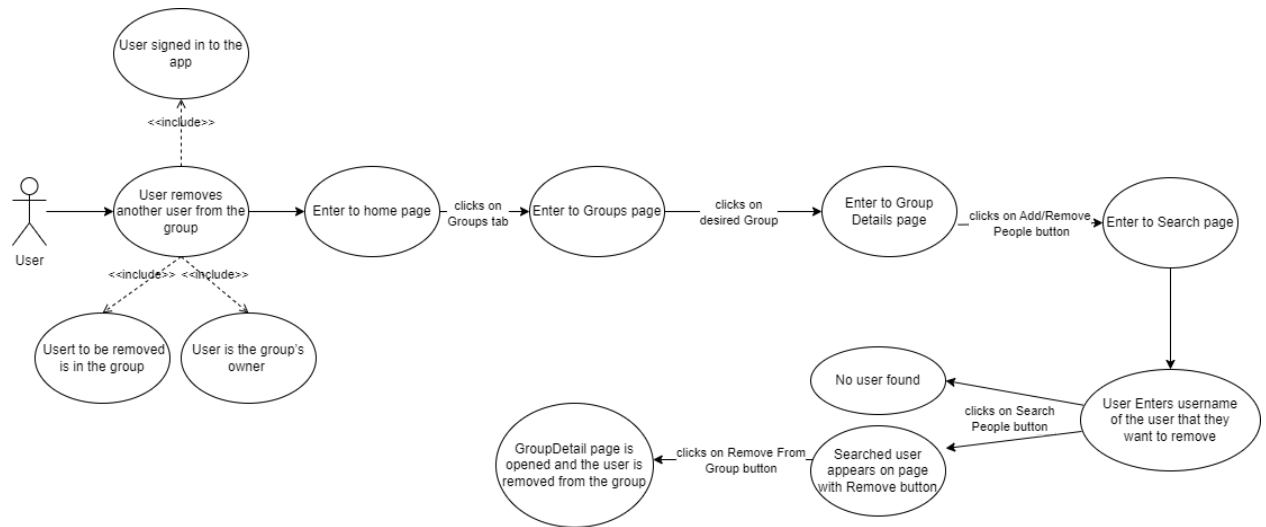
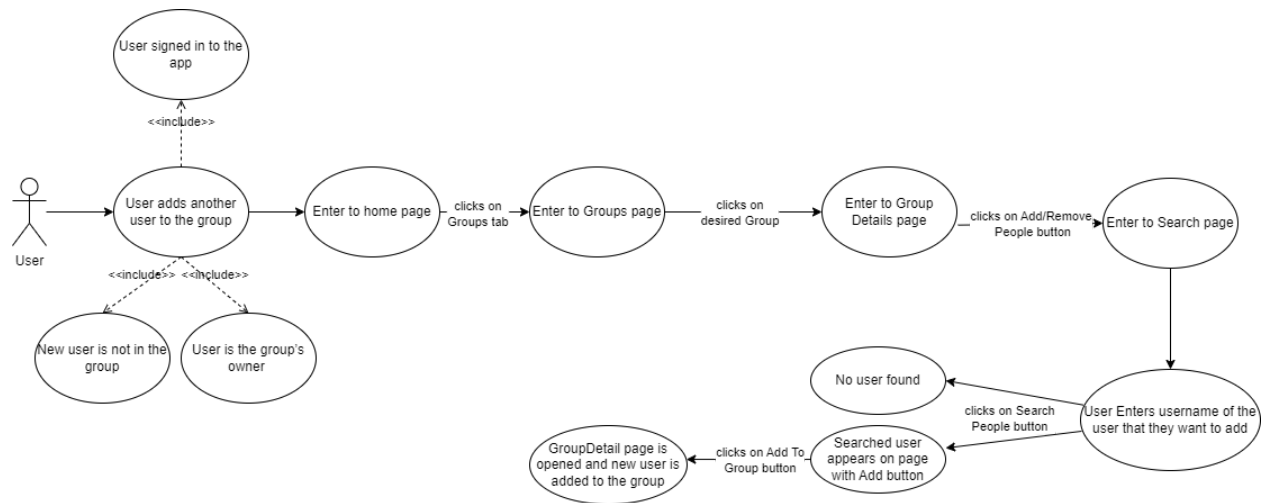
Use Case Flow Diagram

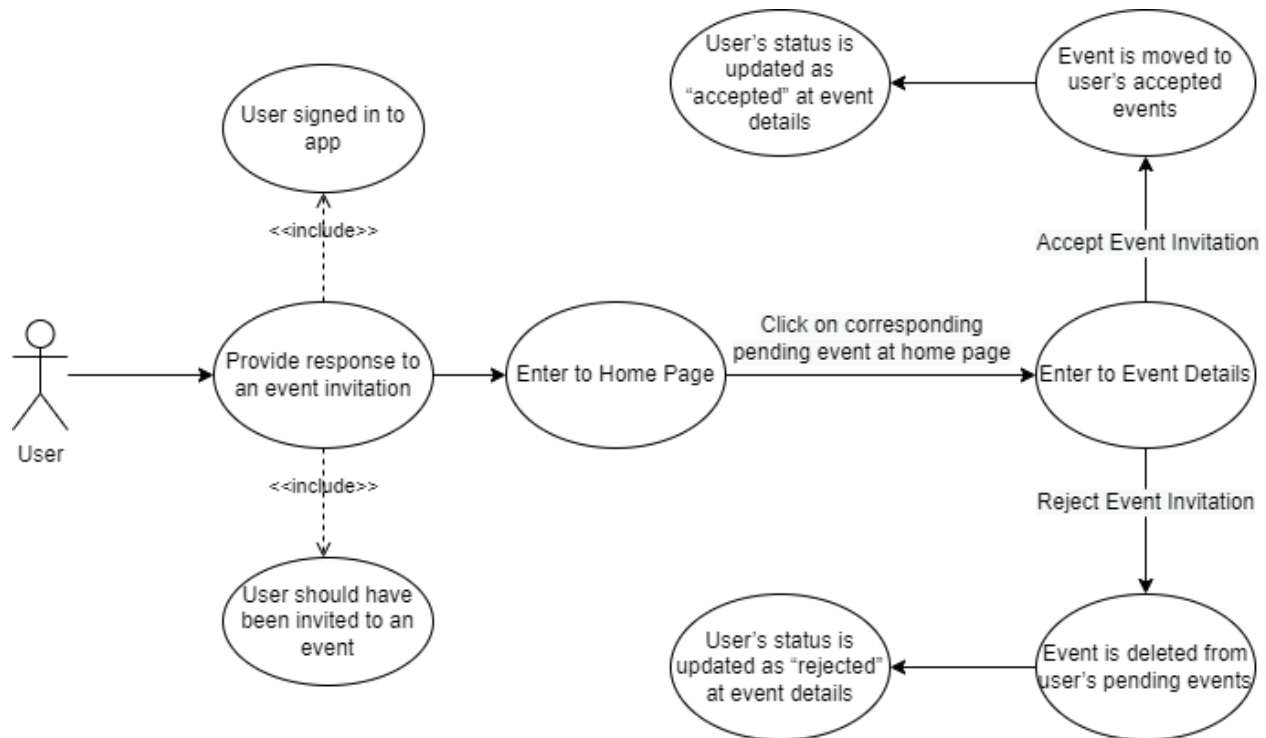












Use Cases

Use Case Name	Create an account
Participating Actors	User
Entry Condition	-
Main Flow	1) User clicks on the 'Sign Up' button in the login page 2) User enters necessary information into registration form 3) User clicks on the 'Sign Up' button in the registration page 4) Login screen opens
Alternative Flow	2) User clicks on the 'Cancel' button in the registration page 3) Login screen opens
Special Requirements	The desired username and email should be available

Use Case Name	Sign in to the system
Participating Actors	User
Entry Condition	There must be an account with corresponding user credentials

Use Case Name	Sign in to the system
Main Flow	1) User enters necessary information into sign in form in entrance page 2) User clicks on the 'Sign In' button in the login page 3) Home screen opens
Alternative Flow	-
Special Requirements	-

Use Case Name	Log out from the system
Participating Actors	User
Entry Condition	User has to be signed in
Main Flow	1) User clicks on the 'User' tab on the navigation bar 2) User clicks on the 'Log Out' button in the 'User' tab 3) Login screen opens
Alternative Flow	1) Session time-out 2) Login screen opens
Special Requirements	-

Use Case Name	Edit user information
Participating Actors	User
Entry Condition	User has to be signed in
Main Flow	1) User clicks on the 'User' tab on the navigation bar 2) User changes the necessary information 3) User clicks on the 'Save' button 4) Profile page opens with updated information
Alternative Flow	-
Special Requirements	-

Use Case Name	User deletes associated account
Participating Actors	User
Entry Condition	User has to be signed in

Use Case Name	User deletes associated account
Main Flow	1) User clicks on the 'User' tab on the navigation bar 2) User clicks on the 'Delete Account' button 3) User clicks on the 'Yes' button on the confirmation dialog 4) Login screen opens
Alternative Flow	3) User clicks on the 'No' button on the confirmation dialog 4) Confirmation dialog is closed
Special Requirements	The account should not have the admin role

Use Case Name	User creates a group
Participating Actors	User
Entry Condition	User has to be signed in
Main Flow	1) User clicks on the 'Groups' tab in home page 2) User clicks on 'Create Group' button 3) User enters group details at Create Group page 4) User clicks on 'Save' button 5) GroupDetail page is opened and user is assigned as group owner
Alternative Flow	3/4) User clicks on Cancel 4/5) Home Page is opened
Exit Condition	Save Group Details / Cancel
Special Requirements	-

Use Case Name	User adds another user to the group
Participating Actors	User
Entry Condition	User has to be signed in User is the group's owner New user is not in the group
Main Flow	1) User clicks on the 'Groups' tab in home page 2) User clicks on the group that they desire to add an user into it 3) User clicks on 'Add/Remove People' button at GroupDetail page 4) User enters username of the user that they want to add 5) User clicks on search people button 6) Searched user appears on page 7) Click on Add To Group button 8) GroupDetail page is opened and new user is added to the group
Alternative Flow	6) No user found appears on page
Exit Condition	Returning back/ Add user to group

Use Case Name	User adds another user to the group
Special Requirements	User knows username of the user that they want to add Add To Group button appears for new user when their name is searched
Use Case Name	User remove another user from the group
Participating Actors	User
Entry Condition	User has to be signed in User is the group's owner User to be removed is in the group
Main Flow	1) User clicks on the 'Groups' tab in home page 2) User clicks on the group that they desire to remove an user from it 3) User clicks on 'Add/Remove People' button at GroupDetail page 4) User enters username of the user that they want to remove 5) User clicks on search people button 6) Searched user appears on page 7) Click on Remove From Group button 8) GroupDetail page is opened and the user to be removed is removed from the group
Alternative Flow	6) No user found appears on page
Exit Condition	Returning back/ Remove user from group
Special Requirements	User knows username of the user that they want to remove Remove From Group button appears for user to be removed when their name is searched
Use Case Name	Creating an Event for a group
Participating Actors	User
Entry Condition	User should be signed in to app User should be participant of at least one group
Main Flow	1) User clicks to the 'Groups' tab in home page 2) User clicks to the group that he/she wants to create an event 3) User clicks to the 'Create Event' button to navigate corresponding screen 4) User fills the necessary event details (name, time, location, description) and clicks to the 'Save' button 5) Event is created and added to the 'Active Events of the Group' section
Alternative Flow	4) User clicks to the 'Cancel' button
Exit Condition	Creating Event / Cancelling process
Special Requirements	-

Use Case Name	Provide response to an event invitation
Participating Actors	User
Entry Condition	User should be signed in to app User should be a member of group that the event belongs to User should have been invited to an event
Main Flow	1) User click on corresponding pending event at home page 2) User accept invitation from the event detail page 3) Event is moved to user's accepted events 4) User's status is updated as "accepted" at event details
Alternative Flow	2) User reject invitation from the event detail page 3) Event is deleted from user's pending events 4) User's status is updated as "rejected" at event details
Exit Condition	Accept invitation/Reject invitation
Special Requirements	User got invitation for corresponding event which was sent by event creator
Use Case Name	Admin deletes user account
Participating Actors	Admin
Entry Condition	User has to be signed in User has to have admin role
Main Flow	1) Admin searches for an account in the users webpage 2) Admin clicks on delete User 3) User is removed from all joined groups and events 4) User's account is deleted
Alternative Flow	2) Admin does not click on delete user 3) User's account is not deleted
Exit Condition	Delete account/Do not delete account
Special Requirements	-
Use Case Name	Admin deletes event group
Participating Actors	Admin
Entry Condition	User has to be signed in User has to have admin role
Main Flow	1) Admin searches for a group in the groups webpage 2) Admin clicks on delete event group 3) All users are removed from the group 4) All events that belong to the group are deleted and removed from users 5) Event group is deleted

Use Case Name	Admin deletes event group
Alternative Flow	2) Admin does not click on delete event group 3) Event group is not deleted
Exit Condition	Delete event group/Do not delete event group
Special Requirements	-

Use Case Name	Admin deletes event from group
Participating Actors	Admin
Entry Condition	User has to be signed in User has to have admin role
Main Flow	1) Admin searches for a group in the groups webpage 2) Admin checks all the active events in the group 3) An event is chosen to be deleted 4) All users are removed from the event 5) Event is removed from the group 6) Event is deleted
Alternative Flow	3) No event is chosen to be deleted 4) Event is not deleted
Exit Condition	Delete event from group/Do not delete event from group
Special Requirements	-