

Project Part 2 - GROUP

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- **Title:** ChatApp
- **Project Summary:** A java-based messaging application which implements Object-oriented concepts and includes basic functionalities. The system is based on a client-server model in which multiple clients (contacts wishing to initiate a chat with other contacts) can request access through the server.
- **Requirements**

Business Requirements				
ID	Requirement	Topic Area	Actor	Priority
BR – 01	A username must be a gmail.com or colorado.edu email address for registration	Authentication	All	Critical
BR – 02	A password must contain at least 8 characters	Authentication	All	Critical
BR - 03	A password must contain at least one lowercase letter, one uppercase letter, one digit, and one special character	Authentication	All	Critical

User Requirements				
ID	Requirement	Topic Area	Actor	Priority
US – 01	As a user, I should be able	Authentication	User	Critical

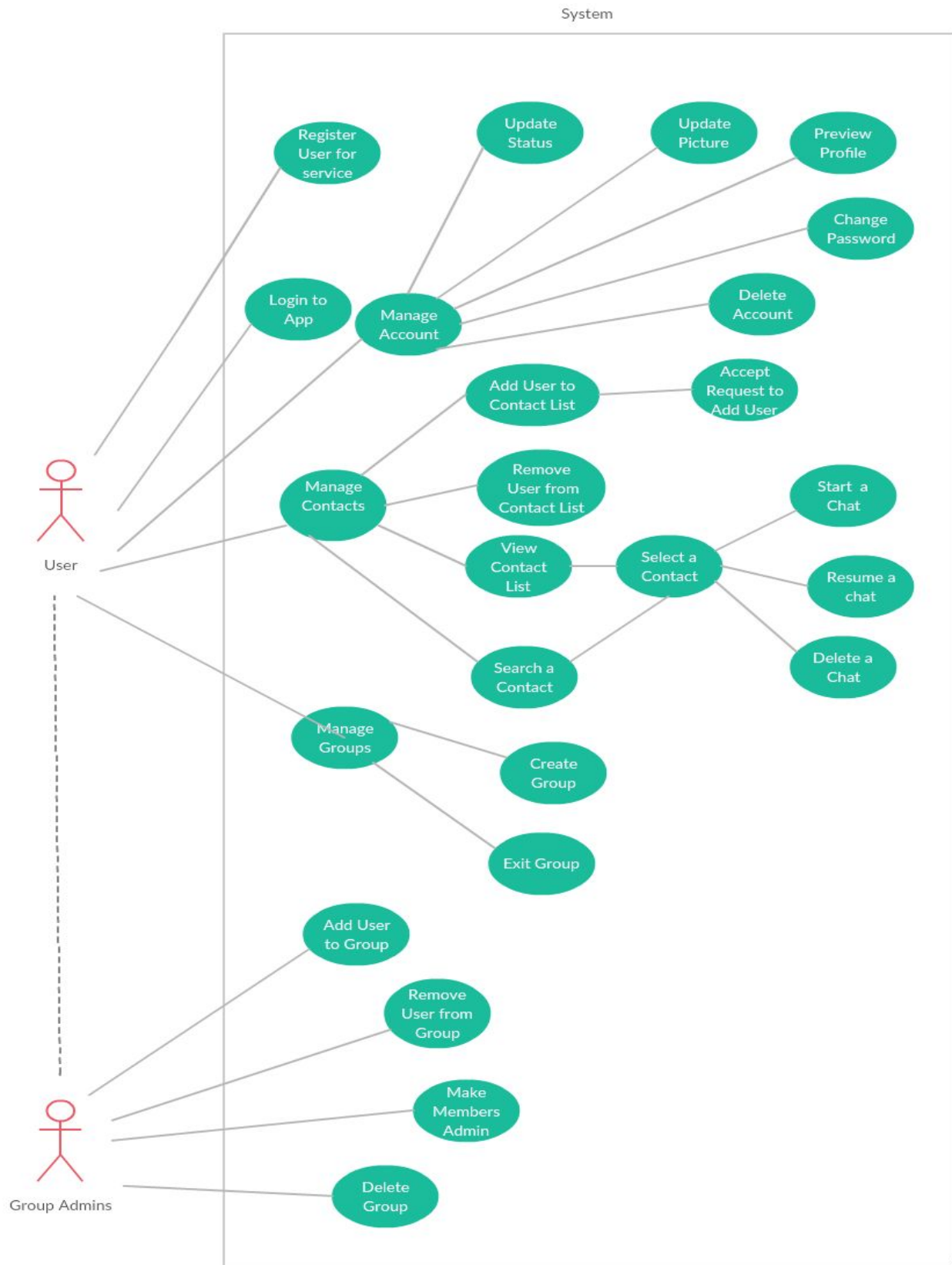
	to register for the service			
US – 02	As a user who has registered, I should be able to login to the system	Authentication	User	Critical
US – 03	As a user, I should be able to change my display picture	Profile Management	User	Critical
US – 04	As a user, I should be able to update my status	Profile Management	User	High
US – 05	As a user, I should be able to view my profile	Profile Management	User	High
US – 06	As a user, I should be able to delete my account	Profile Management	User	Critical
US – 07	As a user, I should be able to add a new contact to my contact list	Contact Management	User	High
US – 08	As a user, I should be able to remove an existing contact from my contact list	Contact Management	User	High
US - 09	As a user, I should be able to accept a request to add a contact	Contact Management	User	High
US – 10	As a user, I should be able to view my contact list	Contact Management	User	High
US – 11	As a user, I should be able to select a contact from my contact list	Contact Management	User	High
US – 12	As a user, I should be able to search a contact from my contact list	Contact Management	User	Medium
US – 13	As a user, I should be able to start a chat with a	Messaging	User	High

	selected contact			
US – 14	As a user, I should be able to resume a chat with a selected contact when I have already started a chat	Messaging	User	High
US – 15	As a user, I should be able to delete a chat with a selected contact	Messaging	User	High
US – 16	As a user, I should be able to create a new group	Group Management	User	High
US – 17	As a user who is a member of a group, I should be able to exit a group	Group Management	User	High
US – 18	As a group administrator, I should be able to add users to a group	Group Management	Group admin	High
US – 19	As a group administrator, I should be remove an user from a group	Group Management	Group admin	High
US – 20	As a group administrator, I should be able to make a group member an administrator	Group Management	Group admin	High
US - 21	As a group administrator, I should be able to delete an existing group	Group Management	Group Admin	Critical
US - 22	As a user, I should be able to change my password	Profile Management	User	Critical
US - 23	As a user, I should be able to log out	Authentication	User	Critical

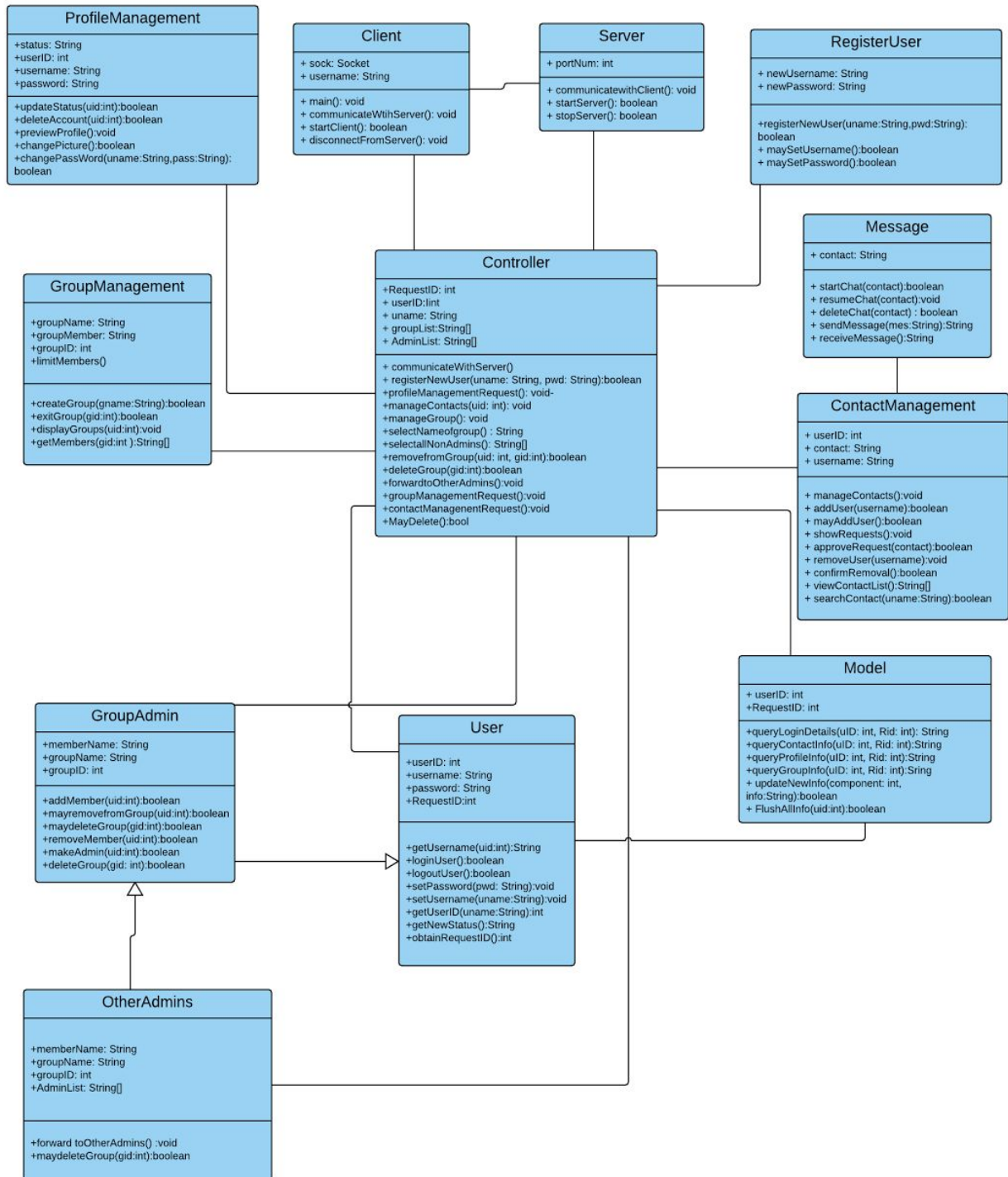
Non-Functional Requirements

NFR – 01	A login username cannot be identical to another login username	Reliability	User	Critical
NFR – 02	A group should have at least 3 members to be created	Reliability	Group Admin	Critical
NFR – 03	All messages in a group should be backed up at 12:00 midnight	Reliability		Critical

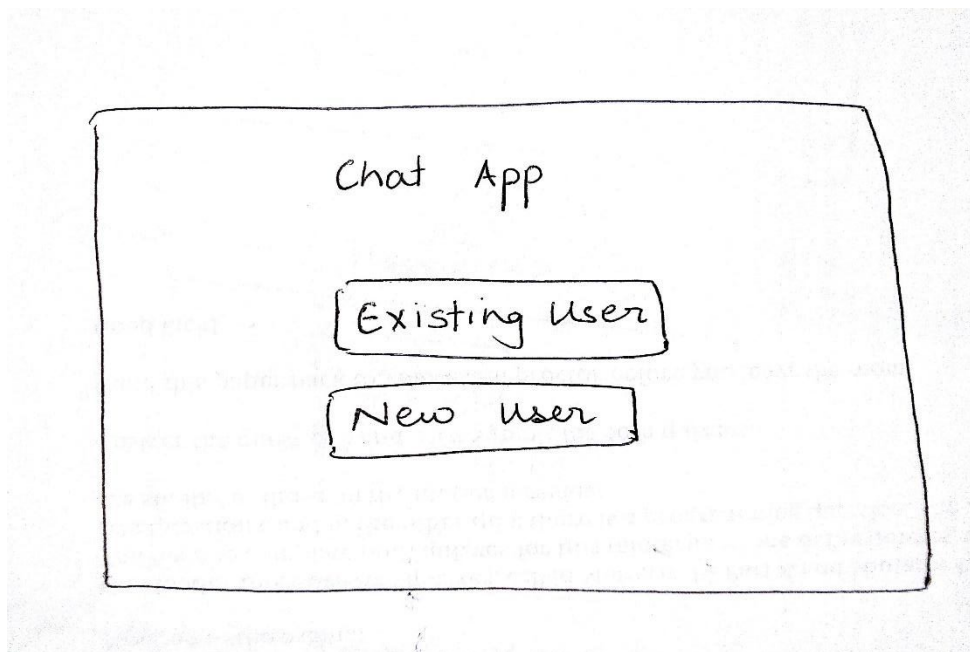
- Use Case Diagram



Class Diagram



- UI Mockups



Existing User

A hand-drawn UI mockup for the 'Existing User' login form. It contains two input fields: 'Username:' and 'password:', each followed by a rectangular text box. Below these fields is a rectangular 'Submit' button.

New User

email ID :

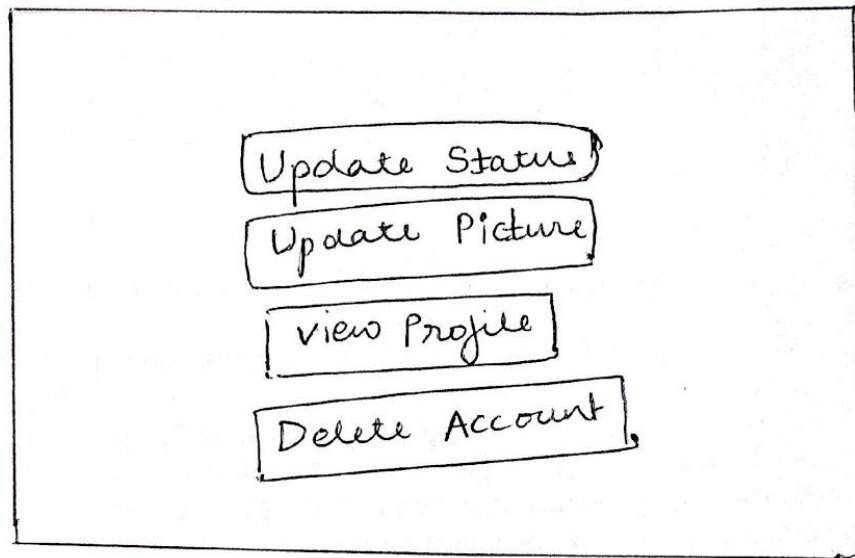
username :

password :

conferim pass word :

Home Page

Manage Profile



A rectangular box containing four stacked buttons. The buttons are labeled 'Update Status', 'Update Picture', 'View Profile', and 'Delete Account' from top to bottom.

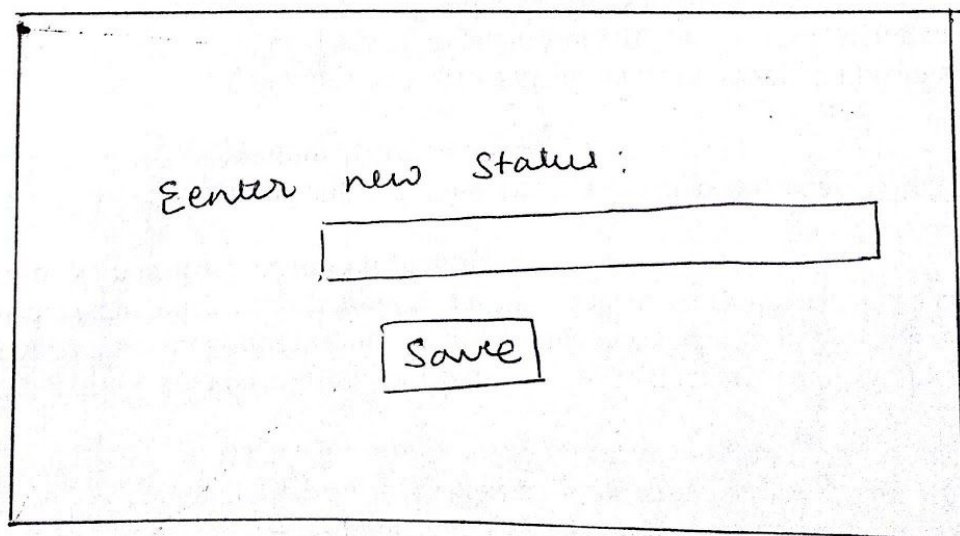
Update Status

Update Picture

View Profile

Delete Account

Update Status



A rectangular box containing a text input field and a 'Save' button. The text 'Enter new status:' is positioned to the left of the input field.

Enter new status:

Save

Update Picture

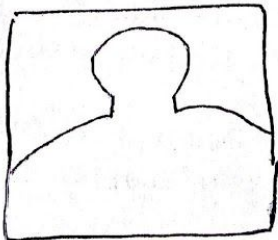
Browse

 // link

upload

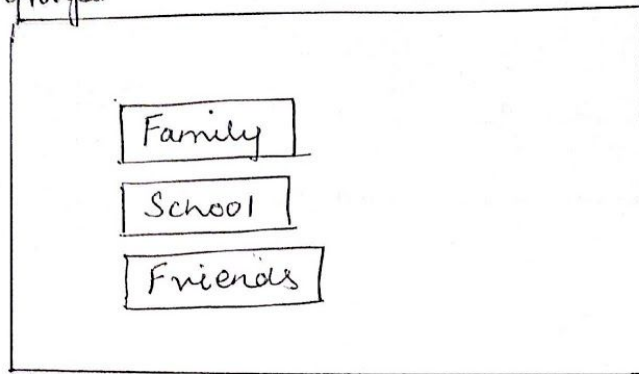
View Profile

Display Name

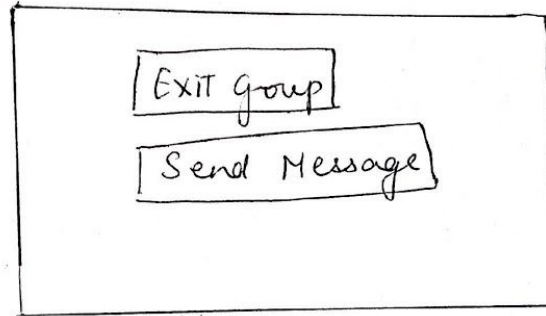


status : I love Chocolates

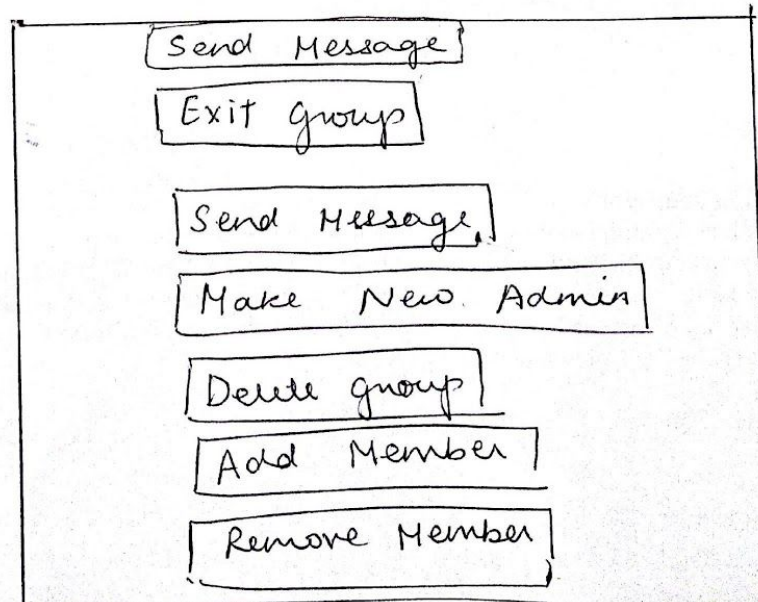
View Groups



Family — user view



Family — Admin View



Manage Contacts

Add User

Remove User

Accept Requests

View Contact List

Search a Contact

Go Back

Add User

Username of :
New User

Add

Go Back

Add User

User `abcdefgh@gmail.com` has
been added to your contact list.

Add User

Username of :
New User

Add User

Username not recognized.

Remove User

John	
Michael	✓
Steve	
Matthew	

Remove User

Are you sure you want to remove "Michael"
from your contact list?

Remove User

Success! "Michael" removed from Contact List

Approve Requests

Edmund Cohen ✓
Richard Miller

Approve

Reject

Approve Requests

Request approved and Edmund Cohen added.

View Contact List

Aditya ✓
Swapnil
Mayank
Kushal

Select

Go Back

Aditya

Start a Chat

Go Back

Swapnil

Resume Chat

Delete Chat

Aditya

Type message:

Aditya

Hello! ←

→ Hi there! How've you been?

Type message:

Swapnil

Hi! ←

→ Good to hear from you!

Swapnil

Search a Contact

Name :

Contact List

Raghu
Rahul
Raktim

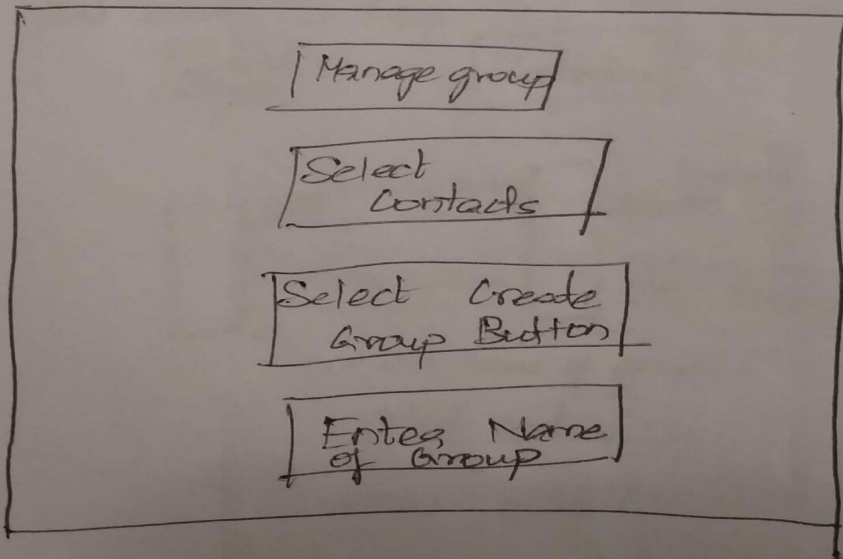
Search a Contact

Name :

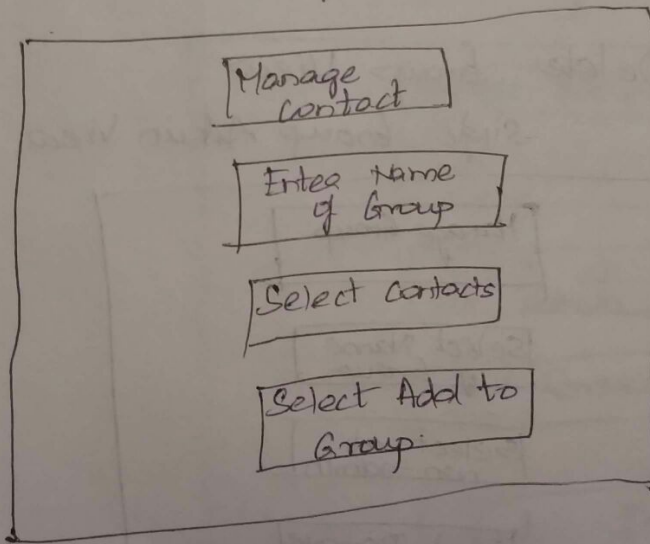
Search a Contact

Contact does not exist!

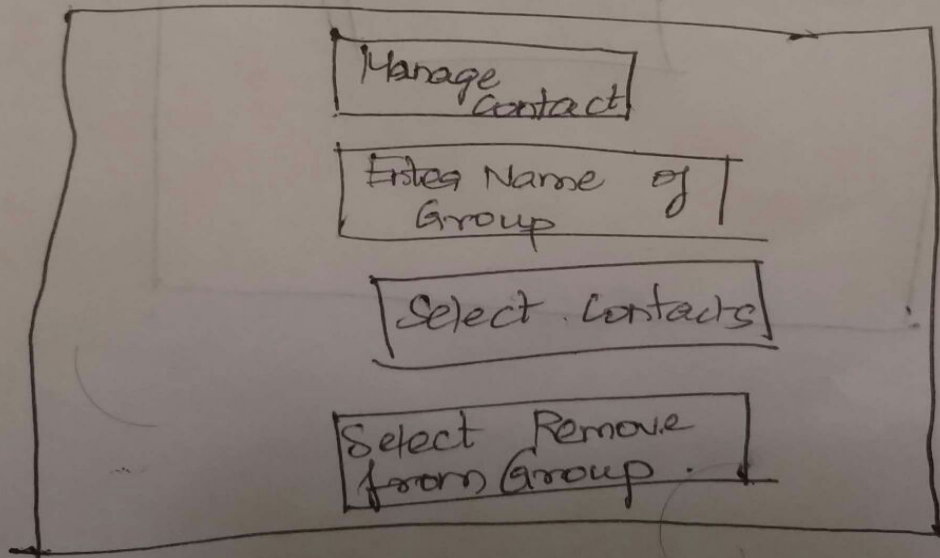
Create Group View



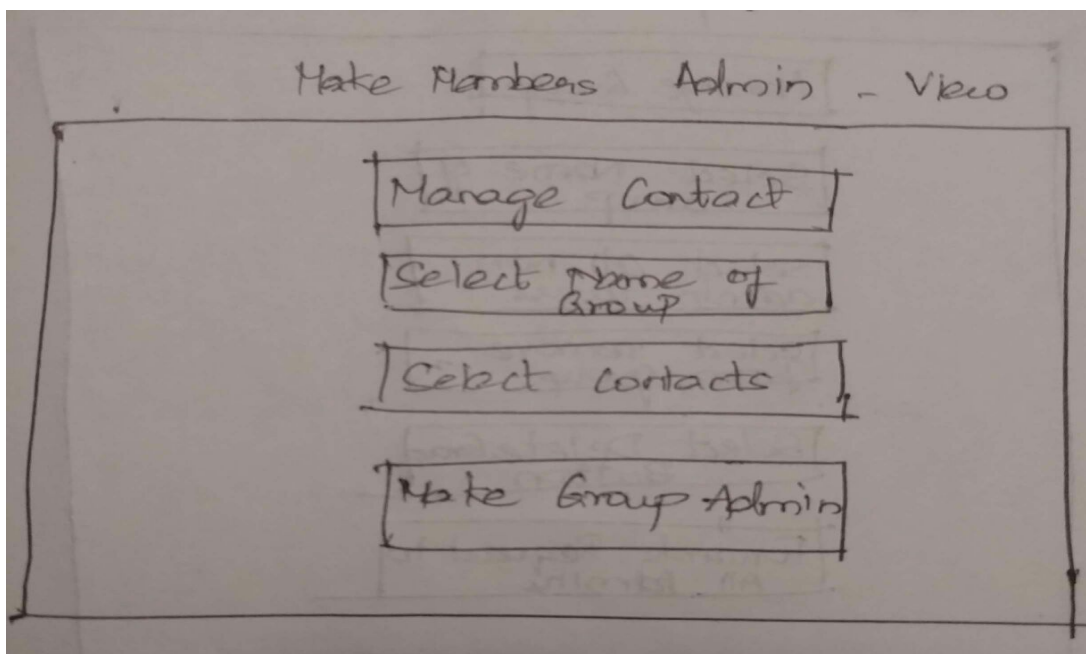
Add user to Group View



Remove User from Group View



Make Members Admin - View



Delete Group - Single Admin View

Manage Group

Select Name of Group

Select all non admin users

Select Remove from Group

Select Delete Group

Delete Group - Multiple Admin View

Manage Group

Select Name of Group

Select all non admin users

Select remove from group

Select Delete Group Button

Forwards Request to All Admins

Delete Group

Exit Group View

A hand-drawn diagram of a user interface for exiting a group. It consists of a large rectangular frame containing three smaller rectangular boxes stacked vertically. The top box is labeled 'Manage group', the middle box is labeled 'Enter Name of Group', and the bottom box is labeled 'Select Exit Button'.

- Data Storage

We will be using MySQL Database Management System to store and retrieve messages. The Database will also contain entries corresponding to each user such as username, password, emailID, contactlist and grouplist.