



IT314 : Software Engineering

(Group -12)

Black Box Testing



Sign Up Screen

Equivalence Class Partitioning

1. Name

- Non-empty string
- Empty string

2. Email

- Well-formed email addresses
- Missing "@"
- Domain not Specified

3. Password

- Password with at least 8 characters.
- Password with less than 8 characters.

4. Confirm Password

- Password with less than 8 characters.
- Password with at least 8 characters.

Name	Email	Password	Confirm Password	Expected Output	Actual Output	Sign Up Button	Reason
User	user@example.com	User@123	User@123	Valid	Valid	Enabled	All fields are Valid
	user@example.com	User@123	User@123	Invalid	Invalid	Disabled	Name is empty
User	userexample.com	User@123	User@123	Invalid	Invalid	Disabled	Missing '@'
User	user@example.	User@123	User@123	Invalid	Invalid	Disabled	Domain not Specified
User	user@example.com	User@12	User@123	Invalid	Invalid	Disabled	Password is less than 8 characters and Password and Confirm Password are not same
User	user@example.com	User@12	User@12	Invalid	Invalid	Disabled	Password is less than 8 characters

Boundary Value Analysis

1. Name

- Non-empty string
- Empty string

2. Email

- Empty
- Non-empty

3. Password

- Password is Valid(eg. User@123).
- Password is Invalid.

4. Confirm Password

- Confirm Password is Valid.
- Confirm Password is Invalid.

Name	Email	Password	Confirm Password	Expected Output	Actual Output	Sign Up Button	Reason
User	user@example.com	User@123	User@123	Valid	Valid	Enabled	All fields are Valid
	user@example.com	User@123	User@123	Invalid	Invalid	Disabled	Name is empty
User		User@123	User@123	Invalid	Invalid	Disabled	Invalid Email address
User	user@example.com	User@123		Invalid	Invalid	Disabled	Confirm Password is invalid
User	user@example.com		User@123	Invalid	Invalid	Disabled	Password is invalid
				Invalid	Invalid	Disabled	All Fields are empty

Login Screen

Equivalence Class Partitioning

1. Email

- Email Address is Registered.(eg. user@example.com)
- Email Address is not Registered.

2. Password

- Password is Valid.(eg. User@123)
- Password is not Valid.

Email	Password	Expected Output	Actual Output	Reason
user@example.com	User@123	Valid	Valid	Valid Email address and Valid Password
user@example.com	User1234	Invalid	Invalid	Invalid Password
userexample.com	User@123	Invalid	Invalid	Invalid Email address
userexample.com	User1234	Invalid	Invalid	Invalid Email address and Invalid Password

Boundary Value Analysis

1. Email

- Email Address is Empty.
- Email Address is not Empty.

2. Password

- Password is Valid.(eg. User@123)
- Password is not Valid.

Email	Password	Expected Output	Actual Output	Reason
user@example.com	User@123	Valid	Valid	Valid Email address and Valid Password
user@example.com	User1234	Invalid	Invalid	Invalid Password



	User@123	Invalid	Invalid	Invalid Email address
		Invalid	Invalid	Invalid Email address and Invalid Password

Forget Password Screen

Equivalence Class Partitioning Constraints

1. Email Input (`email`)

- Well-formed email addresses
- Emails with uncommon but valid domains
- Emails with valid but uncommon formats
- Missing "@"
- Domain not Specified

2. Reset Password Button Interaction

- Button enabled when email input is valid.
- Clicking the button triggers `resetPassword` successfully and shows an alert.
- Button disabled when email input is invalid.

Email Input	Reset Password Button	Expected Output	Actual Output	Reason
user@example.com	Enabled	Valid	Valid	Valid Email address
user@sub.example.co.uk	Enabled	Valid	Valid	Valid Email address
userexample.com	Disabled	Invalid	Invalid	Missing '@'
user@example.	Disabled	Invalid	Invalid	Domain not Specified

Boundary Value Analysis Constraints

1. Email Input (`email`)

- Boundary Values:
 - Minimum Length:
 - Empty email: ""
 - Single character: "a"
 - Just Above Minimum:
 - "a@b" (invalid domain).
 - "a@b.c" (valid).

2. Button Interaction

- Boundary Values:
 - Button is disabled when email input length is 0.
 - Button remains enabled for valid emails (e.g., "user@example.com").

Email Input	Reset Password Button	Expected Output	Actual Output	Reason
	Disabled	Invalid	Invalid	Empty Email
a	Disabled	Invalid	Invalid	Invalid Email
a@b.c	Enabled	Invalid	Invalid	Valid but uncommon format
user@example.com	Enabled	Valid	Valid	Valid email



Chat List Screen

Equivalence Class Partitioning

1. Search Bar (`searchQuery`):

- Strings containing text that matches part of a message:
- Empty string (no filtering):

Search Bar	Expected Output	Actual Output	Reason
Rutvik	Valid	Valid	The user is founded given it has started conversation with that user.
	Invalid	Invalid	Empty String

Boundary Value Analysis

1. Search Bar (`searchQuery`):

- Minimum Input: 0 characters (empty query).

Search Bar	Expected Output	Actual Output	Reason
	Invalid	Invalid	User not found
Rutvik	Valid	Valid	User found given started conversation with that user

All Users List Screen

Equivalence Class Partitioning

1. Search Bar (`searchQuery`):

- Strings containing text that matches part of a registered user name
- Strings containing text that does not matches part of a registered user name
- Empty string (no filtering):

Search Bar	Expected Output	Actual Output	Reason
Rutvik	Valid	Valid	The user is founded given it has registered.
NotRegiseterdUser	Invalid	Invalid	The user is not founded as it has not registered.
	Invalid	Invalid	User not found

Boundary Value Analysis

1. Search Bar (`searchQuery`):

- Minimum Input: 0 characters (empty query).

Search Bar	Expected Output	Actual Output	Reason
	Invalid	Invalid	User not found
Rutvik	Valid	Valid	The user is founded given it has registered.

Chat Screen

Equivalence Class Partitioning

1. Search Bar (`searchQuery`):

- Strings containing text that matches part of a message:
- Empty string (no filtering):

Search Bar	Expected Output	Actual Output	Reason
Hello	Valid	Valid	The message Hello is Highlighted as a result.
	Invalid	Invalid	Empty String

2. Message Input (`text`):

- Non-empty strings:
- Strings with special characters.
- Empty or whitespace-only strings:

Message Input	Expected Output	Actual Output	Reason
Hello	Valid	Valid	All non-empty strings are valid
I'm fine !!!	Valid	Valid	Strings containing special characters are also valid
	Invalid	Invalid	Message not sent : Empty String

3. AI Suggestions (`response`):

- Non-empty, coherent AI-generated text:
- Empty or incomplete responses from the AI:

- Incorrect AI response format (if response should match a specific structure):

Message Input	AI Suggestions	Expected Output	Actual Output	Reason
Hi	Hello there!	Valid	Valid	Non-empty String : AI suggestion generated
		Invalid	Invalid	Empty String : No AI suggestion generated
Rt36#%&	Random Characters. No meaningful interpretation possible.	Invalid	Invalid	Random Characters. No meaningful interpretation possible.

Boundary Value Analysis

1. Search Bar (`searchQuery`):

- Minimum Input: 0 characters (empty query).

Search Bar	Expected Output	Actual Output	Reason
	Invalid	Invalid	search bar is empty : No message is highlighted
BoundaryValueAnalysis	Valid	Valid	searched word is founded

2. Message Input (`text`):

- Minimum Input:
 - 0 characters (empty message).
 - 1 character (smallest valid message).

Message input	Expected Output	Actual Output	Reason
	Invalid	Invalid	Message content is empty
H	Valid	Valid	Message content is valid
Hello, How are you?	Valid	Valid	Message content is valid

3. AI Suggestions (`response`):

- Minimum Input:
 - 0 characters (no suggestion generated).
 - 1 character (minimum valid suggestion).

Message Input	AI Suggestions	Expected Output	Actual Output	Reason
		Invalid	Invalid	Message content is empty
H	Hmm...	Valid	Valid	Message content is non-empty

Group List Screen

Equivalence Class Partitioning

1. Search Bar (`searchQuery`):

- Strings containing text that matches part of a message:
- Empty string (no filtering):

Search Bar	Expected Output	Actual Output	Reason
Rutvik	Valid	Valid	The user is already registered.
	Invalid	Invalid	Empty String

Boundary Value Analysis

1. Search Bar (`searchQuery`):

- Minimum Input: 0 characters (empty query).

Search Bar	Expected Output	Actual Output	Reason
	Invalid	Invalid	Empty String
Rutvik	Valid	Valid	User Found

Group Chat Screen

Equivalence Class Partitioning

1. Search Bar (`searchQuery`):

- Strings containing text that matches part of a message:
- Empty string (no filtering):

Search Bar	Expected Output	Actual Output	Reason
Hello	Valid	Valid	The message Hello is Highlighted as a result.
	Invalid	Invalid	Empty String

2. Message Input (`text`):

- Non-empty strings:
- Strings with special characters.
- Empty or whitespace-only strings:

Message Input	Expected Output	Actual Output	Reason
Hello	Valid	Valid	All non-empty strings are valid
I'm fine !!!	Valid	Valid	Strings containing special characters are also valid

	Invalid	Invalid	Message not sent : Empty String
--	---------	---------	------------------------------------

3. AI Suggestions (`response`):

- Non-empty, coherent AI-generated text:
- Empty or incomplete responses from the AI:
- Incorrect AI response format (if response should match a specific structure):

Message Input	AI Suggestions	Expected Output	Actual Output	Reason
Hi	Hello there!	Valid	Valid	Non-empty String : AI suggestion generated
		Invalid	Invalid	Empty String : No AI suggestion generated
Rt36#%&	Random Characters. No meaningful interpretation possible.	Invalid	Invalid	Random Characters. No meaningful interpretation possible.

Boundary Value Analysis

1. Search Bar (`searchQuery`):

- Minimum Input: 0 characters (empty query).

Search Bar	Expected Output	Actual Output	Reason
	Invalid	Invalid	search bar is empty : No message is highlighted
BoundaryValueAnalysis	Valid	Valid	searched word is founded

2. Message Input (`text`):

- Minimum Input:
 - 0 characters (empty message).
 - 1 character (smallest valid message).



Message input	Expected Output	Actual Output	Reason
	Invalid	Invalid	Message content is empty
H	Valid	Valid	Message content is valid
Hello, How are you?	Valid	Valid	Message content is valid

3. AI Suggestions (response):

- Minimum Input:
 - 0 characters (no suggestion generated).
 - 1 character (minimum valid suggestion).

Message Input	AI Suggestions	Expected Output	Actual Output	Reason
		Invalid	Invalid	Message content is empty
H	Hmm...	Valid	Valid	Message content is non-empty

Add member Screen

Equivalence Class Partitioning

1. Input Fields (Search Query):

- Non-empty alphanumeric strings
- Empty strings

Search Bar	Expected Output	Actual Output	Reason
Rutvik	Valid	Valid	The user has registered.

	Valid	Valid	Empty String
--	-------	-------	--------------

2. Member Role Selection

- Assign admin (`isAdmin = true`).
- Assign member (`isAdmin = false`).

Member Role Selection	Expected Output	Actual Output	Reason
Admin : Yes	Valid	Valid	The member becomes Admin of the group
Admin : No	Valid	Valid	A normal member

Boundary Value Analysis

1. Search Query

- Minimum boundary: 0 characters

Search Query	Expected Output	Actual Output	Reason
	Invalid	Invalid	Input field is empty
Vedant	Valid	Valid	Input field is non empty

Create Group Screen

Equivalence Class Partitioning

1. Input Fields (Search Query):

- Non-empty alphanumeric strings

- Empty strings

Group Name	Description	Expected Output	Actual Output	Reason
Testing	This group is for testing	Valid	Valid	All fields are non-empty.
Testing		Invalid	Invalid	Empty description
	This group is for testing	Invalid	Invalid	Empty group name
		Invalid	Invalid	Empty group name and description

2. Select members

- Add users in group
- Not add members in group

Add Member	Add/Not	Expected Output	Actual Output	Reason
Rutvik	Yes	Valid	Valid	The member becomes part of the group
Rutvik	No	Valid	Valid	The member becomes part of the group

3. Member Role Selection

- Assign admin (`isAdmin = true`).
- Assign member (`isAdmin = false`).

Member Role Selection	Expected Output	Actual Output	Reason
Admin : Yes	Valid	Valid	The member becomes Admin of the group
Admin : No	Valid	Valid	A normal member

Boundary Value Analysis

1. Search Query Input Length

- Minimum boundary: 0 characters

Group Name	Description	Expected Output	Actual Output	Reason
		Invalid	Invalid	All fields are empty
Testing	BoundaryValueAnalysis	Valid	Valid	Fields are non-empty

Acceptance Testing

1. SignUp

Email : user@example.com

Name : User

Password : User@123

Confirm Password : User@123

Output : Valid

← Signup

Sign up with email

Get chatting with friends and family today by signing up for our chat app!

User

user@example.com

User@123



User@123



Sign up

Email : user@example.com

Name :

Password : User@123

Confirm Password : User@123

Output : Invalid

← Signup

Sign up with email

Get chatting with friends and family today by signing up for our chat app!

 Enter your name

 user@example.com

 User@123



 User@12



Password must be at least 8 characters

Sign up

Email : user@example.com

Name : User

Password : User@123

Confirm Password : User@12

Output : Invalid

← Signup

Sign up with email

Get chatting with friends and family today by signing up for our chat app!

 User

 user@example.com

 User@123



 User@12|



Password must be at least 8 characters

Sign up

2.Login

Email : user@example

Password: User@123

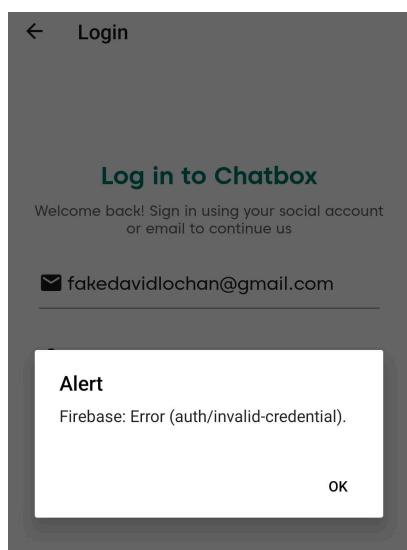
Output : Valid



Email : fakedavidlochan@gmail.com (registered email)

Password: wrong password

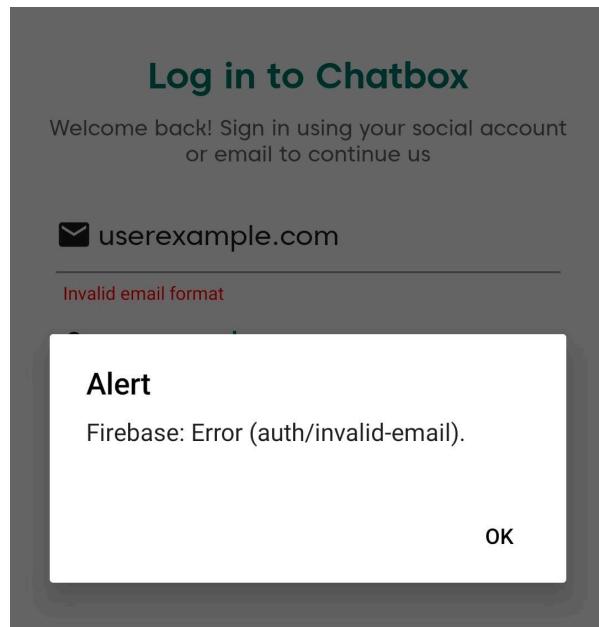
Output : Invalid



Email : userexample.com (missing “@”)

Password: User@123

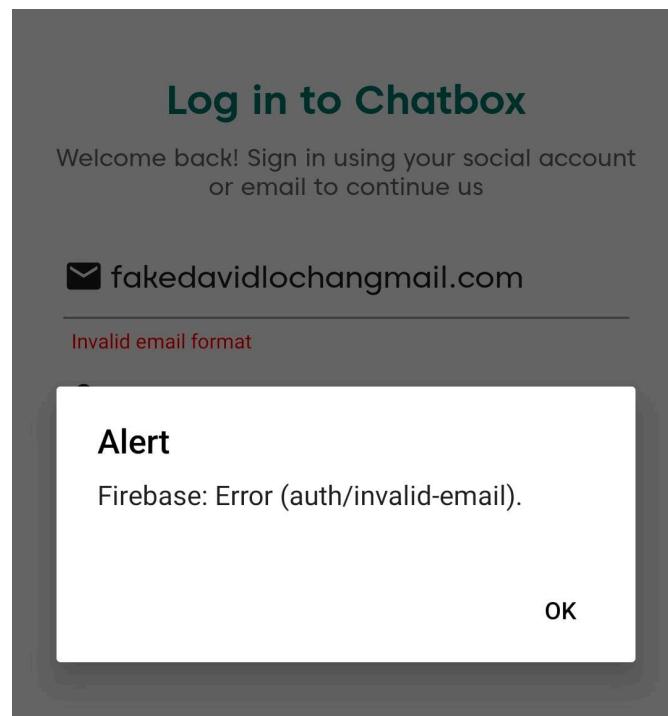
Output : Invalid



Email : fakedavidlochangmail.com (wrong email)

Password: wrong password

Output : Invalid



Email : fakedavidlochan@gmail.com

Password: Correct Password

Output : Valid

Log in to Chatbox

Welcome back! Sign in using your social account
or email to continue us

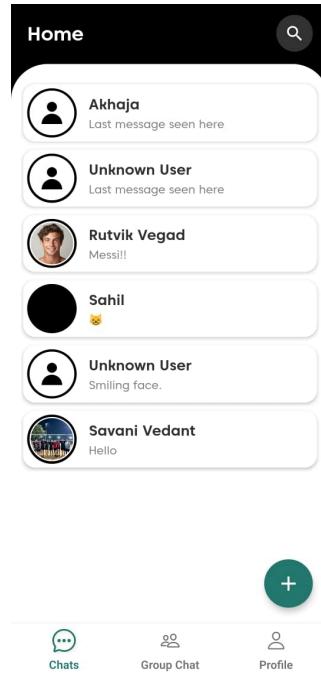
 fakedavidlochan@gmail.com



Log in

[Forgot password?](#)

After Login successfully this screen is shown



Email :

Password: Correct Password

Output : Invalid

Log in to Chatbox

Welcome back! Sign in using your social account
or email to continue us

 Enter your email

 User@123



Log in

[Forgot password?](#)

Email :

Password: wrong password

Output : Invalid

Log in to Chatbox

Welcome back! Sign in using your social account
or email to continue us

 Enter your email

 User@123



Log in

[Forgot password?](#)

Email :
Password:
Output : Invalid

Log in to Chatbox

Welcome back! Sign in using your social account
or email to continue us

 Enter your email

 Enter your password 

Log in

[Forgot password?](#)

3. Forget Password

- Recovery email address: user@example.com
 - Status: Valid

 [Reset Password](#)



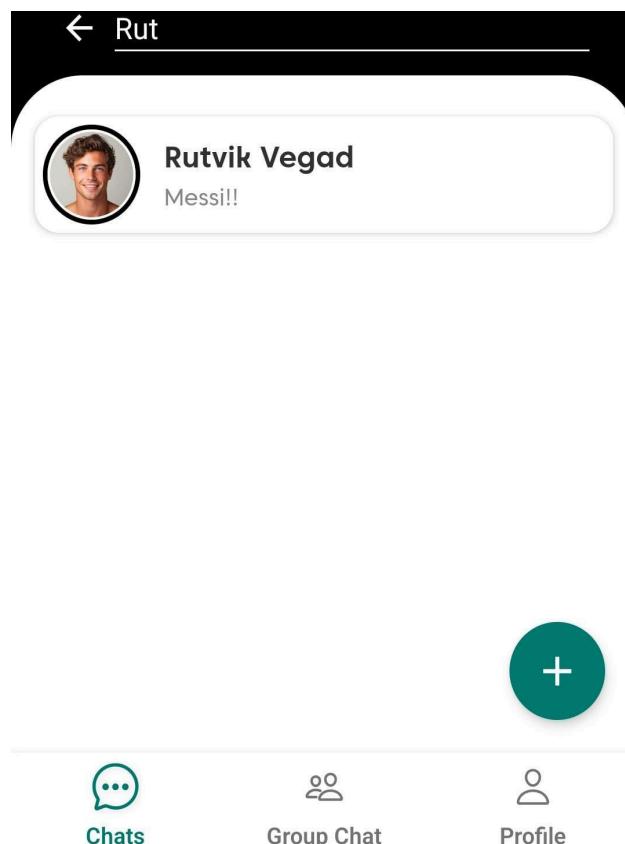
Enter your email address to reset your password.

 user@example.com

[Reset Password](#)

4. Chat List Screen

Search Value: Rut



5. All user List Screen

Search Value: Parja

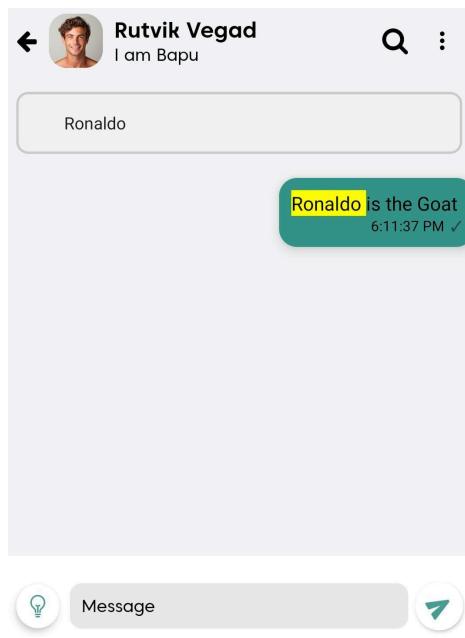
Status: all users containing Parja are displayed



6. Chat Screen

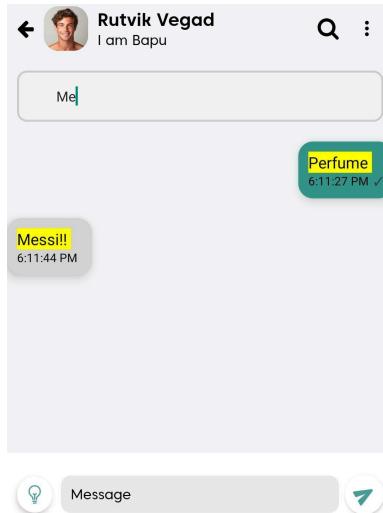
Search Value: Ronaldo

Status: all words containing Ronaldo is highlighted



Search Value: me

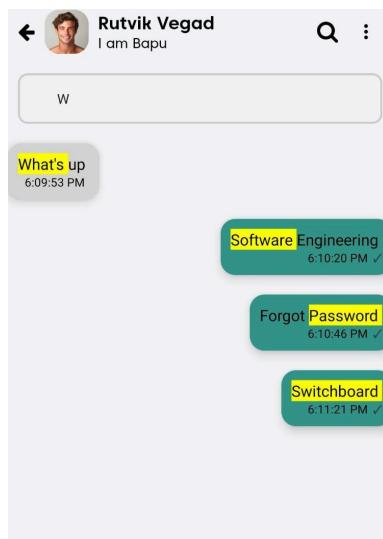
Status: all words containing me are highlighted



Message

Search Value: w

Status : all words containing are highlighted

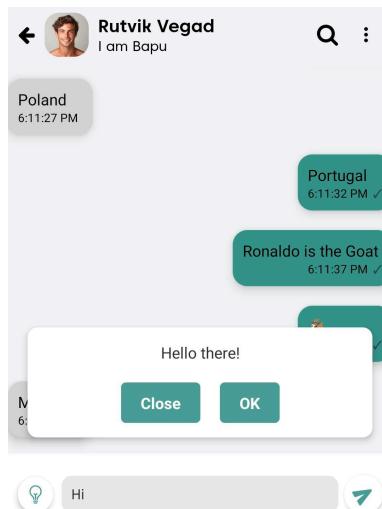


AI Suggestions (response):

Message Input : Hi

AI Suggestion : Hello there!

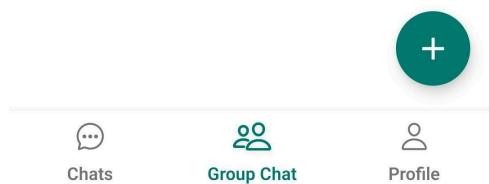
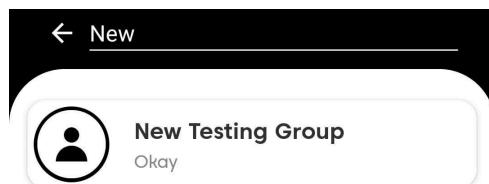
Output : Valid



7. Group List

Search Value: New

Status: all groups containing the word new are displayed

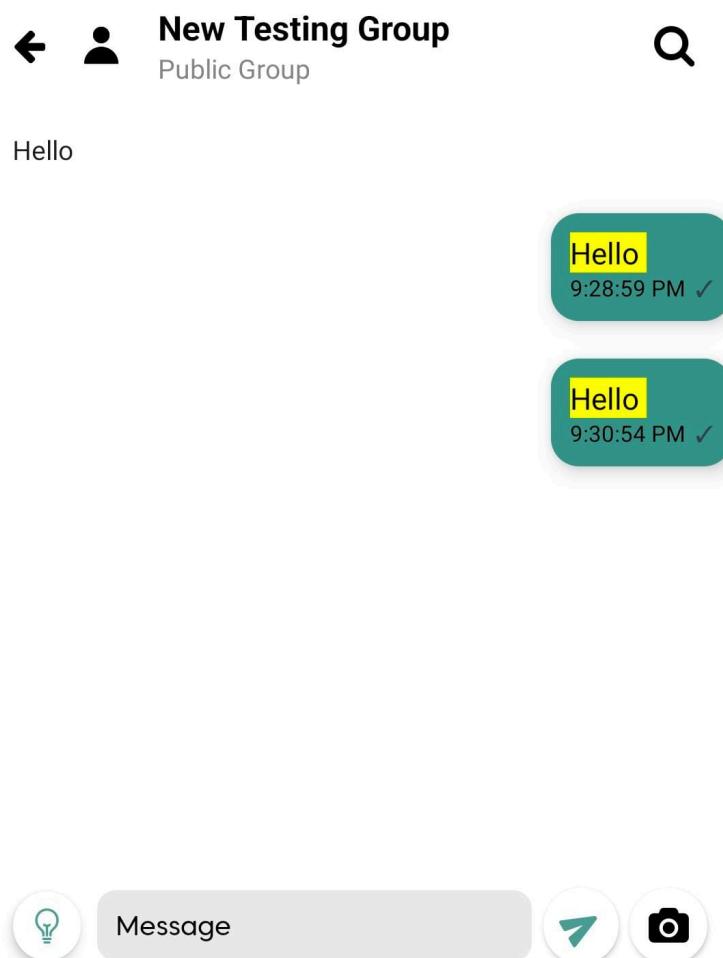


8. Group Chat Screen

Search Bar (searchQuery):

Message Input : Hello

Output : Valid



Message Input (text):

Input: Hello

Output: Valid



9. Add Member Screen

Input Fields (Search Query):

Input : Dhruvin

Output : Valid

The screenshot shows the 'Add Member' screen with the title 'Add Member to New Testing Group'. A search input field contains the text 'Dhruvin'. Below it, a section titled 'Selected Members:' shows the message 'No members selected'. Two search results are listed: 'Dhruvin Akhaja' and 'Akhaja dhruvin'. A blue 'Add Members' button is at the bottom.

Input : Preet

Output : Invalid

The screenshot shows the 'Add Member' screen with the title 'Add Member to New Testing Group'. A search input field contains the text 'Preet'. Below it, a section titled 'Selected Members:' shows the message 'No members selected'. A message 'No users available to add' is displayed. A blue 'Add Members' button is at the bottom.

Member Role Selection

Admin : Yes

Output : Valid

AddMember

Add Member to New Testing Group

Search members by name

Selected Members:
No members selected

Dhruvin Akhaja

Make Admin?
Would you like to make Dhruvin Akhaja an Admin?

YES NO

Dhruv

Rutvik

Add Members

AddMember

Add Member to New Testing Group

Search members by name

Selected Members:
Dhruvin Akhaja (Admin)

Dhruvin Akhaja

Akhaja dhruvin

Janvi Ramani

Dhruv

Rutvik

Add Members

Admin : No

Output : valid

AddMember

Add Member to New Testing Group

Search members by name

Selected Members:
Dhruvin Akhaja (Admin)

Dhruvin Akhaja

Make Admin?
Would you like to make Janvi Ramani an Admin?

YES NO

Dhruv

Rutvik

Add Members

AddMember

Add Member to New Testing Group

Search members by name

Selected Members:
Dhruvin Akhaja (Admin)
Janvi Ramani (Member)

Dhruvin Akhaja

Akhaja dhruvin

Janvi Ramani

Dhruv

Rutvik

Add Members

10. Create Group Screen

Input Fields (Search Query):

Group Name: Testing

Description : This group is for testing

Output : Valid

Create a New Group

Set up a group for your friends, family, or team!

 Testing

 This group is for testing

Select Members:

Dhruvin Akhaja

Create Group

Group Name: Testing

Description :

Output : Invalid

Create a New Group

Set up a group for your friends, family, or team!

 Testing

 Enter group description

Select Members:

Dhruvin Akhaja

Create Group

Group Name:

Description : This group is for testing

Output : Invalid



Create a New Group

Set up a group for your friends, family, or team!

Enter group name

This group is for testing |

Select Members:

Search members by name

Dhruvin Akhaja

Create Group

Group Name:

Description :

Output : Invalid



Create a New Group

Set up a group for your friends, family, or team!

Enter group name

Enter group description

Select Members:

Search members by name

Dhruvin Akhaja

Create Group

Select members

Add Member : Rutvik

Output : Valid



Create a New Group

Set up a group for your friends, family, or team!

Testing

This group is for testing |

Select Members:

Search members by name

Janvi Ramanl

Dhruv

Rutvik

Parjanya

Parjanya Rajput

Savani Vedant

Rutvik Vegad

Create Group

Member Role Selection

Admin : Yes

Output : Valid (admin)

Create a New Group

Set up a group for your friends, family, or team!

Testing

This group is for testing

Select Members:

Make Admin?
 Would you like to make Rutvik an Admin?

<input type="checkbox"/> Dhruv	<input type="checkbox"/> Rutvik
<input type="checkbox"/> Parjanya	<input type="checkbox"/> Parjanya Rajput
<input type="checkbox"/> Parjanya Rajput	<input type="checkbox"/> Savani Vedant
<input type="checkbox"/> Savani Vedant	<input type="checkbox"/> Rutvik Vegad

Create Group

Create a New Group

Set up a group for your friends, family, or team!

Testing

This group is for testing

Select Members:

Search members by name

<input checked="" type="checkbox"/> Janvi Kamanl
<input type="checkbox"/> Dhruv
<input checked="" type="checkbox"/> Rutvik
<input type="checkbox"/> Parjanya
<input type="checkbox"/> Parjanya Rajput
<input type="checkbox"/> Savani Vedant
<input type="checkbox"/> Rutvik Vegad

Create Group

Admin : No

Output : Valid (a normal member)

Create a New Group

Set up a group for your friends, family, or team!

Testing

This group is for testing

Select Members:

Make Admin?

Would you like to make Dhruvin Akhaja an Admin?

YES NO

Janvi Ramani
 Dhruv
 Rutvik
 Parjanya
 Parjanya Rajput

Create Group

Create a New Group

Set up a group for your friends, family, or team!

Testing

This group is for testing

Select Members:

Search members by name

Dhruvin Akhaja
 Akhaja dhruvin
 Janvi Ramani
 Dhruv
 Rutvik
 Parjanya
 Parjanya Rajput

Create Group

GroupDetails

Testing

Description: This group is for testing

Members:

- Akhaja dhruvin
202201172@daiict.ac.in
- Rutvik
202201143@daiict.ac.in Group Admin
- David Lochan
fakedavidlochan@gmail.com Group Admin

Add Member