



**Distributed Applications
(AI5109)
Videos, Images, GroupChat
(Module 5)**

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Introduction

This chat app is a messaging application developed for Android devices using Android Studio and Firebase as the backend service. It allows users to send text messages, images, and videos, as well as engage in group conversations. The app provides a seamless and user-friendly interface for real-time communication.

Features:

- Text Messaging: Users can send and receive text messages in real-time.
- Image Sharing: Users can share images with their contacts or in group chats.
- Video Sharing: Users can share videos with their contacts or in group chats.
- Message Editing : Users can edit there message.
- Deleting Messages: Users can delete messages they have sent.
- Group Chat: Users can create or join group conversations with multiple participants.

Technologies Used

- Android Studio: Integrated Development Environment (IDE) for Android app development.
- Firebase: Backend-as-a-Service (BaaS) platform provided by Google for real-time database, authentication, and storage.

Functionality

Text Messaging:

- Users can type messages in the chat input field.
- Messages are sent in real-time using Firebase Realtime Database.
- Received messages are displayed in the chat interface.

Image Sharing

- Users can select images from their device's gallery or capture new ones using the camera.
- Selected images are uploaded to Firebase Storage.
- Image URLs are stored in the Firebase Realtime Database and shared with the recipient.

Video Sharing

- Users can select videos from their device's gallery.
- Selected videos are uploaded to Firebase Storage.
- Video URLs are stored in the Firebase Realtime Database and shared with the recipient.
- Videos can be played directly within the app.

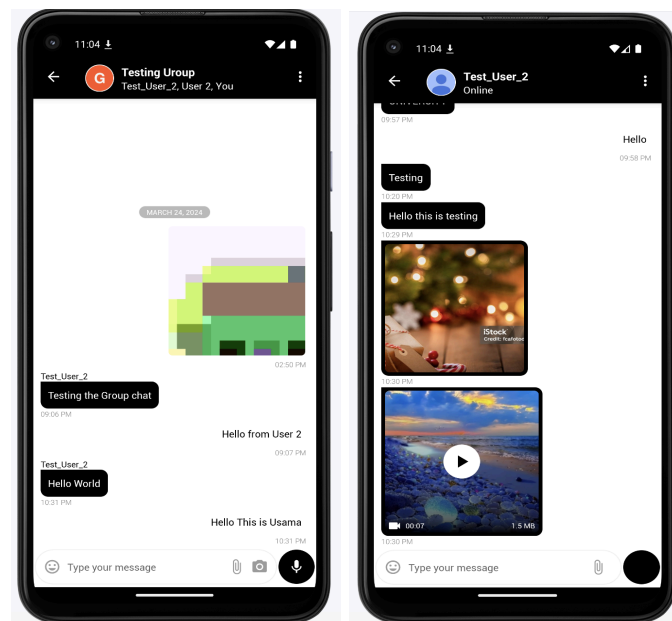
Deleting Messages

- Users can delete messages they have sent by tapping and holding on the message.
- Deleted messages are removed from the Firebase Realtime Database and from the chat interface of all participants.

Group Chat

- Users can create groups and add multiple participants to the conversation.
- Group messages are stored in Firebase Realtime Database with a unique group identifier.
- Users can send messages, images, and videos to the group.
- Group members receive real-time updates of new message

Snapshots of Application



Note : I have attached the video on moodle showing demo of all these features