



**Anekant Education Society's**  
**Tuljaram Chaturchand College of Arts, Science and Commerce Baramati**  
**Department of Bachelor of Business Application (Computer Application)**

A Project Report on  
**“Video Conferencing Application”**

Submitted to  
**Tuljaram Chaturchand College, Baramati**  
TY BBA (CA)  
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**Anekant Education Society's**

**Tuljaram Chaturchand College of Arts, Science and  
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## **CERTIFICATE**

**Seat No.: - 4630**

**Date: / /2022**

**Seat No.: -4624**

This is to certify, that the project entitled “**VIDEO CONFERENCING APPLICATION**” submitted by **Mr. Kokane Vishal Dattatray** and **Mr. Kale Akshay Rajendra** in partial fulfillment of the requirement of the award of degree BBA (CA) to **Tuljaram Chaturchand College of Arts, Science and Commerce Baramati** under Savitribai Phule Pune University has been carried out by them under my guidance satisfactorily during the academic year 2021-2022.

**Project Guide**

**HOD**

**Internal Examiner**

**External Examiner**

## **ACKNOWLEDGMENT**

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Project Date: -     /     /2022

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Mr. Kale Akshay Rajendra

Place: - Baramati

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# Introduction

## **1. INTRODUCTION :-**

Video conferencing is an online technology that allows users in different locations to hold face-to-face meetings without having to move to a single location together. This technology is particularly convenient for business users in different cities or even different countries because it saves time, expenses, and hassles associated with business travel. Uses for video conferencing include holding routine meetings, negotiating business deals, and interviewing job candidates.

Video conferencing software enables online communication for audio meetings, video meetings, and seminars, with built-in features such as chat, screen sharing, and recording.

These applications are implemented to enable long-distance or international communication, enhance collaboration, and reduce travel costs.

Employees at every level within an organization can use video conferencing tools to host or attend virtual meetings with fellow employees, company partners, or customers, no matter where the attendees are physically located.

## **1.1 Existing System:**

The Existing system lacks in various points.

### **DISADVANTAGES:**

The following drawbacks of existing system emphasize the need for computerization:

- Lack of security of data.
- Costly and Slow.
- Complex.
- Resource Hungry.
- Unstable connection.

## **1.2 Proposed System:**

This application is used to connect people online through video calling. This system is very user friendly and can be operated by any one.

In this system we implement the following points:

- Minimize travel costs.
- Better communication and relationships
- Increase productivity.
- Telecommuting made easy.
- Security of data.
- User friendliness and interactive
- Better service.
- Greater efficiency



## **1.3 Fact Finding Techniques:**

Information gathering in large and Complex Organization is not an easy task. It has to be gathering in an organization way so that no system details left out, right problem are identified, respective work is avoided and wrong details are not collected. The specified methods used for collecting data about requirement are called as fact finding techniques. They are:-

### **1 Interview**

#### **1.1 Structured Interview**

#### **1.2 Unstructured Interview**

### **2 Observation**

#### **2.1 Interview:-**

This technique is used to collect information from individuals or groups. I need this technique frequently in the system analysis. I choose some teachers in college who takes lecture and store student details. Interviews are not always source for collecting the information because of time required for interview. Two types of interview:-

**2.1.1 Structured Interview:** - Structured interview uses standardized questions. In structure interview time may be limited. It requires deep study and preparation.

**2.1.2 Unstructured Interview:** - It allows respondent to answer in their own words. In this interview different type of questions are raised. It may collect extra and unnecessary information. Following are some questions:

2.1.2.1 How do you find the data?

2.1.2.2 How do you keep information about transaction?

2.1.2.3 Where is entry made?

2.1.2.4 What are the major and minor problems in the existing system?

2.1.2.5 Which methods are used to solve problems?

## **2.2 Observation:-**

Observation method is most useful when the analyst need to be actually observe how documents are handle, how process are carried out and whether specified steps are actually followed or not. It provides close view of the working of the real system .System analyst observes people, objects, documents and occurrences of events. It allows analyst to get information, which they cannot obtained from other fact finding techniques.

## **3 Operational feasibility:-**

After implementing the system the training program are arranged for the users. This is carried out by people who are familiar with information system as Ill as the techniques. They are experienced person like managers, system analyst. Functioning of the system is very predictable smooth because of error handling, Graphical User Interface (GUI), Consistent User Interface (CUI).That's why my system is operationally feasible.

## 1.4 Objective

- Teaching:

Video Calling allows easy access to remote expertise. When the number of expertise is small, one lecture can teach various virtual classes at a go thus, traveling to various campuses is significantly reduced.

- Meetings:

Using Video Calling leads to cost savings on travel, accommodation and staff time. Several sites can be linked together. Having a set time and duration for a meeting encourages punctuality and focused discussion.

- Data sharing:

Images from a personal computer (PC), such as spreadsheets, PowerPoint illustrations etc. can be shared to enhance a presentation.

- Interviews:

Cost savings can allow more candidates to be interviewed from remote locations. With data sharing, Video callings can be viewed and discussed online.

- Telemedicine:

In rural areas, specialist medical help may not be available on hand. By linking to a regional center, cottage hospitals and clinics can receive help in diagnosing patients' disorders.

- Legal work:

Video Calling helps reduce intimidation of vulnerable court witnesses. Particularly sensitive cases

## **1.5 System Requirements :**

### **■ Hardware Requirements:**

- Processor: Intel/AMD dual-core or above
- Processor Speed: 2.0GHZ or above
- RAM: 4 GB RAM
- Disk: 10 GB of SSD/HDD
- Operating system: Windows 10

### **■ Software Requirements:**

- Platform: Android studio, Firebase
- Technology Used: Java, XML
- API keys: Firebase Authentication, Firebase Database, Jit.si meet

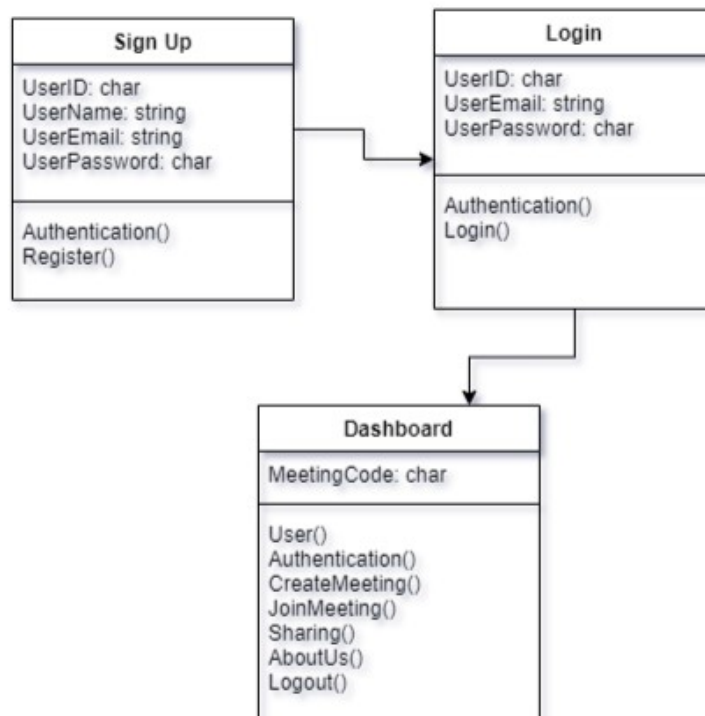
### **■ Android Device Requirement:**

- Internet connection
- Android 5(Lollipop) or above
- RAM: 2GB
- Storage: 100MB

# **Analysis and Design**

## 2. Diagrams

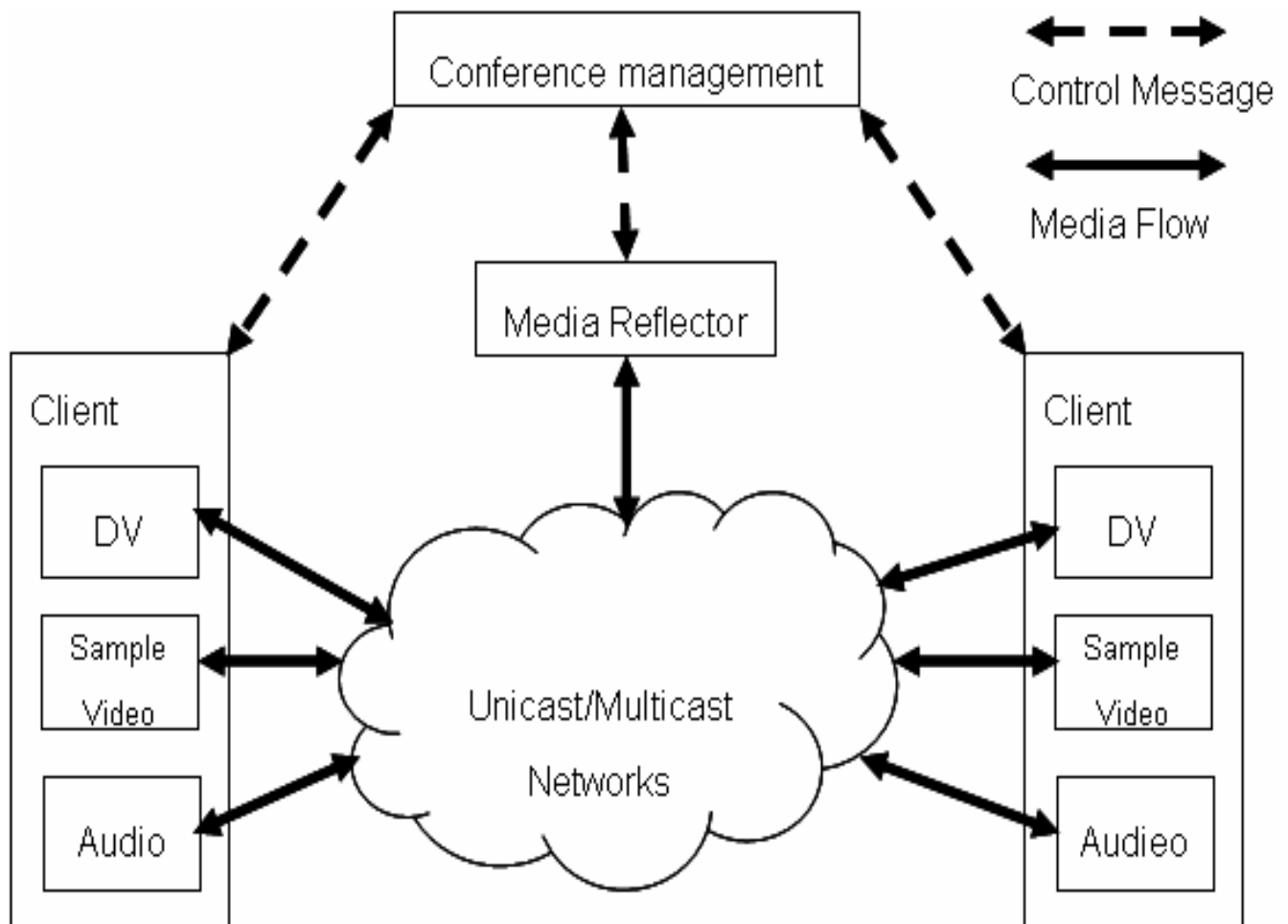
### 2.1 Class Diagrams



## 2.2 Use Case Diagram

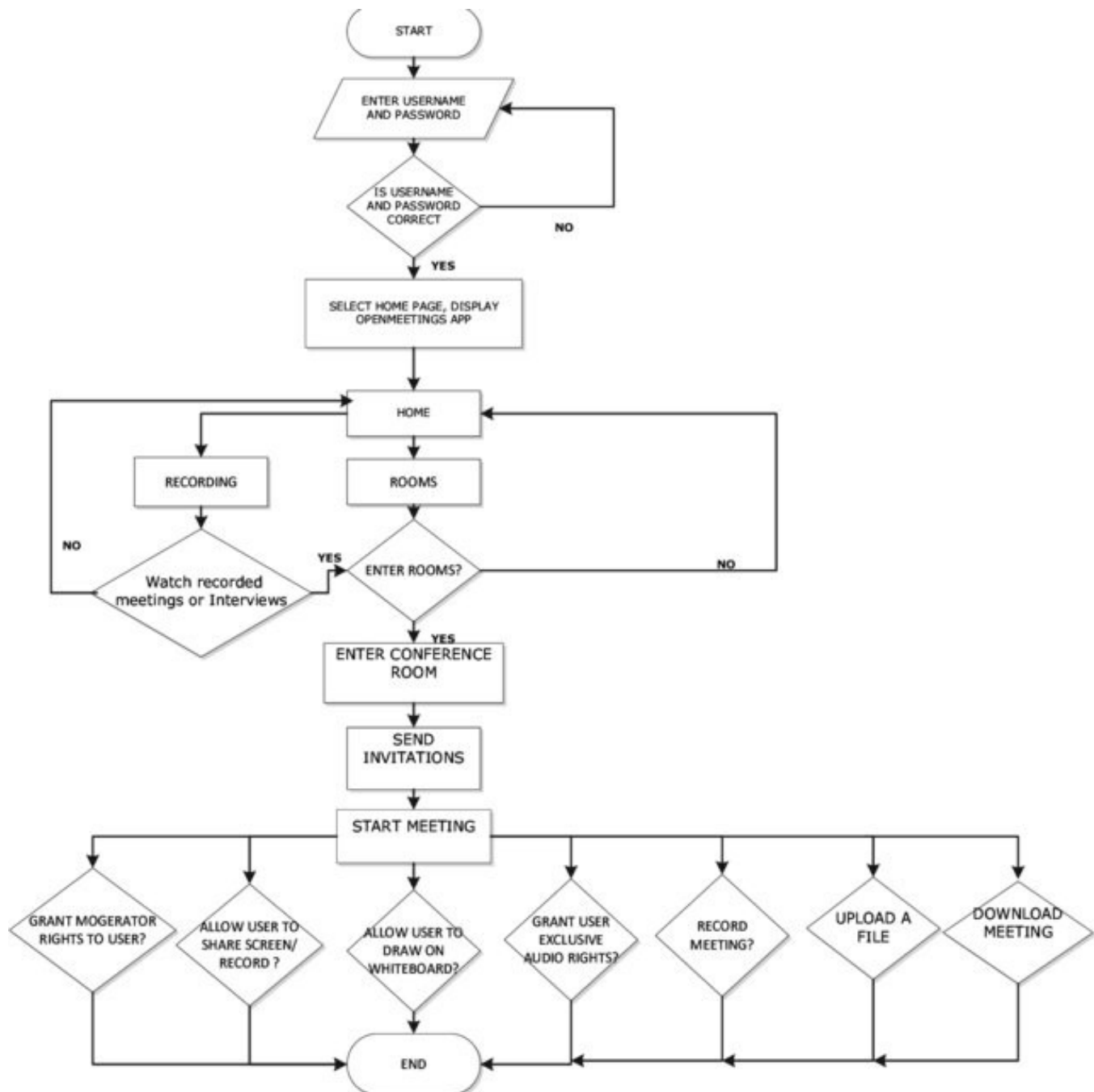


### 2.3 System Architecture Diagram

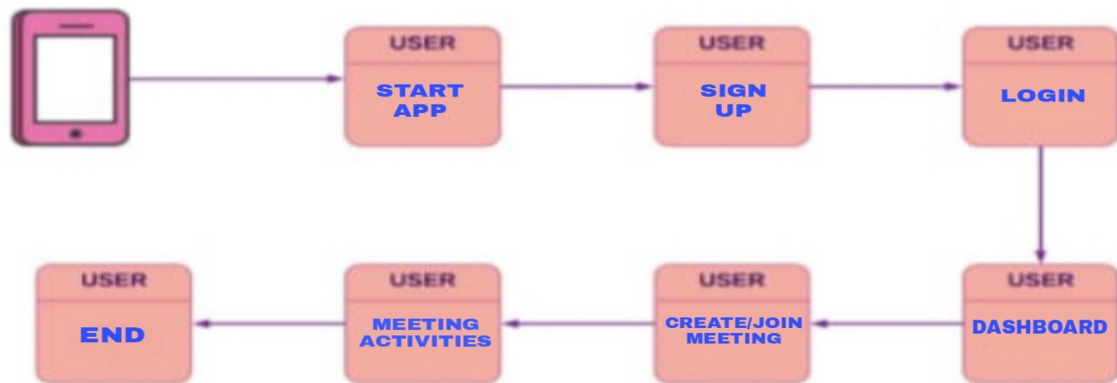




## 2.4 Activity Diagram



## 2.5 Data Flow Diagram



# Table

### 3 Tables

#### 3.1 Tables & Attributes

**Users Table**

| Sr. No | Tittle        | Datatype |
|--------|---------------|----------|
| 1      | User ID       | char     |
| 2      | User Name     | string   |
| 3      | User Email    | string   |
| 4      | User password | char     |

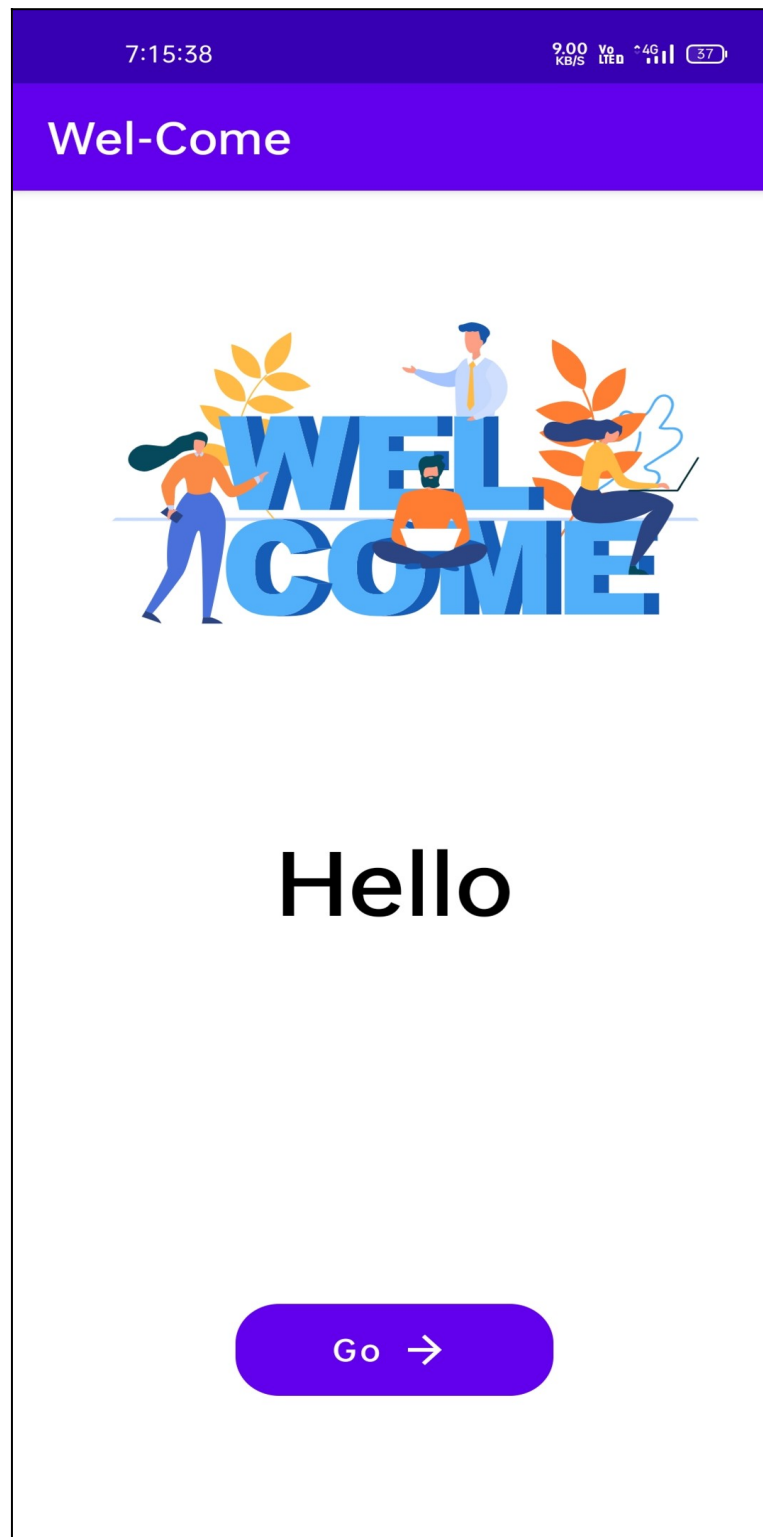
### 3.2 Data Dictionary

| Sr. No | Attribute    | Data Type | Description           | Keys        |
|--------|--------------|-----------|-----------------------|-------------|
| 1      | UserID       | Character | User ID               | Primary Key |
| 2      | UserName     | String    | Name of User          | Null        |
| 3      | UserEmail    | String    | Email Address of User | Null        |
| 4      | UserPassword | Character | Password of User      | Null        |

# **Menu Screens**

## 4. SCREENS

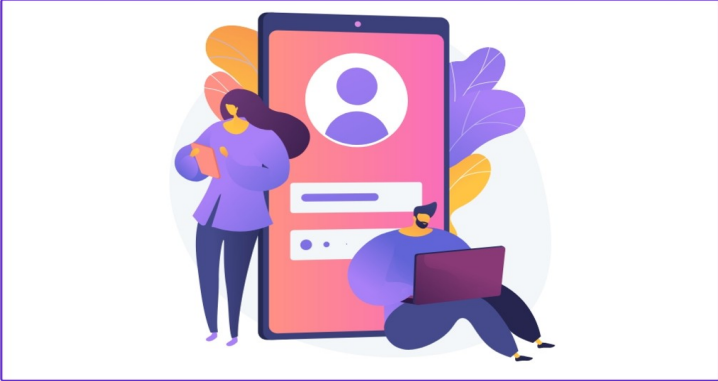
### 4.1 Welcome Screen



## 4.2 Login Screen

7:15:470.00 KB/SVoLTE4G57

Login



Login :

Email

Required\*

Password

👁

Required\*

Forgot Password?

→ LOGIN

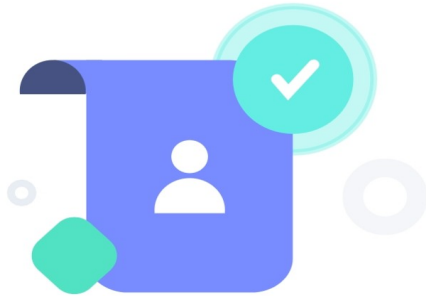
Create an Account




### 4.3 Sign up Screen

7:15:542.00 KB/sVo LTE4G37


Sign-Up





Sign Up :

 Name

Required\*

 Email

Required\*

 Password

Required\*

+ CREATE AN ACCOUNT

Already have Account? Go to Login

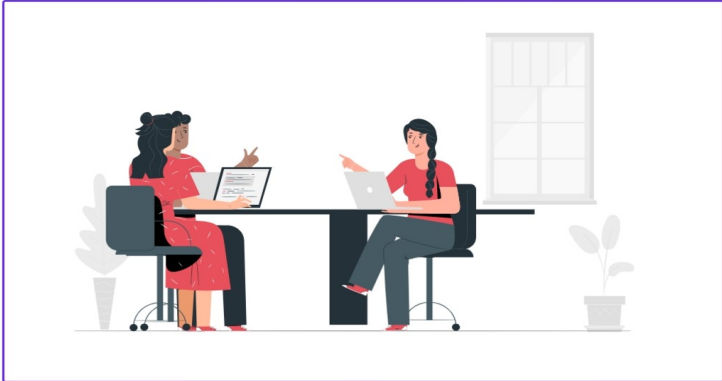
## 4.4 Dashboard Screen

7:16:50

0.11 KB/S Vo LTE 4G+ 57

≡

Dashboard



# Meeting :

Meeting Code

meet-code

×

Required\* 9/10

+ 👤

JOIN/  
CREATE

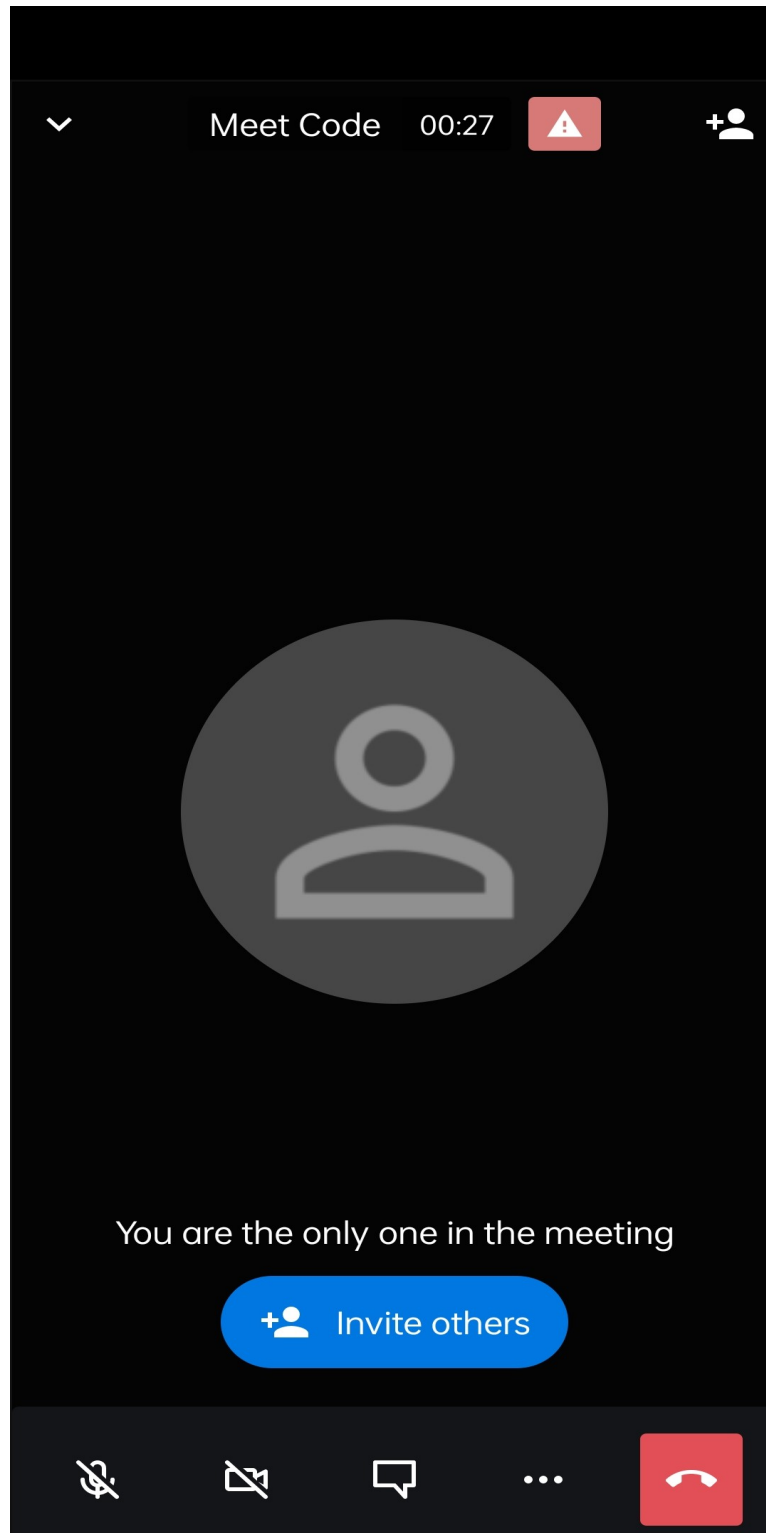
SHARE

🔗

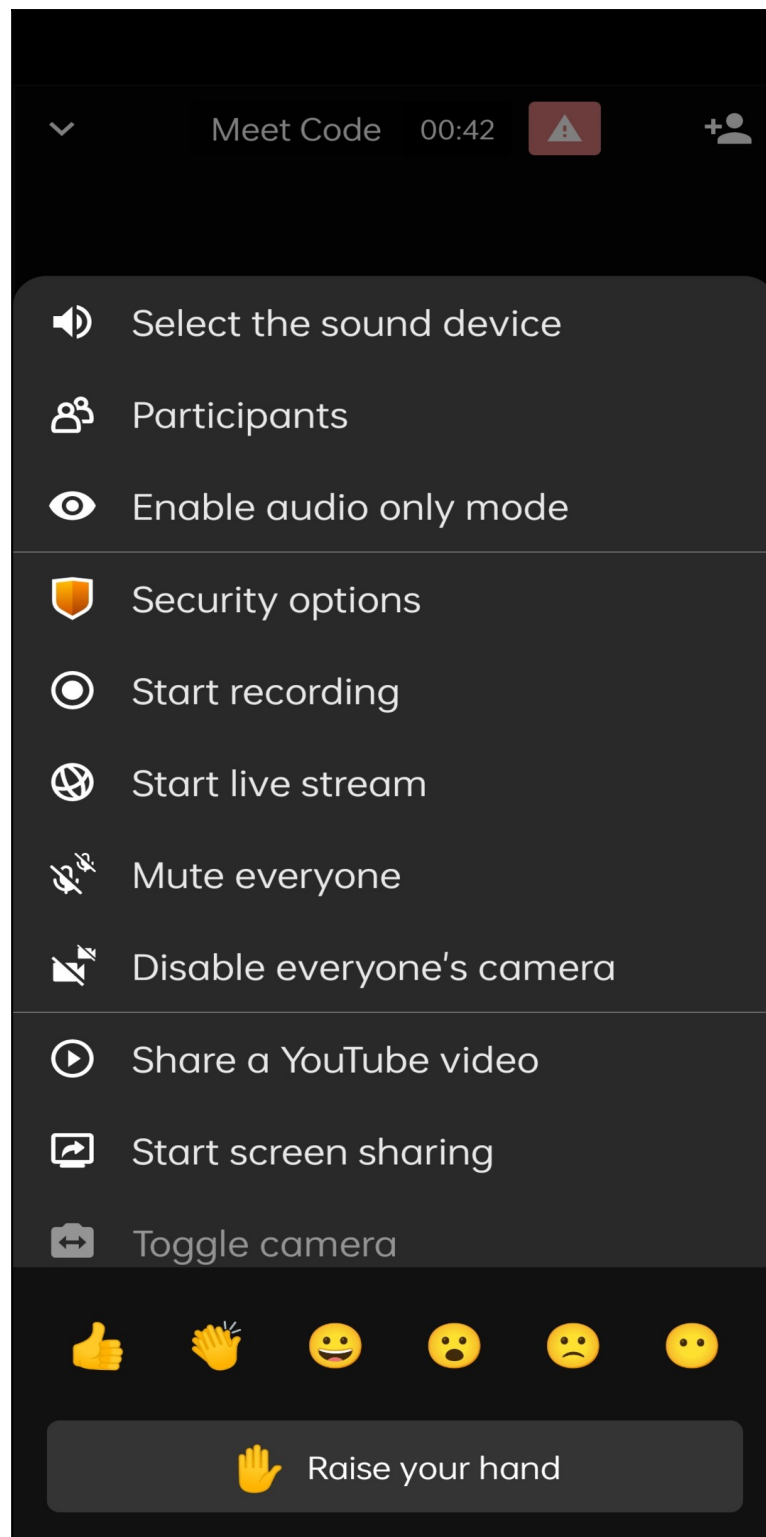
🚪

LOGOUT

## 4.5 Meeting Screen



## 4.5 Meeting options



# Conclusion

## 5. Conclusion

Video conferencing is one of the best ways of communication for large organizations as they provide an instant and reliable method through which the entire organization can connect, communicate, and collaborate. Not only do video conferencing tools make communication efficient, more comfortable, and cheaper for the organization but they also provide a lot of intangible benefits such as increasing the productivity of the employees in the organization in general.

It was quite surprising to find that almost all of the well-known video conferencing solutions (like Google Meet, Zoom, Teams, Webex, Gotomeeting or Skype) do not provide a service with a data privacy agreement conforming to Indian law. There are exceptions, and the review lists several solutions that do conform to legal requirements as well as provide secure and private solutions.

All services that did pass the legal requirements did also pass the security and privacy requirements, at least for the least-demanding use case outlined in the review. Three video conferencing solutions did pass all requirements, and two of these are open source software - including the one with strongest end-to-end encryption.

# **Advantages and Limitations**

## **6. Advantages and Limitations**

### **6.1 Advantages**

- Increases productivity of the employees
- Saves time and resources
- File and screen-sharing capabilities
- Increased savings
- Easy to use

### **6.2 Limitations:**

- Even the best systems can suffer from technical problems
- Network connectivity issues
- Organizing newly created data
- Securing meetings



# **Future Enhancement**

## 7. Future Enhancement

Modern video communications technologies allow us to work together as if we were in the same space, face-to-face, regardless of our locations. These innovations allow companies who are tackling the world's biggest problems to hire talented people from all over the world, spreading their workforce across countries, cultures, continents, and time zones. COVID-19 has pushed all businesses to operate remotely, to adapt to the new reality of social distancing. When the pandemic is over, people will go back to the office, but we will not go back to the ways we used to work.

- Enhancements:
  - Deep integration with other communication solutions (voice, video, SM'S) .
  - The influence of AI.
  - High-Quality Video and Audio.
  - Everything is moved to the Cloud.
  - Video Conferencing Rooms.
  - More friendly user experience.

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- Layout: <http://developer.android.com/guide/topics/ui/declaring-layout.html>
- Common Tasks:  
<http://developer.android.com/guide/appendix/faq/commontasks.html>
- jit meet sdk  
<https://jitsi.github.io/handbook/docs/dev-guide/dev-guide-android-sdk/>

# **Annexure**

## 9. Annexure

### MainActivity.java

```
package com.example.video_conferencing_app;

import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        new Handler().postDelayed(new Runnable() {
            @Override
            public void run() {
                startActivity(new Intent(MainActivity.this, WelcomeActivity.class));
                finish();
            }
        }, 2500);
    }
}
```

**..... Thank You .....**