Automatic Android Telecaller App
Using REST API

Ashutosh Tiwari[1] ,Nagraj Lingayati[2] , Ashutosh Kumar Dube[3], Mrs. Uma Goradiya[4]

[1,2,3]*BE student , Department of Computer Science And Engineering, Shree L.R. Tiwari College Of Engineering, Maharashtra, India.*
[4]*Associate Professor ,Department of Computer Science And Engineering, Shree L.R. Tiwari College Of Engineering, Maharashtra, India.*

---***---

Abstract - Android is the most used mobile operating system   in World, developed by Google. It is used on various smartphones such as the Motorola Droid, Samsung Galaxy, and Google's Nexus One. A regular Android program written in Java and run via Google's "Dalvik". Virtual machine optimized for mobile devices. Users can install Android "Applications" from Google Store or other call recorders on mobile devices based on Android applications for all kinds of general users. Its usage is to record a call, regardless of whether the is incoming or outgoing. Users record all incoming or outgoing calls, which is a great help in investigating .

Keywords—Android , Android Services ,Telecalling , REST API.

1. INTRODUCTION

Today, mobile phone technology is skyrocketing. Similarly, food, housing, clothing, and mobile phones have become fundamental needs for everyone. As the number of users increases, it is necessary to increase the number of facilities. Starting with a simple regular mobile phone that was used only to make phone calls, mobile phones have evolved and become a part of our lives. Now it can be used not only for making phone calls, but also for cameras, music players, online TVs, web browsers and more. Also, with the rise of new technologies, new software and operating systems are needed. The most Talked operating system today is Android. This is a software package that consists of middleware services and key applications as well as the operating system.

Sometimes you want to know exactly what someone said about the name. Whether it's an important dialogue with a colleague or a brainstorming discussion with a corporate accomplice, you may need to keep a record of conversations for later Discussions. Therefore, you need a call recorder app. Our project is a kind of product that can be used in various sectors working on telecall to record conversations between customers and providers under state license. The sector includes banks, insurance and telecommunications.

1.2 Problem statement

As you know, in a digital world, communication is an important part of everything. work at banks, customers interact with employees over the phone. Every company that serves its customers needs an overview Communication is done by the customer.

Today, many media groups are conducting telephone interviews to record these interviews. We needed a call recording app. Now let's focus on creating the Call Recorder App.

1.3 Project Objectives

Learn how to develop an android app. Record incoming/outgoing calls. Coming up with a better and sober call recording app. Will help in various telecaller company and banking services. By using REST API the outbound call no. will be directly fetched by database which will be stored in data by Database engineer.

2. LITERATURE REVIEW

2.1 Survey Of Existing System

Earlier phones were only used for making calls and sending messages, but the emergence of smart phones have changed the world into a new tech world. Call recording software is used to record telephone conversations over PSTN or VoIP in a digital audio file format. Call recording is different from call logging and tracking, which only records details about the call but not the conversation; however, software may include both recording and logging Feature. So, in call recorder Application developed in android may not only record conservations but there are preferences for a user to record the calls in their choice of format i.e. .amr, .m4a etc.
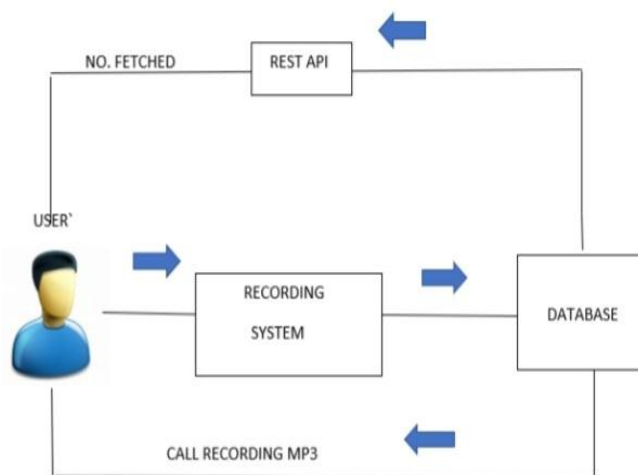
People used to write down the important points. After smartphones emergence few apps came up with call recording service but either they were complex app or multilevel use app. Neither they were business-use friendly app.

2.2 Problems With Existing System

Problems with existing systems were that they were not specific like our proposed system.Either they were complex app or can't fetch no. for outgoing calls from database. Some of were not so user friendly or say not so business friendly App.After emergence of whatsapp ,whatsapp call was also in consideration but most of sectors don't use whatsapp as method of communication.So after studying all the Drawbacks and analysing the situation we started to find solutions.

3. PROPOSED SYSTEM

Our project is type of a product which can be used by different sectors which works on telecalling to record The conversation between customer and provider under govt licencesed. We are developing this Android app to successfully record the conversation between two people Or a conference call. In this project we have used different application component of Android and key services.

BROADCAST RECEIVERS

Responding to broadcast messages from some other application or other system is normally performed by broadcast receivers. For example, apps can also start broadcasting to let other apps know that some data is being downloaded to the device and they can use it, so the broadcast receiver will block that connection.

SERVICES

An important type of operation that does not have an intuitive user interface is called a Service. Services typically run in the background for an indefinite amount of time. Applications start their own services or connect to running services.

TELEPHONY MANAGER

Application information about the telephony services available on the device, such as status and subscription information, is provided by the Telephony Manager.

MEDIA RECORDER

The MediaRecorder class can be used to record audio and video files. After recording the media, we can create an audio file that can be played later. In this example we will record an audio file and store it in an external folder in 3gp format.

PHONESTATE LISTENER

A listener class to monitor changes in device-specific telephony states, including service status, signal strength, message waiting indicator (voicemail) and other types.

3.1 Hardware And Software Used

Programming Languages :

JAVA , MYSQL

IDE / Editor :

ANDROID STUDIO .

Browser :

Any modern web browser.

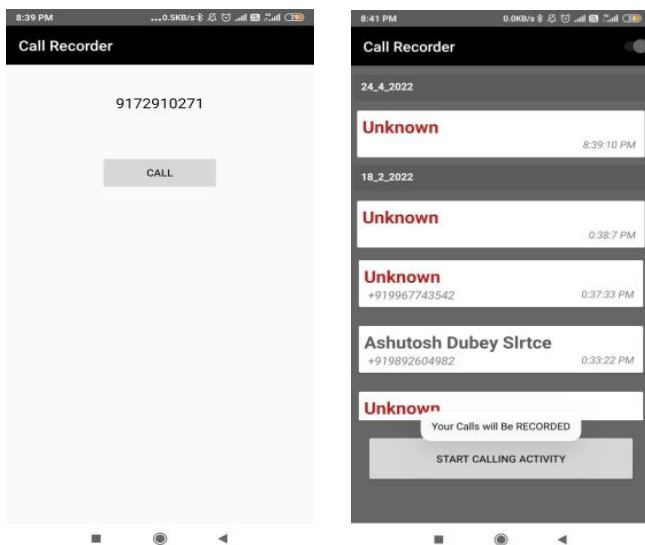System Requirements : Android Operating System.

4. SYSTEM DIAGRAM

Above diagram shows the whole proposed system. When user starts calling activity , the recording system will get activate and recording starts. Then recorded data goes in database , which is accessible by user in form of Mp3 .

5. ADVANTAGES AND LIMITATIONS

• Simple lightweight app.

• A user will record incoming/outgoing call.

• Will be used in various tele calling and bank sector.

• Will be useful to record some important points by employers, clients ,etc

• Investigating purposes & voice quality purposes ,etc

• To record telephonic interview and bytes .

• Some may use it In mischievous way.

• Can't upload on google play store.

• Should be used under government regulations and licence

6. RESULTS

7. CONCLUSION

Android which is the demand of today's world is increasing rapidly day by day. This article provides detailed information on how with the help of Android we can create a call recording application which can be used for different purposes like customer support service, surveys, voice quality purposes, Television world etc. The experience of developing an Android app is quite daunting but still motivating and satisfying.

8. REFRENCES

1. Advanced Android Training - W3Schools Tutor, online available at, http://www.w3schoolstutr.com/androidtraining.html, accessed on Feb 2017

2. code.tutsplus.com/tutorials/android-from-scratch-using-rest-apis--cms-27117.

3. https://www.ijser.org/researchpaper/Call-Recording-Mobile-Application-on-Android.pdf

4. Java Android App using REST API - Network Data in Android Course (https://youtu.be/xPi-z3nOcn8)

5. https://www.ijert.org/whatsapp-call-recorder

6. https://www.w3schools.com/MySQL/default.asp

7. https://www.convirza.com/blog/call-recording-for-business/