Human Interactable Method through A Custom Voice-chat Application: LiveTalk

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Abstract - **Cell phone communication has become an integral part of everyday life. The advent of cell phones has reinforced the need for people to connect without tying knots. Communication is important, but current methods are limited to simple contracts such as telephone, and smaller communication methods such as messaging. LiveTalk is an archive audio chat app that attempts to address current restrictions on mobile communications by exploring verbal communication methods as a flexible Internet Protocol (IP) communication method. LiveTalk acts as a program server within a mobile audio framework that supports a variety of compatible and non-compatible communication channels, archiving chat archives, and new ways to browse speech. A new shift between compatible and compatible communications, as well as integrated channels supporting both methods, has been explored, which is a debate over new mobile communication opportunities.**

Keywords – Voice-chat, LiveTalk

I. INTRODUCTION

LiveTalk is an application itself but moreover it's a deep dive study made into various human interactable methods by which one can make e-interaction easier by using our voice senses.

This will be an android application working on almost all android/ devices.

Android is an interface platform established by Google. This enables the appliance to be used on mobile phones. Users can also develop mobile apps, which will be sold through various app stores like the Google Play store. This can be done by a number of categories [7]:

Most online social messaging apps, photos or files you share use common sense when sharing shared content publicly under a few references .The algorithm for this logic is to test whether a text provided by a user has special hash characters (number symbol or punctuation) at the start. The hash symbol is rated as a key and checks if the name occurs or not. In that case the user submissions are shared and observable to other users when related search requests appear. If the name is new it means that the room is built in the database and the rest of the way is the same as mentioned.

Figure 1: Firebase working (Source: https://www.simform.com/blog/how-to-build-messaging-app-whatsapp-telegram-slack/)

Firebase is a NoSQL website that uses sockets that allow users to store and store data on a website [5]. The Android model need to be more than 2.three, the android studio version 1.5 or higher, and the android studio are the basics of connecting the firebase to the android app. Firebase gives many styles of services together with: [6] Firebase authentication is relevant to both builders and users. developing and retaining an access plan may be tough and time consuming. Firebase presents a easy API [6] for login. It additionally gives statistics backup with actual-time websites. Firebase Cloud is used for storing data together with video or text, photograph codecs can be complicated and steeply-priced for a new firebase developer to offer cloud storage area [7]. Real-time records: NoSQL cloud-based totally website. Without verification, cloud service and actual-time firebase web sites additionally report crash reporting service: if a few unforeseen crashes arise in any packages it could be tough to determine why the software crashes so it gives a crash-reporting carrier in order to address this crash. This paper discusses the usage of software to construct actual-time communication services among operators / users. A social chat chat gadget app wherein customers can be able to chat messages amongst them [8]. The user can make a chatroom consistent with a prerequisite or rejoin a current chatroom 1.1 associated work maximum public online messages, images or file sharing apps make sense where shared content will be written under a single or single word. Instagram or Facebook with a quick photo/video sharing feature is used by this sort of app. The algo used in this logic is to test if a text sent by a user includes a distinct hash symbol at the commencement of it. The hash symbol is taken a key and checks if the name existed before or not. In that case user-posted content remains shared, visible to other users after appropriate search requests appear. If the name is

fresh, it means that the room is made into the database further the whole process is the same as stated.

II. PRESENT SCENARIO

Normal chat or messaging systems are currently in use. Where you should type a message and send it to the required person. In this system various technologies are involved namely gsm which is a standard sim based messaging program and the second is online running apps like WhatsApp WeChat, snapchat, etc. In this case you should open the application after selecting the required contact. Then type every non-trivial message as the era of technology emerges with a personalized technology created by artificial intelligence, one of the biggest examples of amazon Alexa. So in order to overcome this we are trying to introduce a hands-free system that can be very simple where a person can easily send messages while making their voice without interruption by simply telling the bot who to send.

III. LITERATURE SURVEY

Technological advances in each hardware and software aspire to excel within the computer enterprise to smaller, faster and extra powerful cell gadgets that can assist a wider variety of open supply applications and packages. Cell devices are popularly called smart devices [4]. Adding text messaging capability to cell gadgets first became to be had within the cellular communications offerings network inside the early 1980's. The first active institution GSM become accredited in December 1982, requesting "offerings and offerings supplied on dynamic social networks and social networks need to be available on the cellular machine". This program involves the change of direct text messages. Between transportable channels, or broadcast thru Message managing systems which become widely used on the time. the primary suggestion to enhance the exchange of statistics or text messages become made in Germany and France at a GSM group meeting in February 1985. Oslo the first increase turned into slow, with clients in 1995 sending only 0.4 messages in step with GSM purchaser in keeping with month. -2013, 6.1 trillion messages sent [2] this interprets to 193000 SMS consistent with 2d. as a private message, some other kind of SMS is developing swiftly: a private request message (A2P). A2P is a kind of SMS sent from a subscriber to an application or sent from the app to the subscriber. It is generally used by monetary establishments, airports, hotel booking websites, social media systems, and other agencies that send SMS structures to their clients. According to a 2013 have a look at, A2P traffic is growing quicker than P2P message site visitors. over time some of techniques and solutions had been delivered to shield the comfy transaction of the entire patron message and net server. Diverse research has been executed and is ongoing on a site-based totally venture and to the same extent diverse packages had been advanced in the web page-primarily based gadget and message sharing. As a consumer agreement to exchange

statistics with different people to store massive quantities of information the present gadget cannot aid a critical internet site. Sensitive facts can also be by chance leaked due to flawed disposal or resell of very last media. Diesburg et al. scans, summarizes and compares current strategies of offering information privateness however cannot help at ease communique between consumer request and internet server. Ramesh Shrestha, Yao Aihong et al. upgraded the Android Platform messaging device and messaging system. In modern place-based totally packages, the functions are especially targeted on location control, Google map show on android devices and subsequently approximately the training and capabilities used by local resources [7]. "The recent integration of communique and facts generation has created not possible opportunities inside the last few years" Venkatesh (1998). Cell phones, e-mail, SMS (textual content Messaging provider) and instantaneous Messenger are new verbal exchange technologies, all contributing to the "loss of life of distance" Cairncross (2001). on the spot Messenger is a proprietary, simplified version of internet Relay Chat, which permits two or more humans to behavior a verbal exchange, in actual time, the use of textual content-based totally textual content messages. on the spot Messenger is used to keep away from boredom, entertainment, Lai et. al. (2002) and preserving contact with acquaintances, Lee et. al. (2002). Mathieson (1991) determined that human beings use these strategies to keep a sense of connection [9]. There are many websites available that provide unfastened messenger services free of price, they may be the desired services of tens of millions of human beings round the arena.

A bot in python is designed and named "jack". Simply by saying "hey Jack send message to…." We can make the thing done easily without even typing the whole thing.

IV. PROPOSED SYSTEM

In this we have proposed an application which is a little different from conventional chatting applications.

In this first user has to register using his / her email id or phone number then give access to the contacts so that the bot can program appropriately.

This a hands -free chatting application in which user just have to open the app and then our bot named "Jack" is available to listen your command to send message to one of your contacts.

This project uses a blend of python and java.

Tools used are:

- Android Studio

- Pycharm

Technologies used:

- Android

- Firebase Database

- Firestore

- Pywhatkit

- Python

In this firstly we design a server on which we store or execute our python code and operate the android code structure.

An incontinently communicating app that permits the person to interconnect with additional guests in a fast and clean way [9]. Each widgets must have a good/appropriate internet connection. Here are countless different converse apps including WeChat, commandeer, WhatsApp, Telegram, facebook runner, Snap Chat, online and numerous others. (10). As a part of everyday actuality, guests of education or professional cultures need to shoot and admit lines. With the aid of the operation of this operation, the person doesn't need every other pdf author operation on the tool by using this mileage the person can talk with any consumer global. On this operation we use Google firebase as a backup of app records along with dispatches, prints, lines and redundant. The person need to register or subscribe in with his or her dispatch identity and can use the services. Formerly a stoner logs into the app, the person can search for another person if a connection needs to be made. The stoner can cancel the discussion after touch. A consumer can produce his own profile depending on how other guests could be suitable to discover. This app is designed for Android mobile druggies. The stoner can respond to acquired dispatches by simply codifying a respond communication and critical the send button [11]. This software permits the consumer towards cancelling an account. The person can log off of the ultramodern tool and log in with another. There are a many algorithms used to enhance the software, which includes authentication outside packages bear stoner identity to be suitable to help make stoner data safer and redundant secure within the pall. Firebase gives a backend SDK which is ready to apply library that helps the inventor give clean authentication.

```
declare and initialize sign_in variable of type private integer to 1
function onActivityResult
        if request code equals to sign_in  then
                display signin successful
                display chat messages
        else
                display signin unsuccessful
                end task
```

Figure 2. Algo (Source: https://www.ijrte.org/wp-content/uploads/papers/v7i5s2/ES2063017519.pdf)

The algorithm lets in the person to log in to the app with a licite-mail identity. The set of rules first begins with a variable input-up to 1. This indicates the verity. The person also enters a dispatch identity this is saved in something distinctive in the website. Thee-mail id is also demonstrated and the result is stored in law, a flexible mileage. If there quest code price corresponds to the figure of the friction also each values are taken into consideration when it's country miles considered licite-mail and the consumer sings within the operation. If freights don't match also login won't be done and work could be terminated. Shoot and acquire dispatches after a hit login the stoner can now transport and get hold of dispatches.

```
create function onclick
        initialize variable of type EditText to input id
        FirebaseDatabase.getInstance().getReference().push().setValue
                (new classname(input.getText().toString(),
                        FirebaseAuth.getInstance().getCurrentUser().getEmail()));
        set the input to null
        if(current username from database instance is not equal to null the
                display welcome and username
                call function display
end function
```

Figure 3: Algorithm (Source: https://www.ijrte.org/wp-content/uploads/papers/v7i5s2/ES2063017519.pdf)

ListView type variables start with a list id. Textual content conversion with TextView kind users begins with the text and user identity because of this the text, name of sender is saved within those modifications. Via the pre-defined function 'version.get' the statistics is stored flexible and displayed at some stage in the paintings name. Chat room: if the consumer desires towards getting information regarding a topic the consumer can search the room by way of providing a keyword. If the consumer finds any relevant chat location the consumer can be a part of the room directly. If the chat room with that call does not exists the chat room can be created by user for other users. Once users have joined the chat room, users can determine if the messages shipped could be displayed in conjunction with the sender's name or no longer. If the person wants to be visible with the aid of other customers, then messages are showed together with username. If user does no longer need the real name to appear it method that a completely unique id consisting of the username of that chat-room, messages are presented with the call made. The chatroom could be deleted by the consumer who created it. Succeeding glide chat describes the drift of chat room function. In addition to this we have integrated a voice bot named "jack" using python which will simply hear after saying "hey jack!..." and do the needed thing by sending our message to the person whom it is to be sent.
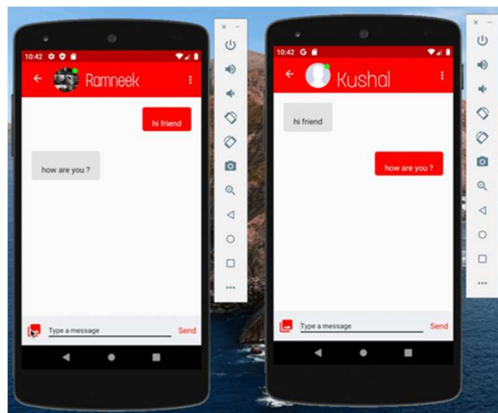
Figure 4. Application Interface

Figure 5. Chatting Interface

V. CONCLUSION

The latest app will lead to a real-time communication app that gives users easy communication. The app is going to have a page for logging in where the user can register and log in. The app's home page contains previous messages if available. A user can search for another user. He/She can send, receive messages. Chat rooms can be created and searched by the user for a particular content. Through such discussion sites users can discuss ideas, information on a variety of topics. User ID can be hidden in these public chat rooms.

There is always room for improvement in any software system, even the best and most efficient operating system. At the moment, we only deal with instant messaging with our peers. In the future the app can be upgraded to [13] include features such as 1. Voice messages. 2. Group call 3. Live streaming 4. Delete messages automatically after a certain

time. 5. Submit your songs. Also a messaging feature that allows a user to create a chat room while chatting with another user by simply posting a hashtag chat name at the beginning.

VI. FUTURE SCOPE

Overall, this is a more convenient way of social media interaction. This makes sending important messages to desired contacts in a hands-free mode which enables the user to do the needful without any distraction from the current course of work he/she is doing.

This is also very useful in case of certain emergency situations as when one does not have enough time to search for the contact and then type the whole message. In our scenario the person just need to open the app and say "hey jack! Send ……. Message to…..". This would be an evolved version of current messaging procedures or applications.

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