PRIVACY PRESERVING RELATIVE LOCATION BASED SERVICES THROUGH WEB SERVICES AND LOCATION MANAGER

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Abstract: **The Android is a growing technology which was started to fulfils various needs. Friend Book is a mobile Text messaging Application and Cross-platform Application designed to let cell phone users send text messages without having to pay Short Message Service amounts to their carrier. The message are sent via Internet. Is a real time Chatting application also sometimes as real-time text transmission over the Internet. First, the User register in to Friend Book, and start synchronous chat. Synchronous chat is text only web based synchronous forum that enables multiple user to be On line and typing their comments to each other. Both the persons may communicate through Friend Book App. The message may be text,video,audio or Portable Document Format file . The users of the Friend Book may join together and form the group. Google Play Service is used to maximize the privacy, manage the accounts, synchronize the contacts, Identify the location and update the location with map. It provides accurate location to user.**

Keywords: **Relative location, Messaging, Group Chatting, GoolgePlayService, Update location with map.**

I. INTRODUCTION

Android is a operating environment based upon the LINUX v 2.1 kernel for mobile devices such as smart phones, tablets and computers. The Android platform is the product of the Open Handset Alliance on November 5,2007.A group of organizations combined to build a better mobile phone .The group led by Google includes mobile operators, device handset manufactures, component manufacturers, software solutions, platform providers and Marketing agencies.

Google Purchased Android and took over its development work and Development Team. Google wanted Android to be Open Source. Hence, most of the Android code was released under the open source Apache License. Android application JAVA language using the Android Software Development kit

Once developed Android application can be packaged easily and sold out either through a store such as Google Play, Opera Mobilestore, F-droid, store mobango and Amazon Appstore .The main advantage of adopting Android is that it offers a unified approach to application developer. Developers need only develop for Android, and their applications should be able to run on numerous different devices. In the world of smartphones, application are the most important part of the success chain.

II. LITERATURE REVIEW

As mentioned by the authors Manish p mathai,priyank singhal,Sumiran shah[1]. Current text messaging protocols over the world allow a rigid limit of 160 characters per Short Message Service (SMS), using the default messaging system of the mobile. However this limit is often found to be minimum under ordinary circumstances and commonly, to

communicate effectively, a concatenated message needs to be send. And This, coupled with exorbitant messaging rates adds to the reduced effectiveness and decrease in potential users of the SMS. In Zip It Up SMS (ZIUS), we have developed our own algorithm, and been successful in compressing more data into the message. Now every SMS can carry up to an average-best case of 250 Characters, which can bring about a change in standards and massive boost to the mobile industry. Larger content can be sent using multiple messages (Concatenated SMS), in which case each message will start with a user data header (UDH) containing segmentation information.

Rasool.R,Sabarinathan.K,Suresh.MSyed Salmon.H,Ragavan[2]. A Smartphone-based autonomous management of Location When developing a location-based application for Android, one can utilize GPS and Android's Network Location Provider to identify the user location. Android's Network Location Provider determines user location using cell tower and signals, providing location information in a way its works both indoors and outdoors location, responds faster, and uses less battery power. To identify the user location in your application, one can use both GPS and the Network Location Provider, or just one. Here one could track the positions of the mobile Device constantly for 24 hours and save them on a well secured webpage. So that if a mobile device is found to be in a prohibited area it can be easily traced out (identify). Hence it is very useful for the army purposes. No unauthorized devices can enter or leave the area without notification to the server. It can also help to create a daily activity log of device each and every location visited by the device in a day. Changes in location is found using the services and displayed in the emulator. Distance is calculated between the sender position and the receiver position. GPS status is checked once the task is loaded into the database. Status of the location is shown as a toast message in the emulator window. If the status is disabled then the toast message displays the path to invoke location service.

AmitKushwaha,VineetKushwaha[6]Location Based Service include services to identify the location of a persons. such as discovering the nearest banking cash machine or about of a friend or employee. LBS services include vehicle tracking services.

LBS have two major actions, that is:

1. Identifying the location of the user

2. Information are utilized to provide a service.

III. PROPOSED METHOD

Android app are usually developed in the Java language using the Android Software Development Kit. The main objectives of this project is to achieve the various needs of the user. Chatting is an Innovative approach to the mobile world. Using this chatting application we can share text, audios, videos, photos, phonebook contacts and location. When sharing of PDF files between one user to the another user first PDF files are compressed using compression techniques and then send to the receiver.

SQLite has inbuilt database available in Android mobile. The datas of the user

Stored in the SQLite databases To Enhance the App experience and maximize the accuracy of the Location Google Play Service is used. This application automatically imports the contacts from your phone and tells you that how many of your friends are using this application. User can share photos, status, location with your friends. Easy to create groups and chat. And It provides accurate location through Google Play Service. Using Compression Techniques Bandwidth is reduced.

The existing system limitations are properly avoided .GPS is a space based

Satellite navigation system that provides location and real time information in all weather conditions, anywhere on Earth GPS does not provide the accurate location to the user. When sharing of PDF files between one user to the another user the bandwidth is high.

A. Architecture design

Is a Text based messaging Application. First Register in to Friend Book App .Both the Sender and the Receiver can communicate through Friend Book. Google Play Service keeps track of location and update the location with Map
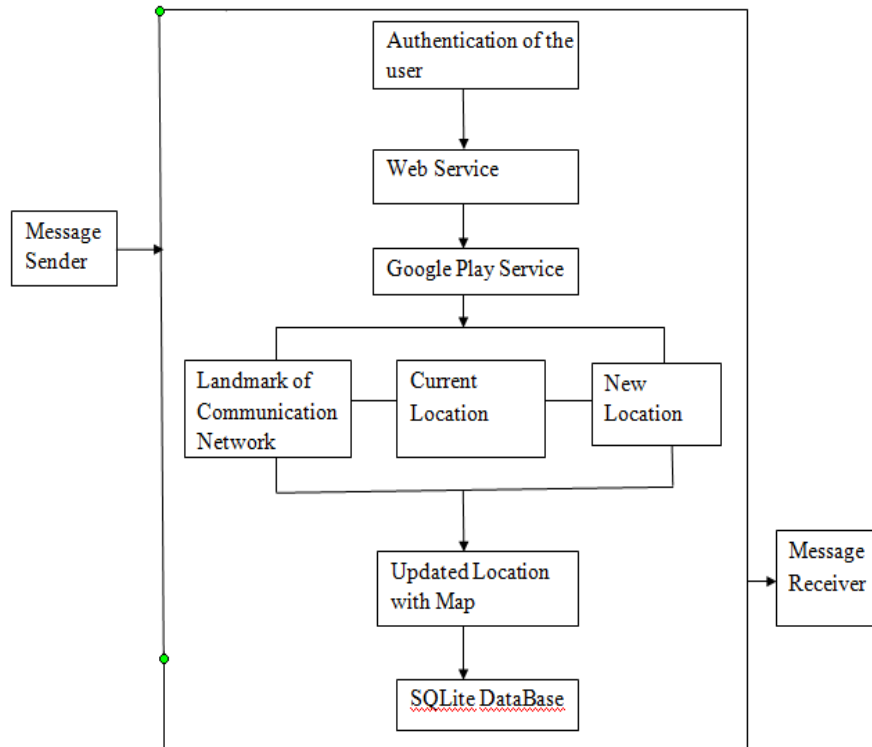
Figure 1: System Architecture Design Figure 1 explains the architecture diagram of the project where the Sender can send the message and the receiver receives the message.

IV. RESULTSANDANALYSIS

Once application is running on the emulator window it can use the services of the android platform to invoke other applications, access the networks, play audio, videos, store and retrieve data, notify the user.
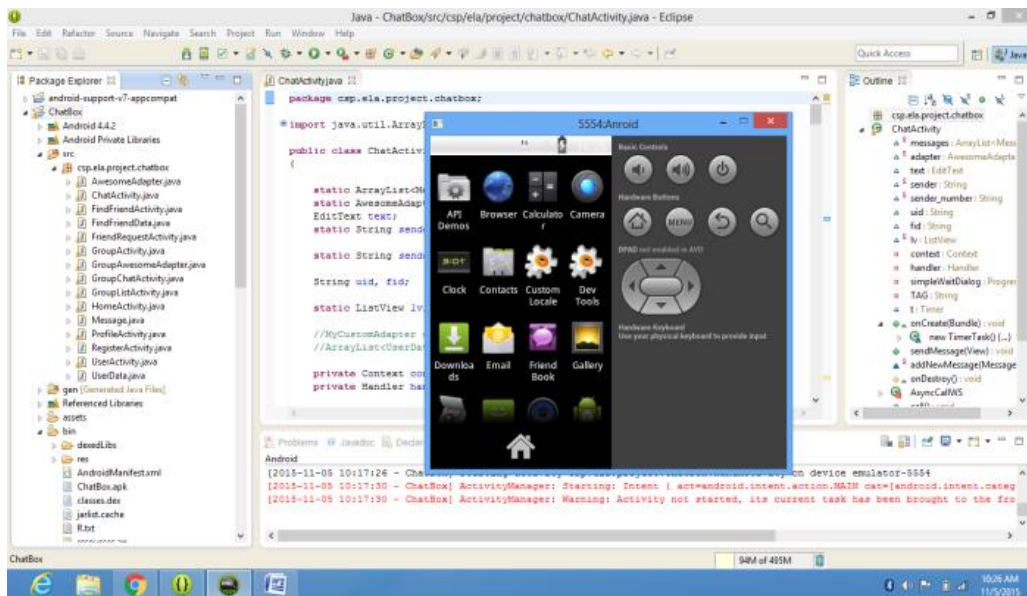

Figure 2: Emulator with different Apps

Figure 2 shows the results of Emulator with different Apps. Its look like 0mobile phone. From this user can access the any Apps.
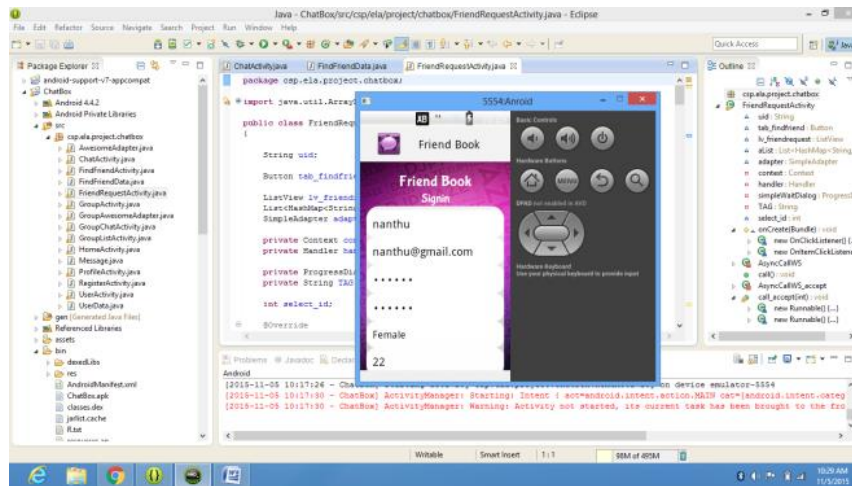
Figure 3: New User Registration

Figure 3 shows the results of New User Registration process. First user enter their details like (User name, email id password, mobile number, Interest etc.) and click Submit button.
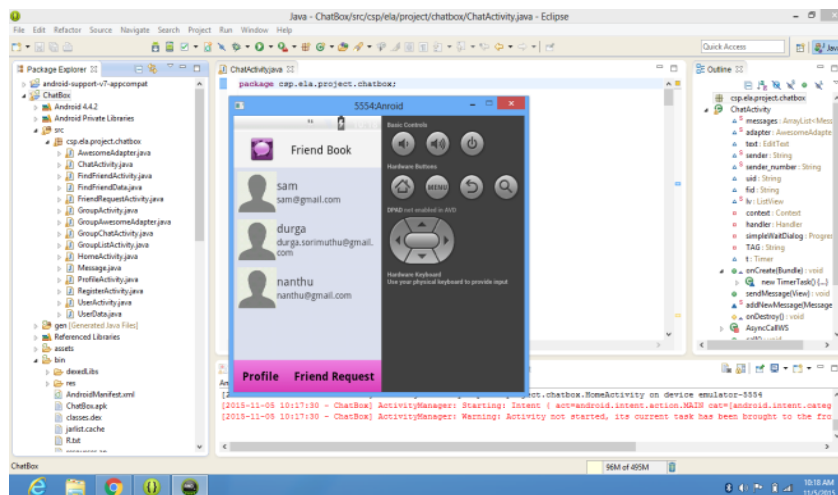

Figure 4: Friend List

Figure 4 shows the results of Friend List. It list all Friends in Friend Book the Email id was already registered.
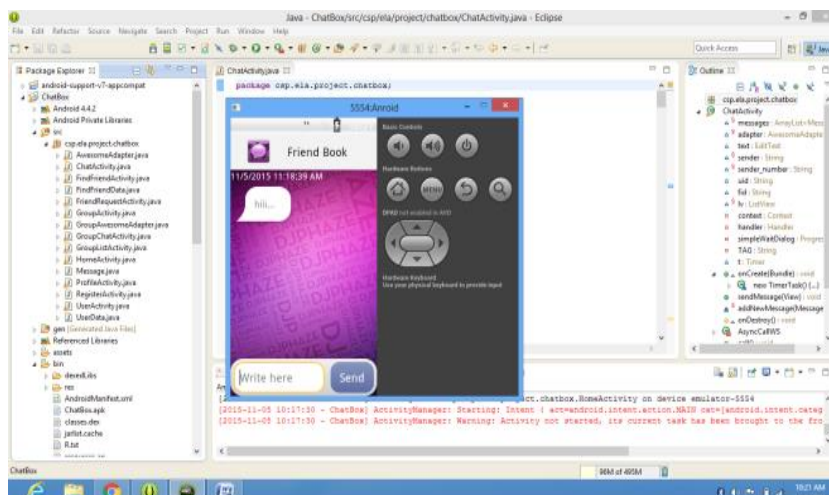

Figure 5: Synchronous Communication

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Figure 5 is the screenshot of Synchronous communication. Web based Synchronous forum that enables multiple users to be online typing their comments to each other. As soon as user clicks "Enter" button. His/Her text messages appears in the order in which they are entered.
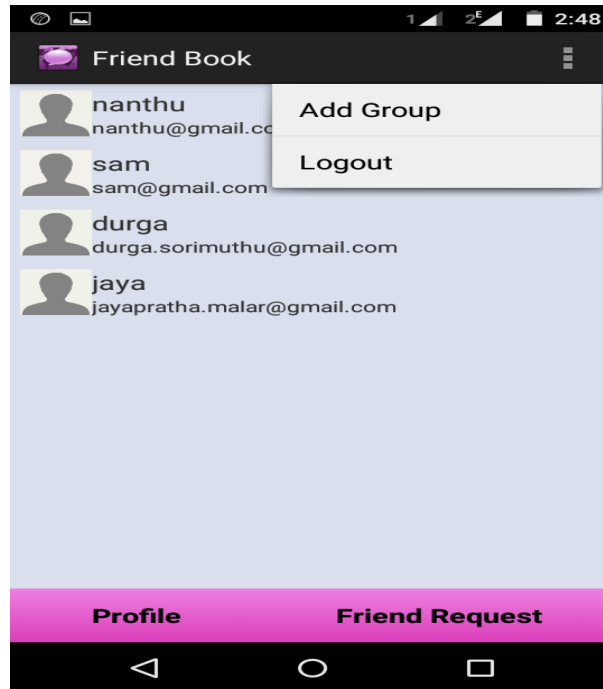

Figure 6: Group Chatting
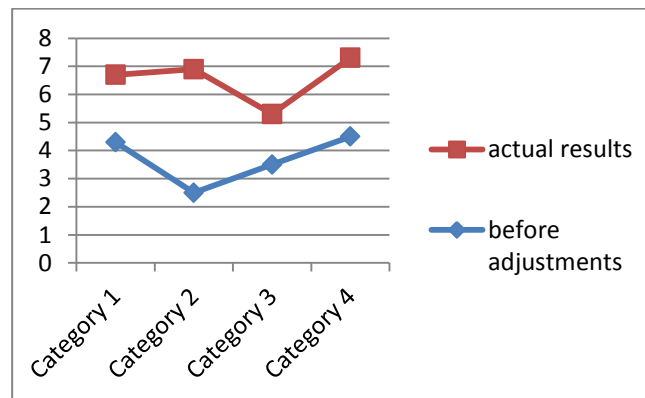
V. PERFORMANCE EVALUATION

Figure 7: Location Accuracy

Google-powered features such as Maps, Google+, and more, with automatic platform updates distributed as an APK through the Google Play Store. This makes it faster for your users to receive updates and easier for you to integrate the newest that Google has to offer.

VI. CONCLUSION

The Application is designed through web services user can interact with other user. Chat server is a specially equipped computer connected to Internet that allow users with chat clients. A chat client is a software program that allows users to connect to chat server and communicate with other user. All users have Internet connection to use this Application. In this Application through synchronous chat User can send Text, Audio, Video and update the location with map. . To enhance the App experience Maximize the privacy and provide high quality of service through Google Play Service.

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