

# Android based Instant Messaging Application using Firebase for Insurance

Vipul Chaudhari<sup>1</sup>, Rohit Gawade<sup>2</sup>, Vishal Naik<sup>3</sup>

<sup>4</sup>Professor: Meenakshi Garg, Dept. of MCA, VESIT, Maharashtra, India

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**Abstract** - Communication on internet have become more important these days. Communicating online allows users to communicate with other users in instant and convenient manner. According to this, communication system should be able to send and receive messages and images with zero or minimal delay. Firebase platform provides real time database and cloud storage which allows developer to develop this application with ease. Android is one of the best platform to create instant messaging application. Instant messaging is not just for interacting with people now a days instant messaging also can be used for Business Purpose. Here the main focus is on insurance. The objective of this paper is to create and present an android application for real-time communication. The application developed on android will provide the feature to users to message via internet using this application and can provide job opportunity for various people. In Firebase applications the backend is provided by google Firebase.

**Key Words** communication, firebase, android, instant messaging, real-time databases, insurance;

## 1. INTRODUCTION

In our daily life, communication plays an important role. People are communicating using various applications on internet here our moto is not only instant messaging but providing users with various services related to insurance. This can be done even on various other instant messaging applications. But here the mobile number of user is shared with other users. Even if users are not willing to share their contact the have to do so to avail the assets provided by application. Here in we can create an application which wont take phone number as unique key of user which will wont publically expose users contact Number and save user from spamming. Our Main Objective is to create an instant messaging application which shows insurance agents from a particular city or locality and help users to get various types of insurance from this application. This can be done by covering or adding insurance agents from city to city on this application. Since even though online insurances are available most of the people are afraid to carry out transactions online. To meet this requirement agents of those companies play the vital role. Insurance Agents act as a barrier between users and insurance company. And we can clearly say that this application can provide jobs to various insurance agents and peoples. Since here the agents will be messaging users online but still those agents will be from the same city where the user

lives in. This is important for user as well as agent to form a trust which is very difficult where people don't prefer online transactions. This can be done by using firebase's real time database and cloud storages to save and retrieve data with minimal or zero delay. Android software was developed for Mobile Phones so this application can be used on mobile phones and can be accessed any were anytime. To carry on instant Messaging

Internet should be functioning on both sender and receiver side. This Application can be launched on play store by charging Minimal entry fees for agents and users with free access. Firebase is a NoSQL Database, which makes use of socket this allows to save and retrieve data from database. An Android version should be greater than 2.3 and android studio version 1.5 or higher, android studio project are the prerequisites to connect the firebase to an android application. Firebase provides a various kind of services such as:

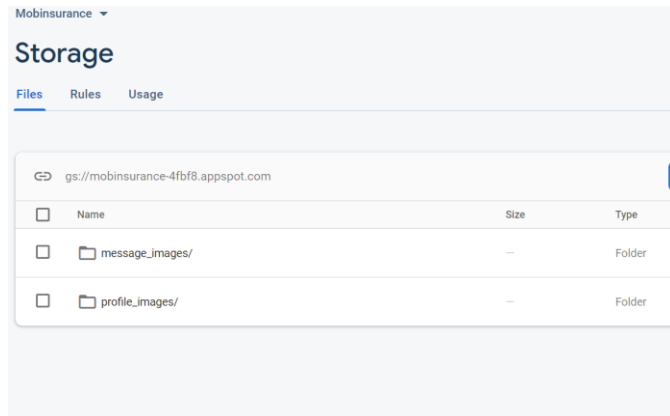
### 1) Firebase Authentication:

Firebase authentication can be useful for user and developer. Firebase provides various sign-in method where users can sign-in via phone no, email-id, Facebook, twitter and google account.. Developing, maintaining sign-up is a bit difficult, and time consuming as compared to firebase. It provides an easy API for sign-in and even backup's data using real time database.

Provider	Status
Email/Password	Enabled
Phone	Disabled
Google	Disabled
Play Games	Disabled
Game Center	Disabled
Facebook	Disabled
Twitter	Disabled
GitHub	Disabled
Yahoo	Disabled
Microsoft	Disabled

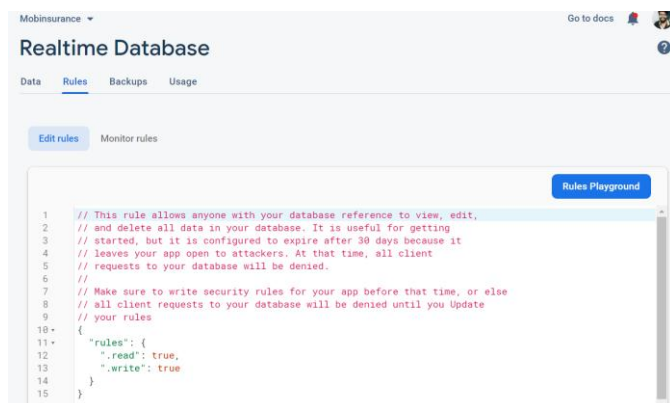
## 2) Firebase cloud:

To store data such as videos, images, text the actual storage would be difficult and expensive for a newbie so firebase provides us this platform of cloud storage.



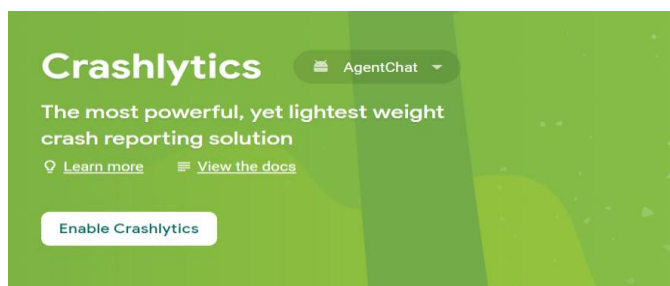
## 3.) Real time database:

Real time database is a cloud hosted NoSQL database. Which can be used for instant messaging.



## 4.) Crash Reporting:

Whenever any error comes up or app crashes. it may be difficult to find the root of the crash. Firebase has a crash report feature which shows the exact line of error which reflects in crash reports section. This would help developers to quickly find and resolve the error to maintain the flow of the application.



## 1.1 Related Work

MobiInsurance is a local Android Application.

This Application is engaged in providing Search related to insurance Agents in your locality.

There are various types of insurance agents of different companies for example LIC, Medclaim, Vehicle Insurance.

According to indianretailer.com 70 percent of online shoppers are influenced from e-commerce where as only

16 percent can make through.

The Main reason to do so is trust issues people don't trust online transaction which are offered by company B2C(Business to Customers)

While buying an insurance its important to have trust on insurance agent this is possible with this application we will allocate trusted agents to make your life safe.

It will be easy for user to find trusted agent from his own city/area and the main part is user can chat with the agents and choose any one from numerous agents.

User can find agent and can visit the agents to their office.

User can get best deals on insurance by comparing their payment dues with agents.

We can also find the best of a Messaging application though a friend request away.

We can allow from whom to get messages from and whom we might not by sending and accepting requests.

We can also delete requests as well unfriend them to stop getting messages.

To get access to this application one must create an account of his own choice to be an agent or a customer.

We can also set our custom Desktop pictures and also save status so that if any willing user can get to know your need and can contact you with your will.

## 2. GOALS

- The basic goal is to create an application for people to search for insurance agents in their city to secure their life.
- To help those local insurance agents to bloom their business where they can search for customers sitting at their office or home.
- To implement the real time Android Application which can allow users and Agents intacted with

application to interact with each other via friend request feature.

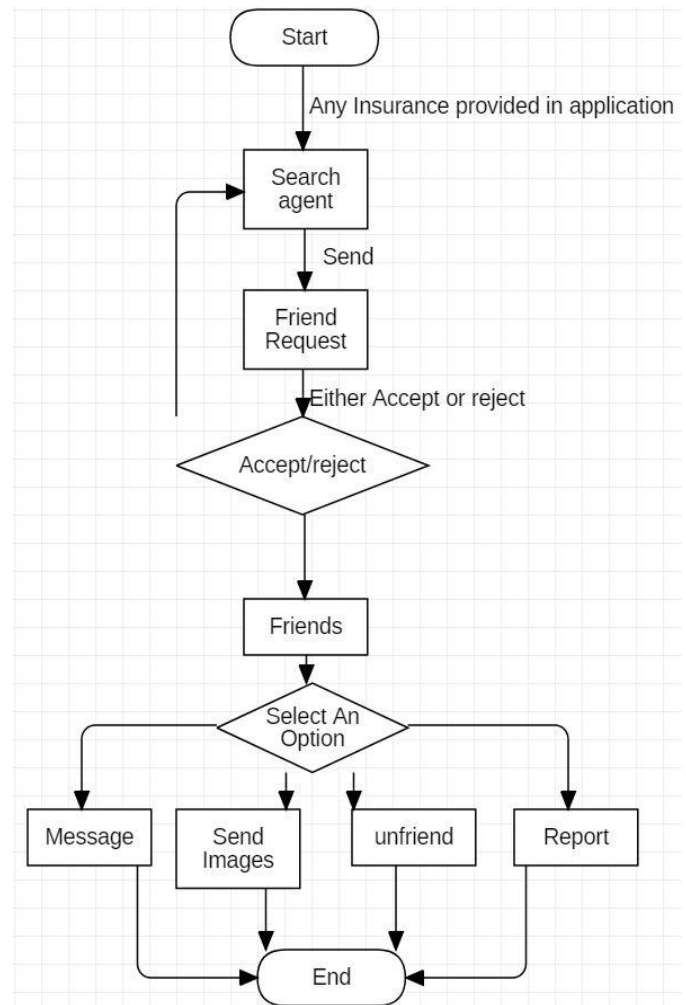
- To make a user friendly platform to buy and sell insurances.

### 3. PROPOSED SYSTEM

It is an internet based instant messaging application there are various applications available on play store which uses internet on both the sides for communication. Those applications are WhatsApp and hike. These applications uses mobile Phone No as a unique id. This may create a problem when it comes to strangers if we keep mobile number as a unique id and display it like WhatsApp and hike then possibly there is a chance that some inappropriate users can spam the users by calling and message bombing. To resolve this issue we can add the friend request feature. The agents can interact with users only when the are in friends state this will save users from message bombing .Once Unfriended someone he/she would not be allowed to send messages to other user. Since mobile number won't be used here the firebase user id will be used as a unique id. The users will be able to delete their chats if necessary. Users can create their profile to get attended by agents or visa-versa. Users can send images as well as messages by just clicking send button. Users can also sign out from the present device and can sign-in from another device.

- Application includes contacts and location of insurance agents.
- Customers and Agents are able to chat with customers and agents to find a proper safe and affordable deals.
- Both users and agents can chat once they accept their requests.
- This system will ease life of users to find trusted agents in his city.
- It prevents unauthorized access to the system.
- The application does not contact user once after user has visited the application.

### 3.1. Flow Chart



### 4. RESULT

- The final application will result as a real time communication application which provides the users to communicate to Insurance Agents with an ease where their mobile no will be secured.
- The application will have a login page through which the user can register and login to their account.
- Home page of the application contains three fragments REQUESTS,CHATS FRIENDS in requests tab will show incoming and outgoing requests if any , chats tab shows the last sent message , with last seen time and friends fragment shows all friends on that fragment.
- The user can be able to search for the other user.
- User can send and receive text messages.

- The user can send requests and accept requests to carry along with messaging and the content or information.

## 5. CONCLUSIONS AND FUTURE SCOPE

There is always some place for enhancements in any software application, however good and efficient the application may be. Right now, we are dealing with only the instant messaging between the peers. Even for now we have only one application for users and agents we can create separate application to manage users and agents separately. And even we have to create an admin application to expel inappropriate users who are reported more than five users and to register agents with their preferences. In future the application may further developed to include some features such as

1. Voice messaging.
2. Calling
3. Messages auto delete after a given time.

## REFERENCES

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3. <http://youtube.com/>