

Smart Address Book

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Abstract--Nowadays everybody wants to use Smartphone because of advance features. Near about one of five people have Smartphone. Smartphone consist of various applications and provides versatileservices to user.Smartphone provides user address book for storing contact information like number, email-id,residential address etc. Everyday ourcontact list goes on increasing. But the main problem occurs when contact information like number, email-id, address get changed we have to send SMS to all of our friends which increases the cost. Some people uses social networking media to send the updated contact information but it does not assure us certainty and lastly our friend has to save the contact information manually into the address book of his Smartphone. So we are going to develop an android application which automatically update the contact information into address book. This application is Client Server based application implementing using Client Server model. All the contact information like contact image, number, email-id, address is updated automatically into the address book of smartphone by this application (proposed system) whenever any of our friend changes his contact information.

Index Terms-- Android,Client,Server,Base64,REST

I. INTRODUCTION

Using client server architecture it is possible to introduce automation in mobile application. Nowadays if our contact information get changed then we need to inform to all our friends about newaddress/phone number. Generally we send SMS to our friends which increases the messaging cost.There is also other way like by using social networking sites we can send updated contact information to our friends.But it reduces certainty that our friend got the information about our updatedcontact information.so this contact reflector introduce the concept of automatic contact update Which reduces messaging cost and increase the certainty that our friend got the updated contact information.The main advantage it provides is automation. Our friend does not require to update our contact information in his contact list

This application also provides facility like multimedia file sharing and Google maps showing our friend's location. It can also implement as an Ad-hoc network within an organization, college, premises and help the subscriber to send contact update information, notification multimedia filewithout using internet.

II. LITERATURE SURVEY

A. Existing System

- If someone's address get changed then he/she need to inform to all her/his friends about new address/phone number.
- We use SMS which increases messaging cost
- Some of us update new contact info on Facebook/Google+ or any social media. But it does not provide us security and privacy.
- Our current system does not provideus certainty or assurance of contact update.
- Current system require manual efforts and lastly our friend only needs to update my contactmanuallyon his or her mobile phone.

B. Proposed System

- Herewe want to build an application which will automatically update contact/address of my smart phone if someone of my friend changes his/her contact information.
- Proposed system provides us certainty and privacy of sharing contact information.
- With new system manual interaction get reduced due to automation.
- Proposed system helps us in reducing messaging cost

III. AIMS AND OBJECTIVES

- Contact information should update automatically like mobile number, email-id, and residential address.
- Contact picture should also update automatically.
- I can choose which photo should get display on my friend's mobile handset when I call them.
- Friend finder:-wanted to know who all are near to me geographically on Google map.

IV. MODULAR APPROACH

Our proposed system is the client-server application divided into three modules.

A. Server

It is the webserver which provides registration facility to client. Server gives unique ID to each client registration. Server will receive the policy set by client and send his updated information to respective clients.

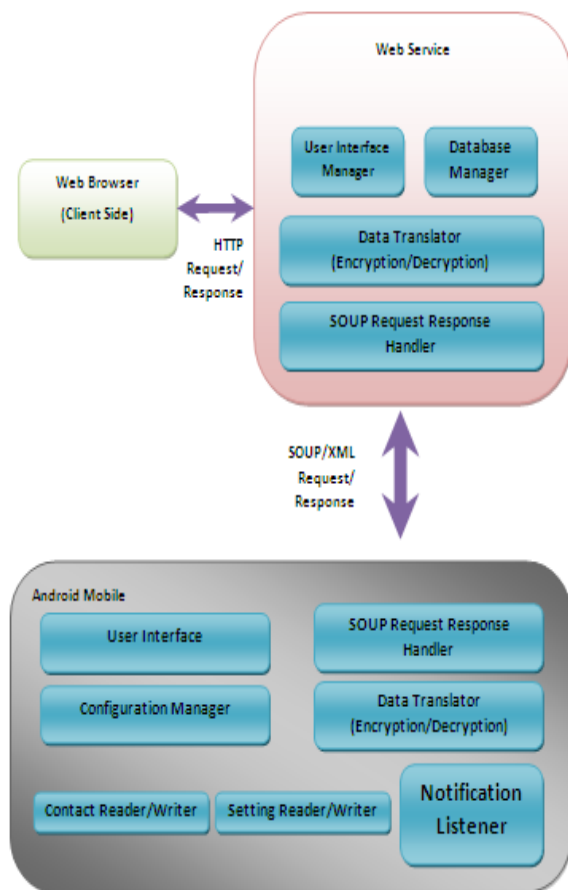


Fig 1: Architecture

B. Client (user)

Client is the user having this application installed in his smartphone. Client has to create profile first which includes the contact information like number, email-id, address, image etc. As soon as the profile is created registration request is send to server by client which on response provides user ID. This is the unique id provided by server to client. Next time whenever client update his contact information saved

into his profile the result is send to server with policy set by user. Policy is nothing but the friends (Contacts) to whom the user wants to send his updated contact information. Policy is the special option provided by the application to the client, in order to select his friends from contact list to whom he want to send updated contact information.

C. MySQL (database)

It is the server side database. It contains all the client registration with all unique ID's. Server retrieves information from database to send the updated contact information.

V. IMPLEMENTATION

We implemented our concept using two smartphones having android OS as client and one central server in order to give practical approach to our proposed system. We developed the server system which initiates a network and resolve the user policy, send updates to the respective clients, store the updated information into database and also helps in locating nearest friend location with GPS. We developed the client which provides user friendly GUI. Client provides features like set/update user profile, set policy, locating nearest friend. Main idea we implemented is contact update, whenever client update his profile the request is send to server and server resolves policy send the updated information to our contacts included into the policy and to the database. After that the contact information is automatically updated into our friend's smartphone. The result of this experimentation proves the efficiency of this application. It gives the benefits in terms of messaging cost, manual efforts and provides certainty that contact information will get updated automatically in our friend smartphone.

VI. ALGORITHMS USED

A. Base 64

Many times when we store or transfer data over media there is possibility that data may get modified. To avoid this Base64 is used. It is a command line

utility & in encoding it translates binary data into radix-64 format. In addition to original data the encoded data takes about 33% of additional space. Encoded data represent arbitrary sequence of octets. In Base64 encoding we take stream of bytes & convert them into 6 bit format. If we take three bytes each having 8 bits then first it is converted to four numbers of six bits. The characters m, a, n in ASCII format can be stored as 77, 97, and 110. this there values are then joined together to form a binary string of 24 bit. After that group of six numbers is then converted into corresponding base64 character values. For the process of decoding four characters are generally converted back to three bytes. Base64 is used in number of applications such as email via MIME & in XML to store complex data. In our project we are going to use Base64 for encryption of our database.

B. REST

REST is Representational state transfer protocol which uses HTTP to send and receive request. It used to leveraging the HTTP protocol and does not act as alternative. It relies on stateless, client-server cacheable communication protocol. REST is architectural style that used in designing the network application. The idea is that rather than using complex mechanism such as CORBA, RPC or SOAP connect between machine, simple HTTP used to make call between the machines. REST is light weight alternative to mechanism like RPC. REST is not a protocol, it is a generalized architecture for describing a stateless, caching client-server distributed-media platform. REST architecture can be implemented using a number of different communication protocols

VII. CONCLUSION

We have proposed client-server model which is user friendly android application. The main advantages of this application are that it automatically updates the contact information immediately. Apart from that the application provides strong security while transmission of data and to server side database also. It reduces the manual interaction and increases automation which is the demand of current world.

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REFERANCES

- [1] Piyush V. Shewale, Amit subhash Shelke, Sourabh Madhukar Darange, "Mobile messaging using Wi-Fi Adhoc Network" International Journal of Innovative Research in computer and Communication Engineering Vol.1, Issue 1, March 2013.
- [2] Pawade P. P, Kathalkar A.A. , "Android based server for sharing backup and restoring data" Journal of Data Mining and Knowledge Discovery ISSN: 2229-6662 & ISSN: 2229-6670, volume 3, Issue 1, 2012, PP. -36-39
- [3] "Android Code Analysis"
<http://www.ohloh.net/p/android/analyses/latest>.

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