

Design and Implementation of Android Contact Fetching System

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Abstract— Contacts on mobile device have a vital importance in day to day life. Each mobile user has a tendency to store their important numbers in mobile. While understanding importance of contacts we come to this solution. We can sync our contacts over a single centralised server or we can send a text SMS as a request to the mobile where the Contact is saved which in return bring the corresponding contact number. This software application for android mobile platform discovers various excited applications of SMSs over its traditional text messaging application. It shows how various features in android mobiles can be automated by SMS. By this application user can perform various operations in its mobile even if mobile is very far from him , like by sending a single text message we can fetch our contact numbers, auto respond to the incoming messages, send SMS from our remote mobile. Convenience to the user, security and efficiency are main issues that are considered. This application makes the use of services like telephony and native android applications.

Key words: Android Contact Fetching System, Android

I. INTRODUCTION

Important numbers are usually stored in mobile phones. Due to over dependency on mobile devices, a capability of saving or remembering contacts is declined up to greater extent. Thus in case of when user forgets a cell phone it becomes infeasible to retrieve contacts which may lead to incompleteness of work, or miss out some important contact related information.

While understanding the importance of contacts we came to the following conclusion, so as to develop an application which would be helpful to the user to fetch contacts conveniently through another device.

A. Need

With tremendous advancement in technology, mobile has become a basic commodity for day to day life. Each and every detail of our lifestyle lies in this device.

Due to over dependency on mobile devices, a capability of saving or remembering contacts is declined up to greater extent. Thus in case of when user forgets a cell phone it becomes infeasible to retrieve contacts which may lead to incompleteness of work, or miss out some important contact related information. Thus we require a feasible, convenient and simplified solution to avoid such problems at the time when user forgets cell phone anywhere.

B. Concept

Contact fetcher is an ultimate solution when a user forgets a cell phone and he/she requires an contact to be fetched from that devices. Contact Fetcher can be implemented at the peak point when it becomes mandatory to retrieve contact information from their own device if their device is absent. When a user login in the system contact are fetched and stored in centralized system. Thus when user request to fetch contact he has 2 alternatives either obtain contacts from the centralized server, either he can receive contact from the sync contacts on the server.

But if user does not have internet connection, the work won't get blocked, he/she can send message from any other device with an fixed format to their own device with the actual name of contact to be fetched, thus user will receive an contact with name mentioned in that text message.

C. Applications

- To receive contacts in the absence of cell phone.
- No location restriction.
- Storing contacts online and offline.
- Work won't stop even if user does not have internet connection
- User friendly with simplified steps to increase convenience of the user.

D. The Data Network Subsystem

- 1) The system shall be capable of transmitting data to the user-interface at an update rate at every login.
- 2) The system shall be capable of receiving data from the subsystem at a constant rate.
- 3) The system shall be able to collect and store information about every contacts at the start and end of every session.
- 4) The system shall be able to transfer data from the data network to external devices.
- 5) The system shall be able to display and print results of the data stored on the network based on user specified criteria.
- 6) The system shall provide security to protect the integrity of the data network and the information that it contains.

- 7) The system shall be able to collect information and sends notices of this information to users through email and/or text messages.

E. Performance

- The Contact fetcher shall be able to provide continuous updating of every contact list monitored on every login. This involves designing an optimized scheduling algorithm.
- The Contact fetcher shall be able to provide the user with the information that contains the most recent updates of the parking spaces.
- The Contact fetcher shall be able to send customers' text messages and emails within 10 seconds of the user-desired time. This is measured as the time sent, not received.
- Phone and Internet network delays are not controllable by this system.

F. Reliability

- The Contact fetcher system shall have a reliability rating of 0.98. Reliability is defined as providing the user up to date, correct information when they need it.

G. Maintainability

- The Contact fetcher system shall not need more than 3 hours of monthly maintenance.
- The Contact fetcher shall not need more than 7 days of annual maintenance (system maintenance different from weekly maintenance).

H. Environmental

- The Contact fetcher shall not cause physical harm to users and non-users.
- The Contact fetcher shall not cause interference to external systems.

II. SYSTEM DESIGN

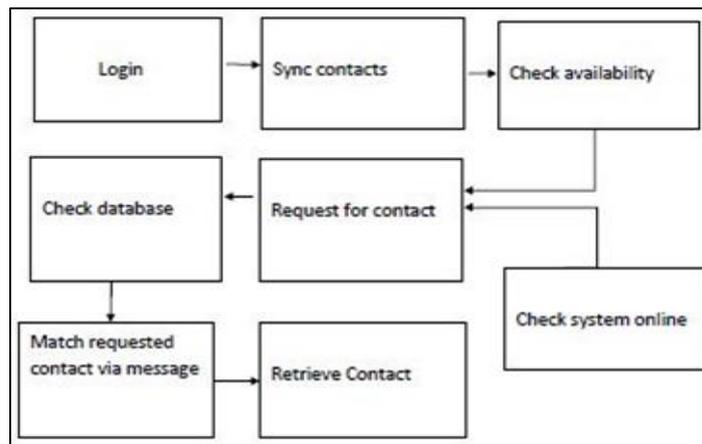


Fig. 1: System Design

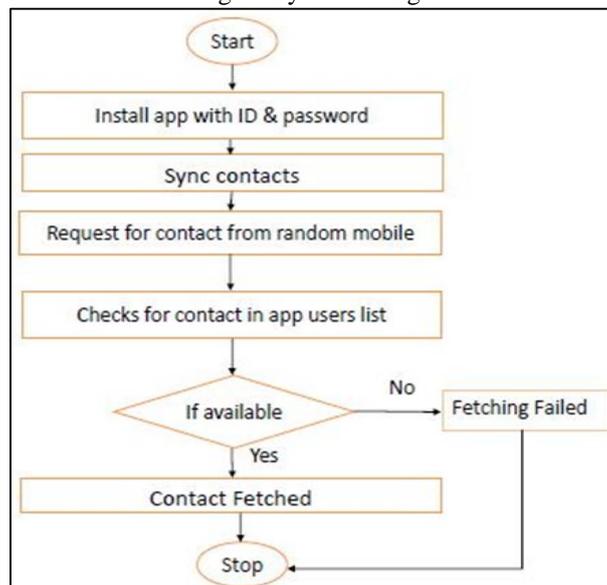


Fig. 2: Control Flow.

Steps how system is processed:

- 1) Step 1: User needs to sign up with basic details such as email id and password where email id will be an unique primary key.
- 2) Step 2: At every login contacts are sync and stored on server to maintain security issues and update database.
- 3) Step 3: In case user forgets the device apart from him, and needs to receive contacts immediately. He needs to login in other system to access contacts online.
- 4) Step 4: In case of absence of internet connection user has far more better approach to send a message with their id and name of contact to be fetched.
- 5) Step 5: Here request is send to centralized server to check database if its matches user requirement it will send a quick message or else it won't. There is no device barrier to send message.

III. CONCLUSION

This article gives a brief introduction to the Contact Fetcher Application. And combine it with android contacts management system. The article provides a new way to access contacts between devices. By implementation of the fetching system, we confirmed the feasibility of this approach.

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