

ANDROID VIDEO CALLING APPLICATION-LESS COSTLY THAN MOST OF THE OTHER TYPES OF VIDEO CALLING APPS

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ABSTRACT

In the field of Smart Phones, video calling feature is yet another break through and it turned out to be a pretty cool feature. Getting to see the person live you is talking to is really a great step towards narrowing the communication gap among people. Today, we have a large number of apps in play store which provide the video calling utility such as IMO, Google Duo, what's app, messenger and the list goes on. So here I will be working on a similar kind of video calling application such as the Sinch video calling the name of the application. Using this application people will simply have a chance to communicate with their loved ones where ever and at whatever time the wish to do so, This app will totally be helpful to a lot of people in that using this application the late of video calling will be less costly than most of the other types of video calling apps and will have the quickest and an easy user interface.

KEYWORDS: Smart Phones, Communicate, Video Calling, Sinch Video Calling, App's, User Interface.

INTRODUCTION

To develop the main aim of the project is video calling using Sinch service online database system. This project is insight into the design and implementation of a video calling android application. This is done by developing an android application using android studio. The primary aim of the video calling application is to communicate with other person with reduced data rates and enhance communication from one place to another. The aim of this project is to develop android application for the effective communication of people from place to place using reduced data rates. The database is then connected to the main program by using

interconnection of the android studio program and the database already created using android studio SQLite. Sinch video calling android application is useful for doing video calling at reduced data rates and communication using visual means.

1. This system shows the user login name
2. It provides the function of entering the recipient's login credentials
3. It provides the function of making a call
4. There is database connectivity provided when you login in as someone.
5. The application has a secure authentication process video calling services.

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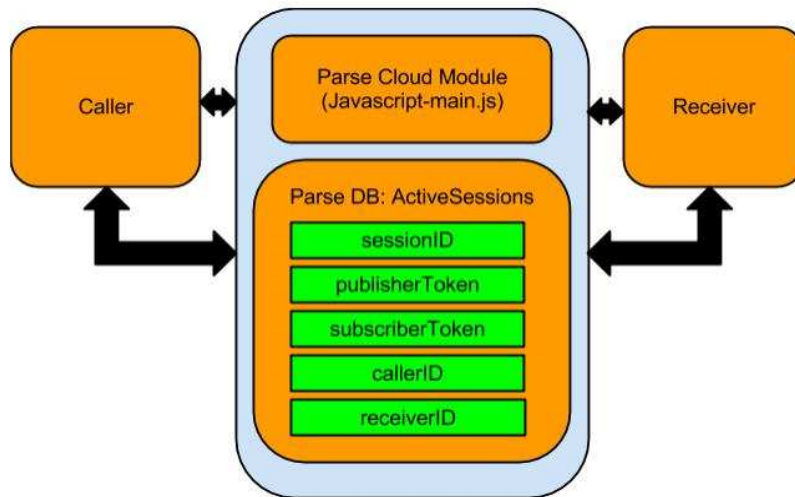
PROBLEM DEFINITION

The system requires that you have good network coverage otherwise both the person making the call and the person who will be waiting for the call will simply have problems communicating with each other so it's really important that the people using this application to simply have good network coverage in order to avoid communication problems mentioned above. System Design is one of the tasking sections of the Programming. In this section of the project many previews are going to be seen

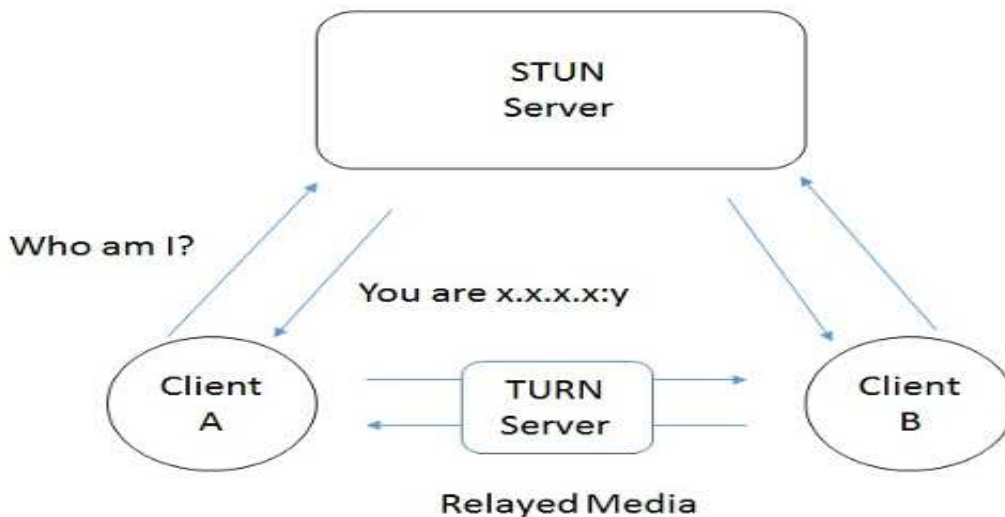
and we are gradually getting close to the new system. System design is a transition from a user-oriented document to a document oriented to programmers or database personnel. The system design is structured into the following parts.

1. System Architecture
2. Data Flow Diagram
3. User Case Diagram
4. Table Design
 - Input Design
 - Output Design

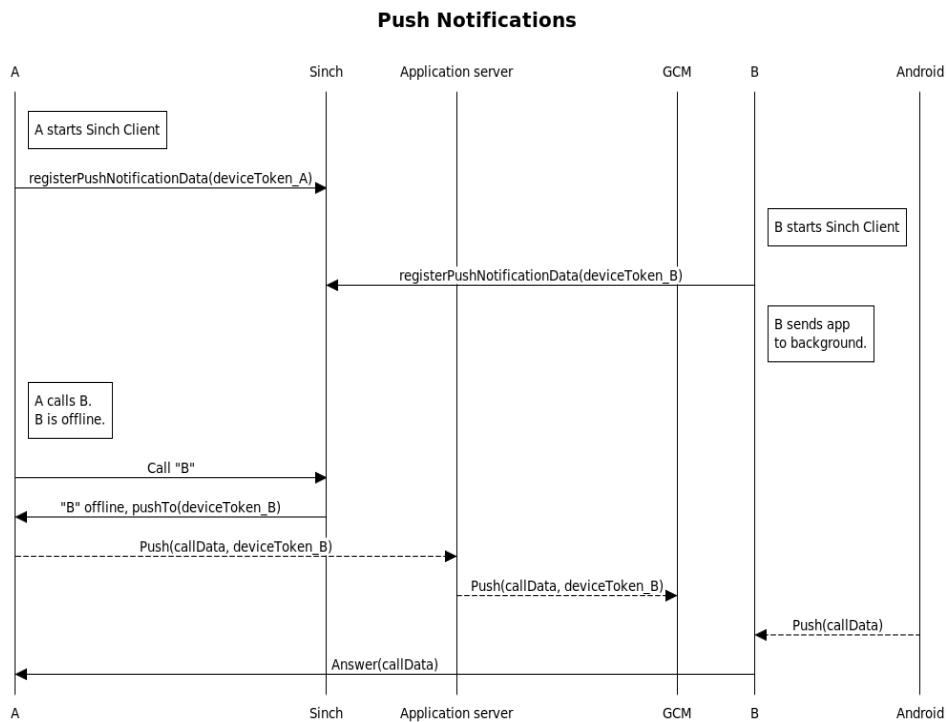
SYSTEM ARCHITECTURE



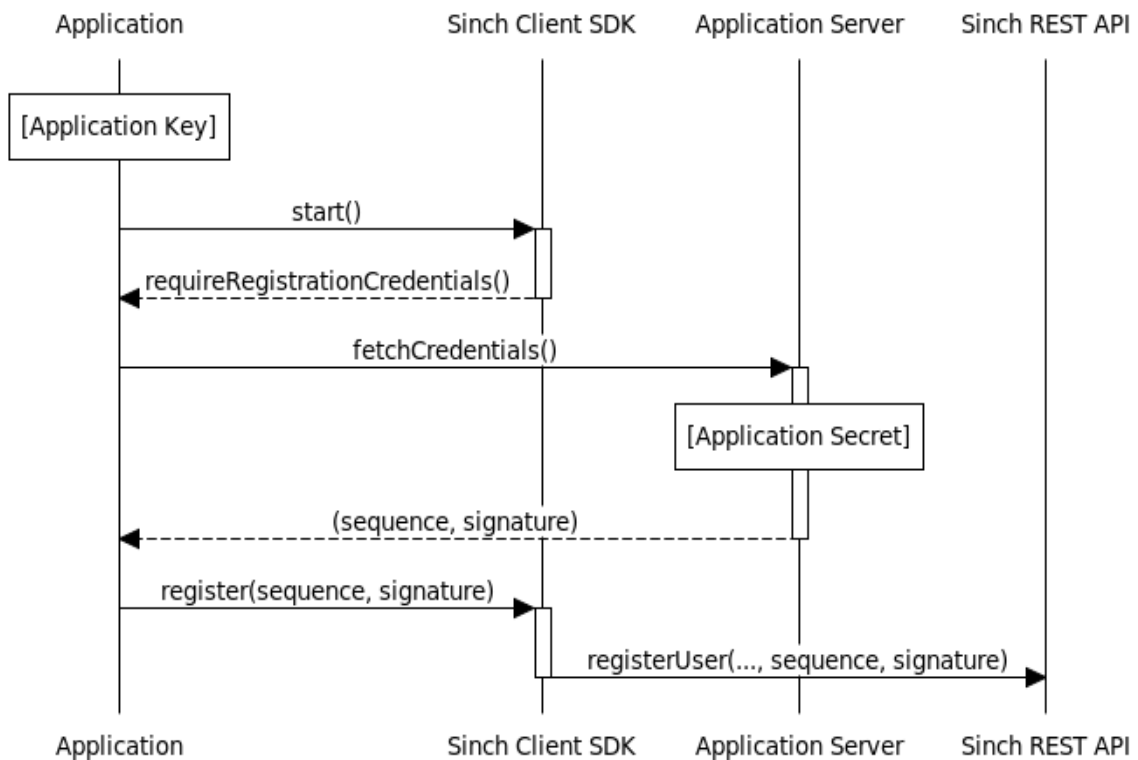
DATAFLOW DIAGRAM



USE CASE DIAGRAM



Authentication Supported by Application Server



Two main areas of documentation were used:

technical explanation.

PROCESS DOCUMENTS

To guide the development testing, maintenance and improvement of the system, for the system administrator and IT engineers of the organization to help in improving the system.

USER DOCUMENTS

These are to give the users the information they need to use the product, these are in form of teaching materials which include some

SYSTEM EVALUATION

This System is a high standard program that can weather the storm of technology advancement, it is most needed in all pharmacies on rural areas and it is an antidote for poor business speed and transaction with record keeping and maintenance, it will be very helpful to clients and customers in the medical business. All it needs is a computer literate operative to make it work.

UNIT TESTING TABLE

UNIT TEST	COMPONENTS
FIXTURE	<ul style="list-style-type: none"> • Input constraints • Output results • Data integrity • Storage and security
TEST CASE	Security <ul style="list-style-type: none"> a. Sql injection b. Network traffic
SETUP	System tester.
TEARDOWN	<ul style="list-style-type: none"> • Random inputs • Process overloads

UNIT TESTING

What can be tested in units?

1. A functional requirement.
2. Given input that satisfies the precondition, whether the output satisfies the post condition.
3. A unit can be a member function, a class, a package or component or a subsystem. Automation is the key! Replace user interaction with the scripts, if possible; replace some units with stubs.

SUGGESTIONS FOR PROJECT EXTENSION

I will recommend that if there is going to be any modification the new writer should endeavor to

improve on the limitations such as inclusion of the valid user authentication to further increase the system architecture and to satisfy users need more for writing of the source code. There are some limitations during the development of this mobile application that will require improvement as stated in previous chapter writer should put them in mind and face it as a challenge and not a problem.

In order to allow for future expansion, the system has been designed in such a way that will allow possible modification as it may deem necessary by the mobile application, whenever the idea arises. Also to include GPRS for accurate location.

CONCLUSION

Effective implementation of this software will take care of the basic requirements of the mobile application because it is capable of providing easy and effective storage of information related to activities happening in the stipulated area. With these, the objectives of the system design will be achieved. In order to allow for future expansion, the system has been designed in such a way that will allow possible modification as it may deem necessary by the pharmacy management, whenever the idea arises. Initially mobile phones were developed only for voice communication but now days the scenario has changed, voice communication is just one aspect of a mobile phone. There are other aspects which are major focus of interest. Two such major factors are web browser and GPS services. Both of these functionalities are already implemented but are only in the hands of manufacturers not in the hands of users because of proprietary issues, the system does not allow the user to access the mobile hardware directly.

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