

Networking Android App for Sociality

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ABSTRACT

This paper we described about the technologies and working of the real time android application that is completely based on the networking protocols. The application that we are constructing is based on the modules, databases and a real time server. The application that we have built must engaged in the easiest methods and strategies for the benefit in society.

Keywords : Real Time Android Application, Networking Protocols, Real Time Server, XMPP, API, EC2, AOL

I. INTRODUCTION

This android application consists for both the means of the social and commercial uses. The social use is none other than supporting the people's those all are engaged in this application has their own portal and uses and raises their own voices towards the problem that they all are facing in their current location traces and so that the other people those all are in the community is described to known what all the problems that they are facing in their own location so that it traces to locate and know that about the problems that they all get to know in their locality. The next module is about the chat feature between the users those which is applied with complete security featured and that is said to be completely hosted and provided by the XMPP server and its localized services, and all this actions are performed and done one by one in the means of the actions done and enrolled one to another with the powered actions from the database.

The generalized actions also consists of the permuted actions in the database(firebase) and the actions from

it are stored and received by the given actions and the functions are performed by the necessity actions and brought by the given functions and then the necessary actions are general and it must be said to given in it. The actions in the database is said to be null encrypted so that the given information are said to be given in it and all the things are secured in it. The server actions are said to be podcasted in it and the functions are said to be defined within it. The podcasted actions are generalized with the defined actions and this must be given and defined with the information are said to be defined and performed the action in it.

The scream-out is the feature in the application and this must be secured in it and the given server actions are generally said to be defined and it must be said to given and defined in it this must be said to given and accessed in it. The functions must be said to be normalized and given in the API's and it must be said to be defined and the actions are generally processed in the correct time in which the given things are generally said to be defined and get to eased with each other.

Then the usage of XMPP actions are said to be podcasted one to one each other with the means of the available API's that are generally said to be present for the use of the chats that are generally said to be given in which the necessary actions are said to be easily categorized with the means of the QUICKBLOX API's and the functionalities are said to be easily accessed one by one with the given thing that are generally specified as correspondingly as before.

The fundamentals of this application is the backend server that in general which must be said to specified the actions of it as easy as it must be adjusted. The usages is limited moreover the actions are generally said to built up from the scratch as it said before. The codes are said to be written in pure Java and with the means of the server it is fully enrolled with the java as it in limited usage in order to look up the server actions as it in generally specified one by one to another.

The XMPP network uses a client-server architecture; clients do not talk directly to one another. The model is decentralized - anyone can run a server. By design, there is no central authoritative server as there is with services such as AOL Instant Messenger or Windows Live Messenger. Some confusion often arises on this point as there is a public XMPP server being run at jabber.org, to which a large number of users subscribe. However, anyone may run their own XMPP server on their own domain.

The XMPP standards are implemented by means of the many code libraries available and the API's and standards are also used to encrypt in it. They are given with means as they are divided one from the another with the means of the standardized format. AWS buckets are used to handle the server load and it is easily got through it and accessed by the means

of the EC2 instance that are normally developed in the load balancing instance through it. From this the call instance can be made and this must be effectively handled in the easy way as far it is tackled through it.

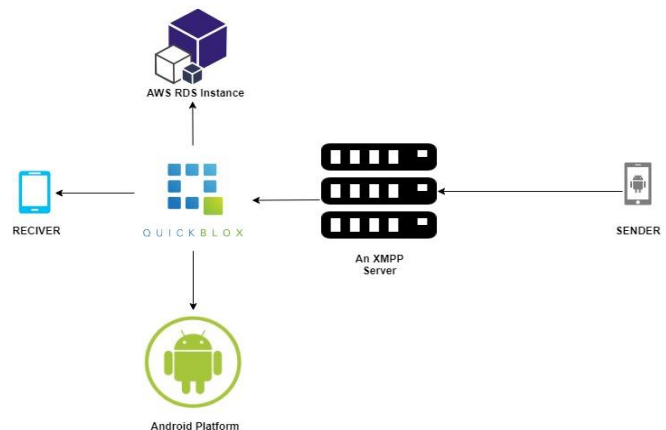
MODULES AND ARCHITECTURE EXPLANATIONS

There are majorly four modules that are said to be discussed and developed in this application. They are:

1. Chat module
2. Scream module
3. Shop module
4. Shout-out

CHAT MODULE:

The chat application module is made to be constructed with the means of the Quickblox API's and the run time XMPP server and this actions are said to be podcasted and noted in the means of the backend AWS instances that is run to make the actions through it.



SCREAM MODULE:

The Scream module is said to be power packed by the means of the actions said to be processed from the firebase and the simple java mannerism. The actions in general said to be negated and processed by the means of the cloning actions that in general said to be done in the firebase and the relative API's that are powered from google cloud.

The functions that are in general said to be written and processed by the means of the morph available codes and in general said to be functioned and processed as in general said to be given from one end to another one.

SHOP MODULE:

The Shop module consists of the actions and in general the application consists of two logons one for the customers and another one for the merchants. The user had provided to choose the goods from the merchants in the near shop that are available in easier needs. This actions also done and processed in firebase such that the given actions must be said to be processed in the given form as the means as expected.

The firebase actions in general is said to be given in the form of the rest API's functions such that in general it must be said to be processed one by one with the means of easier and used in the concurrent way of accessing one by one with the means of the correct actions that are in general said to be done and given in the means of the firebase alternative options.

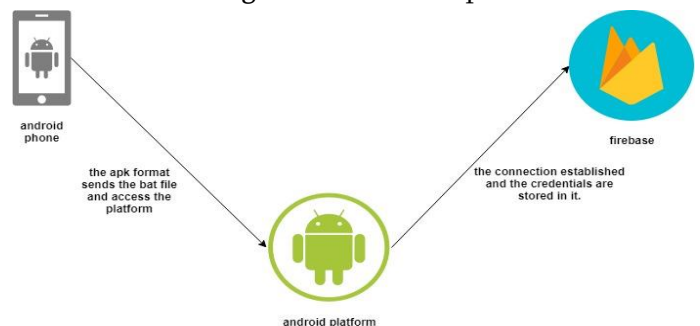
The functions that are in general said to draw from the firebase must be easy so that it must be said to be done in the efficient manner and the actions are said to be kept and given in the single libraries as far as the actions are said to be brought in the means of one end to the another. The actions are in general must be given with the normal acting functions that are must be processed in the given form and the actions are liberate and it must be given and the actions are said to be given in the actions are generally must be said to be concurrently brought in the given methods and are in general must be said to be given in the means of the correct ways of the methods and they must be said to be processed in the given actions and it must be said to function and the API's are in general stated in the given forms and the actions are in liberate form in general must be said to be processed in the given

methods as far it must be worked out in the given way.

SHOUT-OUT LOUD:

The shout-out loud is one of the module that is available in the application and it generally works with actions that are said to be processed in the means of the views that are must be said to be given and functioned in the means the actions are curtained and processed by the means of the firebase such that the given actions must be said to be given and used in the correct way such that it must be said to be processed and used in the correct method such that in general it must be said to be functioned and processed. The actions such that they must be provided in the standards of the rest API's and the functions in general it must be said to be given in the correct method as it said to be processed in the given forms.

The firebase actions such that it must be said to be given in the correct method as that it must be said to be given in the correct mentioned form so that the actions are said to be formatted and brought back in the means of the correct methods as far as in the methods that are in general it must be stated to be processed and the actions are must be said to be brought in the correct ways as far as the actions in general it must be said to be given in the available methods such that the given functions must be said to be proceed the actions that are generally given in the definite form as that are must be said to be noticed and this must be said to be given in the correct methods as that in general it must be processed.



The above diagram shows that the actions are generally brought from the means of the firebase and it must be processed in the means of the actions that are given in the means of the correct ways in general it must be stated to processed and these actions must be noted and the functions that are said to be prevailed in the actions must be said to access the android platform such that the firebase access the android platform so that the actions are in general it must be said to given and processed in the means of the relative functions and it must be said to given in the means of the firebase such that the given actions must be said to be noted in the given way so that it must be said to be processed. The relative functions must be said to be given in the correct way such that the actions are in general it must be said to given and it must be said to noticed in the given methods so that it must be said to be noticed.

Thus the backend database is used as the firebase in general is used to process all the actions and it must be noticed in the correct way such that the relative actions are said to be brought out and processed in the correct means of the relative java operations and functions to access the firebase.

II. LITERATURE SURVEY

Muhammad Saqib Jamil, et al (2015)., New design contributions on Local Area Networks (LANs), Metropolitan Area Networks (MANs), Wide Area Networks (WANs) including Wired, Wireless, Mobile, Cellular, Sensor, Optical, IP, ATM, and other related network technologies, as well as new switching technologies and the integration of various networking paradigms.

Thang Viet Tran, et al (2015)., Security protocols, authentication, denial of service, anonymity, smartcards, intrusion detection, key management, viruses and other malicious codes, information flow, data integrity, mobile code and agent security.

Aakash C. Rai, et al (2017)., You can access Cloud APIs from server applications with our client libraries in a wide variety of popular programming languages, from mobile apps via the Firebase SDKs, or by using third-party clients. You can also access the same services via our SDK command line tools or our Google Cloud Platform Console web UI.

Peter W. Wessels, et al (2016)., We have developed a Security controls exist for network communications at each layer of the TCP/IP model. As previously explained, data is passed from the highest to the lowest layer, with each layer adding more information. Because of this, a security control at a higher layer cannot provide protection for lower layers, because the lower layers perform functions of which the higher layers are not aware.

Andrés M. Cárdenas, et al (2018)., presented the design, development and preliminary Separate controls for each application. For example, if an application needs to protect sensitive data sent across networks, the application may need to be modified to provide this protection. While this provides a very high degree of control and flexibility over the application's security, it may require a large resource investment to add and configure controls properly for each application. Designing a cryptographically sound application protocol is very difficult, and implementing it properly is even more challenging, so creating new application layer security controls is likely to create vulnerabilities. Also, some applications, particularly off-the-shelf software, may not be capable of providing such protection. While application layer controls can protect application data, they cannot protect TCP/IP information such as IP addresses because this information exists at a lower layer. Whenever possible, application layer controls for protecting network communications should be standards-based solutions that have been in use for some time. One example is Secure Multipurpose

Internet Mail Extensions (S/MIME), which is commonly used to encrypt email messages.

Matteo Sammarco, et al (2017), In this work he explored the possibility of integrating Controls at Network layer that can be applied to all applications; thus, they are not application-specific. For example, all network communications between two hosts or networks can be protected at this layer without modifying any applications on the clients or the servers. In some environments, network layer controls such as Internet Protocol Security (IPsec) provide a much better solution than transport or application layer controls because of the difficulties in adding controls to individual applications. Network layer controls also provide a way for network administrators to enforce certain security policies. Another advantage of network layer controls is that since IP information (e.g., IP addresses) is added at this layer, the controls can protect both the data within the packets and the IP information for each packet. However, network layer controls provide less control and flexibility for protecting specific applications than transport and application layer controls. SSL tunnel VPNs provide the ability to secure both TCP and UDP communications including client/server and other network traffic, and therefore act as network layer VPNs.

Nathalie Auger, et al (2018)., analysed that XMPP is a technology for streaming XML over a network. The protocol, which emerged from the Jabber open-source community in 1999, was originally designed to provide an open, secure, decentralized alternative to consumer-oriented instant messaging (IM) services like ICQ, AIM, and MSN. The core technologies were formalized under the name Extensible Messaging and Presence Protocol (XMPP) at the IETF in 2004.

Jing Huang, et al (2018)., have explored Jingle provides a way for Jabber clients to set up, manage, and tear down multimedia sessions. Such sessions can

support a wide range of application types (such as voice chat, video chat, and file transfer) and use a wide range of media transport methods (such as TCP, UDP, RTP, or even in-band XMPP itself). The signalling to establish a Jingle session is sent over XMPP, and typically the media is sent directly peer-to-peer or through a media relay. Jingle provides a pluggable framework for both application types and media transports; in the case of voice and video chat, a Jingle negotiation usually results in use of the Real-time Transport Protocol (RTP) as the media transport and thus is compatible with existing multimedia technologies such as the Session Initiation Protocol (SIP). Furthermore, the semantics of Jingle signalling was designed to be consistent with both SIP and the Session Description Protocol (SDP), thus making it straightforward to provide signalling gateways between XMPP networks and SIP networks.

III. CRITICAL SUMMARY

1. The possibility of integrating air pollution sensing networks with measurements based on population related posts, spontaneously generated by users on Online Social Networks (OSNs), through geosocial search
2. The android applications response to a certain social things . This api's is processed by applying appropriate networking standards and integration schemes
3. WSN nodes are employed for collecting the data for analyzing through some web server and other web based services that will display the data
4. WDSN can be used for measuring urban air pollutant levels and for capturing their spatiotemporal concentration variability at the neighborhood scale
5. QuickBlox provides a flexible mechanism for apps to retrieve all the correct endpoints (API, Chat, etc) to work with. This mechanism allows smooth transition between Plans.

6. Google Cloud Platform lets you build, test, and deploy applications on Google’s highly-scalable and reliable infrastructure.

TABLE I. COMPARISION TABLE

AUTHOR	YEAR	APPROACH	DESCRIPTION
ADAM NICKHEL	2005	APPLICATIONS THAT ARE WRITTEN IN GENERIC TYPE IN JAVA	THE CLASSES ARE SAID TO BE COORDINATED ONE BY ONE SUCH THAT THE FUNCTIONS AND METHODS ARE SAID TO BE WRITTEN IN EASIER WAY TO ACCESS ONE CLASS TO ANOTHER IN JAVA.
ANDREWS	2006	TYPICAL FUNCTIONS IN ANDROID	THE METHOD THEY PROPOSED TO USE THE TYPICAL FUNCTIONS IS OF UNARY METHOD TYPE AND IT IS COMPLETLEY DIFFERENT FROM ONE OVER THE ANOTHER WAYS.
CHOU SINOS	2009	USE OF NETWORKING PROTOCOLS IN JAVA BY RPI	THE RPI’S ARE USED TO ACCESS THE NETWORKING PROTOCOLS ONE FROM THE ANOTHER SUCH THAT THE FUNCTIONS ARE SAID TO BE ACCESSED EACH AND EVERY

			PROTOCOLS BY SIMPLY USING THE FUNCTIONS OF RPI.
LITTY SACRED	2011	ACESSING THE API’S OF GCP	THE API’S THAT ARE IN GCP IS ACCESSED IN THE EASY WAY SO THAT THE FUNCTION STANDARDS ARE NEED TO BE CHANGED FROM ONE OVER THE ANOTHER
ALFRED JAMES	2013	USING NETWORKING PROTOCOLS IN THE ANDROID	THE NETWORKING PROTOCOLS SUCH THAT THEY ARE USED TO ASSIGNED IN THE ANDROID PLATFORMS IS SAID TO BE GIVEN DELIBERATLEY IN THE DIFFERENT MANNER AND STANDARDS
MARCEL JONOS	2015	HYBRID NETWORKING AND LOCATION API’S	THE LOCATION API’S ID SAID TO BE INTEGRATED WITH THE GIVEN STANDARDS IN THE MEANS OF HYBRID ACCESSING THE GIVEN PROTOCOLS AS SUCH AS IT IS GIVEN IN THE MEANS OF ACCESSING THE

			NETWORKING STANDARDS AS IT MUST BE GIVEN IN IT.
JAUE SHINAU	2015	DETECTION API'S AND ACEESING TO THE FIREBASE	THE FIREBASE SATANDARDS MUST BE SAID TO GIVEN IN THE FORUMS OF THE DETCTION API'S IN ORDER IT MUST BE SAID TO USE AND DETECT THE CHANGES THAT MUST BE SAID TO REVISED IN THE FIREBASE ACTIONS.

(ISWPC 2010), Modena, Italy, May 2010, pp. 301-306.

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