

# “Screen Sharer”: Application for Android Mobiles

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## ABSTRACT

In this century the large invention take place in smartphones. There are many applications available for real time data sharing but now days mobile phone are taking place handheld computer. The mobile phones give mobility and portability for every application which is available for personal computer but for real time local resource sharing is not available for smart phones. We are implementing such application which will allow local type of resource sharing. All smartphone with android os which incorporate touch screen will able to share their screen and can be operated fully. Such kind of interaction between mobile phones gives the flexibility to access local resources and services. This is all we are trying to achieve in this application.

**Keywords:** Mobile Communication, Remote Access Software, Screen Sharing.

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## I. INTRODUCTION

Now days peoples are not having time to stay connected while juggling their professional and personal for making their life more easier, concept of sharing mobile screen come into the picture. In the exiting application on the play store are “TeamViewer” and “Join Me” they are having function like sharing one system to another system, usually use for pc to pc sharing resource and mobile to pc resource sharing. In the gadget 21st century Every software, technology, concept has been extended to smart phones inspired and this idea proposes a method of developing a screen sharer application for android mobile phones.

## APPLICATION

### Screen sharing

In screen sharing module presenter side integrate with every presented activity work by capture screenshots (images) of active activity. Through root view of the activity in draw able object. That object encoded into string, this string sends to server via connection. This

process done without overloading the system. Video capturing and playing has frequent interactions with the underlying hardware and driver on whichever computer system, while real-time response on Android platform of commercial embedded devices not ideal .When the frequency of interrupt request is low (for example, 10HZ), the average response time is about 1 to 5 ms; however, the average response time rises to 0.5s when the frequency of interrupt request is high (such as 1KHZ). How to use underlying system and hardware resources to improve the efficiency becomes a main consideration. ITU-T (International Telecommunication Union) and MPEG (Moving Picture Experts Group) are two agencies responsible for researching video coding and specializes unified coding standards which can be suitable for video conferencing and video telephony applications whose real-time requirements are high and MPEG-4 and H.263 have become mainstream standards of current wireless transmission. A variety of video encoders can be implemented on Android, including the open source FFmpeg,

### File Explorer Sharing

In this module file explore is access only on the Presenter side and allows the Presenter to access his files from memory card and share to Viewer side. After sharing of file the viewer can access files easily through application include images and text files. The whole file explorer can be shared between presenter and the viewer there is having various resource such as setting in which presenter can change the setting of the viewer smartphone also the can with the movies ,photos from the gallery or anything which they want to do.

### Whiteboard Sharing

Whiteboard module is available for presenter side only and provide primary feature of windows paint. The Presenter can presenting anything on white board will be shared to the viewer side. Mark up graphics, and photos, or start brainstorm on the blank canvas. Browse the web with your friends or make that conference call more productive than ever. No plug-ins, downloads, or firewall user-friendly. White board contains session stored in memory during session every time the whiteboard is opened.

### Chat Application

In chat module first connection created between sender and receiver for chat feature in this application. It can support only text messaging between sender and receiver. The chat module having two way communication feature not available in file explore and white board modules and they control by only presenter. but chat module will control by both sender and receiver. In chat application the presenter and viewer can chat with each other and they can send the multiple messages.

## II. LITERATURE REVIEW

In Wireless video transmission on smart phone platform. lack of real-time program mechanism, inconsistent quality of the wireless network, and etc are facing difficulties by android. To improve video transmission quality on Android, the paper proposes a system level realization with a viable video QoS scheme . By doing the optimizations without using Android video system on Linux system level and the interfaces were provided to upper-layer applications to reduce the response time. To reduce the time delay of capturing and playing video, decompressed speed up interrupt response and the captured video data in user space. To minimize the end-to-end delay and reduce the influences of unstable wireless network. we adapted to control packet loss ratio and dynamic video encoding rates control. we used a buffer management policy. To validate this scheme we had conducted a series of experiments. The results show that the quality of video transmission and the response time have been significantly improved.

Amend- ment of MPEG-4 is the subject of an Streaming Video Profile and is developed in response to the growing need on a video-coding standard for streaming video over the Internet. It provides the capability to distribute single-layered frame-based video over a wide range of bit rates with high coding efficiency. It also provides fine granularity scalability (FGS), and its combination with temporal scalability, to address a variety of challenging problems in delivering video over the Internet. This paper provides an overview of the FGS video coding technique in this Amendment of the MPEG-4. Taking one with another, wireless multimedia data transmission including video data has already been matured and some multimedia service frameworks on Android have been proposed. But currently there's not an easy-to-use and specific system optimizing QoS solution for video transmission on Android while how to improve the efficiency of video transmission is also lack of consideration. In this paper, we propose an optimizing QoS solution of video transmission specific for Android, and the solution is mainly implemented on operating system level In [3] Due to its open-source advantage and powerful APIs, Android has attracted a large number of developers. Android's SDK is based on Java, how to reuse excellence C/C++ open-source projects is a problem. This paper first discusses a new component development approach for kernel-level development by using JNI (Java Native Interface) technology, and then describes the principle of FFmpeg (open-source codec project) and its transplantation process. At last, an Android-based codec application is designed and implemented. For implementing this repetitive functionality, the Timer Task sub-module is used. For continuously capturing the changes in the screen of the Presenter, screenshots have to be taken repetitively and regularly. In order to do this, a class that extends Timer Task class is used to execute the screenshot capturing code every two seconds. The Timer Task class represents a task to run at a specified time. The task may be run once or repeatedly. The Viewer side Screenshot module is very simple. It only has a single functionality that is taken care by the Timer Task sub-module. In this sub-module, the string continuously received via the connection is accepted. This string is decoded back into a bitmap image and then it is displayed on the screen. After the first conversion, the next one is done only when new information is received through the string. Android is a platform aiming at mobile devices based on Linux2.6 kernel by Google, and the application running on top of the framework so there is multiple levels to be passed through when dealing with the underlying systems and hardware. Experiment data in shows that: in Android platform, there is a corresponding increase in the frequency of the delay when the load increases; interruption frequency increases also led to an increase of the number of delays and delay the accumulation. The paper did not give a specific ratio delay between the two kinds of delay, but according to a specific analysis of the Dalvik virtual machine running on Android, the delay cost is considerable.

### III. PROBLEM DEFINITION

To develop a "Screen Sharer": Application for Android Mobiles.

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### IV. PROPOSED METHODOLOGY

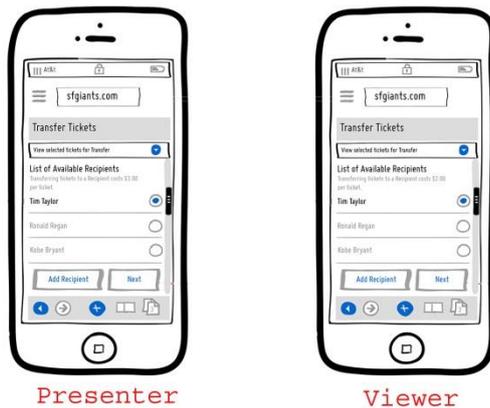


Fig 1. Architecture

This application creates a connection between two users through which they can share their mobile phone screens.

[A] At Sender Side

Firstly, sender will enter the mobile number of receiver. After this, using GPS Technology location of entered mobile number i.e. receiver tracking is take place. Then object will be delivered to receiver.

[B] At Receiver Side

This system will recognize the receiver using Face Recognition System. Successfully delivered the object.

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