Android Pc Controller

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Abstract: Conventionally, the computer system has a monitor, CPU, keyboard, and mouse. In order to perform several activities on the computer such as typing a word document, opening some file or doing any operation on a computer, we need to sit in front of a computer with hardware devices such as keyboard and mouse. Also, if we are giving any presentation in the conference and if the presenter is standing at someplace away from keyboard and mouse and wants to open some other file, then he has to come in front and then open other file using a mouse. Moreover, sitting in front of a computer for hours, one suffers from eye problems as well as other health issues. So, to overcome such problems, an android app is developed. Using this application, the user can control the PC within the Wi-Fi range. Wi-Fi connection is required between the computer and the android device so that the user can access the computer remotely instead of sitting beside it. To share files between a computer system and an Android mobile, start and shut down option, allow accessing the installed applications of PC, this application can be used. It allows the IT administrators to access their database of their computer remotely. It is utilized by doing the operations on PC like sending video.

Keywords : Android mobile-phone, PC system, Socket programming, WiFi, IP Address

I. INTRODUCTION

There exists several conditions where we can comfortably work with our computer system, where the computer screen is connected and made to be used in several places like Classrooms, working environments and so on. In the market, there exists many devices which are used to operate our computers remotely and wirelessly. Wireless presentation device allows the user to operate his/her computer remotely inorder to present their topic with comfort. However, all the available devices have certain drawbacks. The Wireless

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keyboard has certain flexibility, and during the presentation time it is not flexible for the users to carry over the device inside the room. While presenting a slide, the users generally would like to walk in and around the room. However, most of these devices do not allow the user to have the complete access on the computer, like moving and closing an application window. Also that, it is a great deal for the user to use it to move the mouse cursor while he is walking around, the widely used prevalent smart devices, such as iPods, smart-phones can be the excellent alternatives as remote computer controllers if we develop appropriate applications for them. The traditional computer system has a wired keyboard and mouse. This makes the system a little difficult to have an access to the system remotely. So to overcome this problem, we have designed an android app that allows controlling the computer system remotely within the Wi-Fi range by providing a virtual mouse and a keyboard. It also provides a function to send and receive data from phone and laptop, to transfer android files to the desktop and vice versa, to play media player on the laptop and to view gallery controlled by android and to implement live screen.

II. METHEDOLOGY

Networking process can be implemented only by using the **concept of Socket Programming.** Inorder to provide communication between the computer and the mobile device, Sockets are being used. This can be done using the Transmission Control Protocol (TCP). First, a socket is created at the client-side to establish a connection with the server. Socket is also created at the server side. Now, the client and the server communicate by means of sending messages between themselves. Server_Socket object is created by the server which detects the port number at which the occurance of communication happens.

III. EXISTING SYSTEM

There are a number of research projects that are already available which makes use of the android phones to act as a remote accessing device. Our project defines the process of the remote controlling of computer system based on Android. For establishing the connectivity between a Computer system and the Mobile device, there exists several ways which includes certain processes like Java Sockets and Android Debug Bridge Client. There are numerous projects designed which allows remote control access between the devices even though there are some initiatives that aims in controlling of our mobile devices.

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For that unavailable facility, we have introduced a concept which is made flexible and scalable to the users in controlling and monitoring our device through the Android platform.

IV. PROPOSED METHODOLOGY

Our mobile assistant helps the users to express the awkward condition of the users in the use of the computer. It grants permission to the users to access several available facilities such as controlling the media applications, slide-show presentations, video playing facilities, etc. It also facilitates the user to transfer files from our Android mobile phone to our PC system/Laptop and vice-versa. Image Viewer option in the application will help the user to view the images that are available on our phone on the desktop screen of our Laptop. Also, the presentation option enables the user to make this device as a remote device so that we can handle any presentation using our mobile device itself. We need not buy any unique device for this purpose which is specially designed for this purpose as well. This reduces the cost and easy to access as well. This concept can be achieved by installing the introduced mobile assistant which works by means of Wifi technology. Wifi is used to ensure the communication between the computer and the mobile device as well. To achieve this facility, a concept named "Socket programming" is involved in this process which acts as the most important technology to be implemented to achieve success in this project.

a) BLOCK DIAGRAM
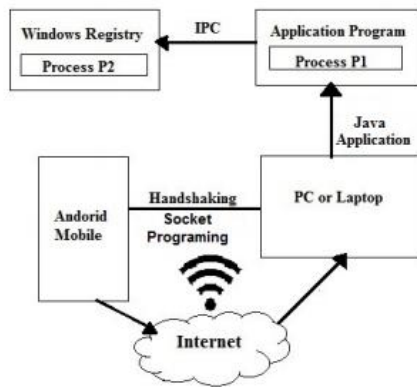
b) FLOW DIAGRAM
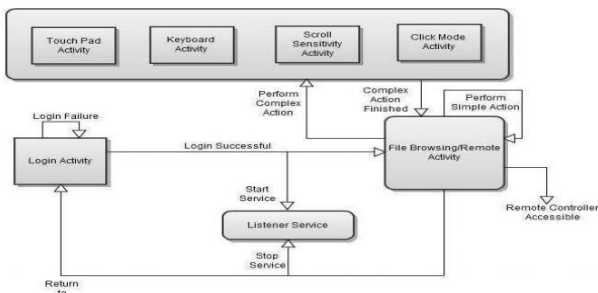
V. FEATURES

1. Media applications are made simpler in terms of pause, play, rewind, control options, etc.

2. Slides presentation is made easier for the users.

3. All the operations that the user handle is done with the help of an Android Operating System.

4. These available features results in the use of wireless connections made between the computer and the mobile device.
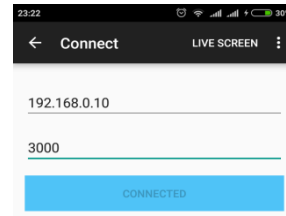
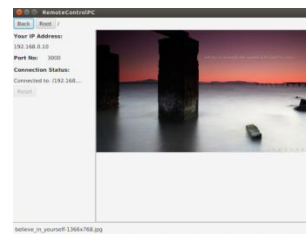## VI. RESULT ANALYSIS

Fig 7.1 Index page

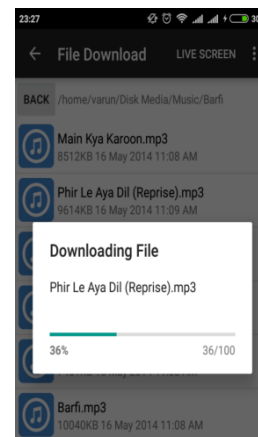**Fig 7.2 Computer window is displaying on the mobile screen**
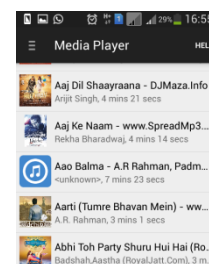

Fig 7.3 File downloading process
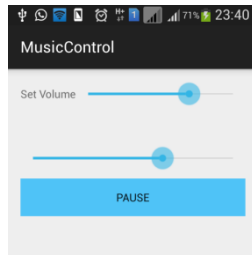

Fig 7.4 Media Player

Fig 7.5 Music Volume Control

VII. CONCLUSION

As we know, our traditional computer systems are not easy to handle. If we want to do any work on computers, then we need to carry the hardware all the time. So, for that purpose, to reduce the difficulties of the users, by using this application, we provide the functionality where the user can easily handle the system from a remote place and can perform several operations by connecting to Wi-Fi without any barrier. It provides flexibility to control the PC remotely through this app. For that, we have provided the touchpad, which is a replacement of mouse and control the pointer. QWERTY keyboard is used here. File transfer and downloading the file from android phone and laptop, respectively. Using the media player, we can directly send the music file to the system, and the music will be played on the computer. Along with that, we have provided the presentation and power-off facilities, where presentation handles the presentation and power-off for shut down, suspend, lock and restart functions are provided. Also, the main advantage is that, by using this app, we can bring the running screen to our android phone using GetScreenCapture() function. So, with the help of a live screen, we can directly see all the files and folders on our phone and can easily handle.

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