RemoteDroid

RemoteConnection

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Abstract: This application represents how your PC and Laptop can be controlled from remote place with smartphone using internet. It fundamentally turns your smartphone into remote console and mouse with touchpad. This application can be performed with a few remote association between the PC or Laptop and the smartphone with Android working framework. By accessing the IP address of PC, we can establish a connection between them using Wi-Fi connection.

This application not only turns your smartphone into remote console and mouse but it moreover gives different other highlights. The implemented application consists of two parts, the first one is an application for Android smartphone and the second one is a server application that executes the command selected by user’s application. The result of this usage could be a helpful, easy-to-use application.

Index Terms - Android, IP address, server, client.

1. INTRODUCTION

We usually come across areas where an admin or department or company head needs to monitor user work.

This observing makes a difference the specialist to know around any bizarre movement or any movement not gathered to be wiped out office premises, which is done by the representative.

The interface of admin dashboard is developed in android, so that to monitor the work of employee more easily and effectively. Remote pc monitoring needs a working internet connection that too having a high bandwidth. Well such system when monitoring on a large number of PC’s proves to have a quite reasonable load on the network. Since, the system works by sending constant image snapshots of computer screen when the admin request for the same using android device. These steady picture exchanges from client computers to admins android phone. So, we propose an On-Demand Android system that monitors a PC on authority demand.

Nowadays, PC’s, laptops and other electronic gadgets are inseparable part of our everyday life. Individual computers are not any longer implied for working reason, but increasingly utilized for entertainment in people’s spare time. This is also applicable to the mobile phones, which have transformed into multifunctional devices with almost same features as computer’s have. Smartphone’s are common and commercially utilized gadget all over the world, user-friendly interface and parcels of highlights such as Wi-Fi, Web get to, Bluetooth, Camera, Video recording etc. add-on to the Android smartphone to be well known all over the world.
Features of proposed system:-
- More efficient
- Easy to handle
- Can be used for commercial purpose
- Can be used for wide area network when connected to internet.

2. RELATED WORK

2.1 Existing Systems :

2.1.1 TeamViewer :
TeamViewer is remote get to and remote control program, permitting upkeep of computers and other gadgets. It was first released in 2005, and its functionality has expanded step by step. TeamViewer is proprietary software, but does not require registration and is free of charge for non-commercial use. It has been installed on more than two billion devices. TeamViewer is the core product of the Göppingen-based company of the same name.

2.1.2 Remote Control Collection:
The Farther Control Collection is a compilation of remotes, which you'll be able utilize to wirelessly control your Windows PC or Mac. The bound together remotes empower you to control the PC past mouse and console!

2.1.3 Pc controller:
It’s a fake application.

2.1.4 Remote Mouse Keyboard And More :
AndroMouse moreover highlights speech-to-type which employments Google discourse acknowledgment to create your work less demanding. The finest and the first farther Android mouse and console out there. AndroMouse converts your phone into remote mouse, console, and more. Association along with your computer is made either utilizing your existing wi-fi or utilizing Bluetooth.

2.2. Existing System Problem :

- TeamViewer has following problems:
  1. File transfer does not seem to work.
  2. Existing systems have signing problem.

- Remote Control Collection:
  1. It speed is slow.
  2. It does not provide feature of scrolling pages up and down.

- Pc controller:
  1. It’s a fake application.

- Remote Mouse Keyboard And More :
  1. It does not provide good keyboard service.
  2. It has very poor performing gaming pad.
  3. Mouse control is not provided on the entire screen.
3. SYSTEM AND IMPLEMENTATION

Proposed System:

- Shutdown Computer system.
- To restart computer system.
- To take snapshot of the current operations running on the connected pc.
- It will give authentication message from logging of any unknown user.
- It can be connected using wifi too.
- We can open any computer application using our app.
- We can play, pause or stop music player.
- We can also control video players using our app.
- We’ll provide joystick for gamers.

3.1 Design Methology:

3.1.1 Java:

Java is a general-purpose computer-programming language that is concurrent, class-based, object-oriented and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java applications are typically compiled to bytecode that can run on any Java virtual machine (JVM) regardless of computer architecture. As of 2018, Java is one of the most popular programming languages in use, particularly for client-server web applications.

Java was originally developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle Corporation) and released in 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low-level facilities than either of them.

3.1.2. Android:

Android is an open source and Linux-based operating system for mobile devices such as smartphones and tablet computers. Android was developed by the Open Handset Alliance, led by Google, and other companies. Android offers a unified approach to application development for mobile devices which means developers need only develop for Android, and their applications should be able to run on different devices powered by Android.

Android applications are usually developed in the Java language using the Android Software Development Kit.

Once developed, Android applications can be packaged easily and sold out either through a store such as Google Play, SlideME, Opera Mobile Store, Mobango, F-droid and the Amazon Appstore.

Android powers hundreds of millions of mobile devices in more than 190 countries around the world. It's the largest installed base of any mobile platform and growing fast. Every day more than 1 million new Android devices are activated worldwide.
3.2 Module Description

Modules:

1 Server
   Server module will run on the machine, which will be control from smartphone. To receive connection, server will be running on unused port and will wait for the client to connect. After get connected, server will respond as per the request received.

2 Connection Initialization
   In this module, user have to enter IP Address of the server machine in order to get connect to the server machine. After a successful connection establishment client and server can communicate with each other using request-n-response model.

3 Navigation
   This module provides user with a touch pad which will work as a mouse. Using touch pad user can perform left mouse click, mouse dragged, mouse move etc.

4 Writing Keypad
   This module will provide interface for entering or typing. This will provide keyboard like interface through which user can type documents etc.
5. **Machine State Controller**

Using this module user can restart and shutdown the server machine in just one click.

6. **VLC Player Controller**

This module helps user to operate VLC Player operations like play, pause, next etc.

7. **Screenshot**

This module will help user to capture and save screenshot of current processing in connected machine.

4. **Results and Output:**

4.1. **Server Side:**

![Figure 4.1 Server Side](image-url)
4.2. Client Side:

![Client Side](image)

4.3. Home Screen:

![Home Screen](image)
4.4. Mouse Pad

Figure 4.4 Mouse Pad

4.5. Main Activity

Figure 4.5 Main Activity
4.6. Machine Activity

Figure 4.6 Machine Activity

4.7. Keyboard

Figure 4.7 Keyboard
4.8. Screenshot

5. Futurescope:
   - We can add activity to view computer screen on android device.
   - We can add functionality to share any kind of file.
   - We can make android app to send and server (computer) to listen voice commands and proceed accordingly.

6. CONCLUSION:

RemoteDroid Application is used to remotely access systems with the help of Wifi. The application will help the systems to be remotely accessed with the help of components which may otherwise requires us to connect them to the system and maintain them. So the application helps to overcome this disadvantage. This application provides user friendly GUI.

Application helps in accessing the various system apps and even type and control the mouse. This application uses wifi to connect which provides faster connection and accessibility. A number expenditure which we are spending to buy these components will be cut down can be reduced through our RemoteDroid Application.
7. REFERENCES


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