Controlling the electronic weapons from the remote place using mobile

Dr. Khanna SamratVivekanand Omprakash

Address for Correspondence
Information Technology Dept, ISTAR, Sardar Patel University, VVNagar, India

Abstract - This paper represent how the electronic weapons can be controlled from the remote places using mobile with the connectivity of the internet using latest wireless technology like Bluetooth and WIFI and using latest mobile application into standard smart phone. The market smart phones comes with the latest hardware and software with different operating systems eg. Windows Nokia, Android, Symbion Operating ,Mobile Linux, Palm OS. Windows based mobile application supported with the camera & bluetooth and controls the electronic gun from the remote place to operate its functions with the help of internet and WiFi Connection. The target of gun directly seen into the mobile camera by adjusting its target & pressing the button it executes the trigger of the electronic gun. In built mobile camera in a gun & trigger can be accessed by the mobile using Bluetooth/WiFi connection with the short range or using internet. A WiFi transmitter antenna is design to send a signal in all directions. Electronic circuit take care of it which consist of application and electronic wireless devices to connect the weapons. Controlling of electronic device will be performed from the mobile by using different keys or buttons. Now a days latest touch screen mobiles also available for quick accessibility and to satisfy the destination of target. By using the camera of the mobile like 10-15 MP, we can set the distance of destination for accuracy to hit the target. Electronic warfare support data can be used to produce signals intelligence and provide target for electronic or destructive attack and produce measurement and signature intelligence. The concept of electric Mechanical gun is used for different application and Camera phone is a mobile phone which is able to capture still photographs (and usually video). Smart phones that are camera phones may run mobile applications to add capabilities such as geotagging and image stitching.
Key Words - Information & user interface, input device, physical user interface, electronic gun, electronic -mechanical gun, mobile, wireless communication, geotagging and image stitching.

I. INTRODUCTION

Electronic warfare:-> Military action involving the use of electro magnetic energy to determine or exploit or reduce or prevent hostile use of the Electromagnetic spectrum. A WiFi transmiter antenna is designed to send a signal in all the directions. A WiFi transmitter antenna is designed to send a signal in all directions. You can redirect the signal so it's more focused and covers a more defined area by building a WiFi antenna that fits into the corner of a room. You will need a few hardware supplies along with a satellite dish from a satellite supply store. Your antenna will reflect the WiFi signals towards the WiFi receiving devices more efficiently and will provide better signal strength when the WiFi receiving devices are in use. A personal digital assistant (PDA), also known as a palmtop computer, or personal data assistant, is a mobile device that functions as a personal information manager. Current PDAs often have the ability to connect to the Internet. A PDA has an electronic visual display, enabling it to include a web browser, but some newer models also have audio capabilities, enabling them to be used as

mobile phones or portable media players. Many PDAs can access the Internet, intranets or extranets via Wi-Fi or Wireless Wide Area Networks. Many PDAs employ touch screen technology. Remote control can mean radio controlled (using radio signals) or optical (light) controlled, also known as infrared. Some newer slot cars now come with wireless controllers that communicate via infrared with a receiver unit that plugs into the slot racing track. Our goal is to provide an enabling technology that helps bridge the gape between hardware interface design and software interface design.

Wireless network With Mobile
Mobile device management (MDM) refers to any routine or tool intended to distribute applications, data and configuration settings to mobile communications devices, such as laptop computers, cell phones and PDAs. The intent of MDM is to optimize the functionality and security of a mobile communications network, while minimizing cost and downtime. Mobile device management allows administrators to oversee the operation of conventional cell phones, smart phones and similar devices as easily as is done with desktop computers. A remote control is a component of an electronics device, most commonly a television set, used for operating the television device wirelessly from a short line-of-sight distance. The *remote control* is usually contracted to *remote*. It is known by many other names as well, such as converter, clicker, "The box" didge, flipper, the tuner, the changer, or the button.
Advantages of Wireless Communication:

- Flexible if there is ad-hoc situation when additional workstation was required.
- Implementation cost is cheaper than wired network.
- Ideal for the non-reachable places such as across river or mountain or rural area.
- Ideal for temporary network setups.

Disadvantages of Wireless Communication:

- Lower speed compared to wired network. (of course!)
- Less secure because hacker's laptop can act as Access Point. If you connected to their laptop, they'll read all your information (username, password.. bla..bla..bla..).
- More complex to configure than wired network.

Affected by surrounding. E.g: walls (blocking), microwave oven (interference), far distance (attenuation)

II. OBJECTIVE
Combination of mobile device management with a wireless remote control to control the operations of electro-mechanical guns from the remote place. The features of ideal mobile device management tool:

- Is compatible with all common handheld device operating platforms and applications.
- Can function through multiple service providers.
- Can be implemented directly over the air, targeting specific devices as necessary.
- Can deploy next-generation hardware, operating platforms and applications quickly.
- Can add or remove devices from the system as necessary to ensure optimum network efficiency and security.

Electronics circuit with wireless connection.

Target

Electronic Gun

Sensor

Bluetooth
WiFi

SAMSUNG

Electronic Circuit   GSM Modem with SIM   Mobile with SIM

Figure represents how the mobile from remote place operates the functions of electronic gun with the help of wireless technology and its equipments with electronic circuit to pass the signals to the gun from remote place.

III. DESIGN & EXPLANATION

Concept of Electronic & electro-mechanical guns taken. Electronic circuit with the sensors having mobile GSM connected with the sim card and internet.

Electronic Guns

Electronic guns or electro-pneumatic guns fire paintballs by using battery powered circuit boards that activate solenoids that cause the gun to fire. The trigger pull tells the circuit board to fire, which then activates the gun. Since circuit boards are programmable, it's easy to tell the board to fire automatically, use a three-round burst or other firing modes. Electronic guns also rely on regulators (mechanical devices that take in variable air pressures from a tank and release the air at a lower, constant pressure) to assure consistent firing. Different electronic guns have different regular maintenance which usually consists of basic cleaning and lubricating (either with grease or oil, depending on the gun). Electronic markers are typically more difficult to disassemble, but they usually come with detailed manuals that explain how to disassemble and reassemble each part of the gun, so follow instructions carefully during routine maintenance. Electronic guns are quite complex, so any major repair or upgrade should be done by a professional. Electronic guns cost considerably more then mechanical markers and are not as readily available. They are difficult to repair and usually require professional servicing for problems or upgrades. Electro-mechanical guns are basically mechanical guns with an electronic trigger which electronically releases the bolt to fire. The actual firing mechanism is almost identical to a basic mechanical marker, but the electronic circuit board allows for fully automatic firing, three-round burst and other firing modes. Maintenance of electro-mechanical guns is basically the same as maintenance for mechanical markers. Be sure to regularly clean and oil the gun after use and make sure you keep your electronics dry at all times. In fig[I] electric mechanical gun is fixed in a remote place. The executing of the gun fire is totally based on the signal. The electronic circuit is connected with the mobile GSM having SIM card with the advanced wireless communication technology Bluetooth and WiFi. Inbuilt camera is set up in the gun, the target can be directed in terms of image or video file to the electronic circuit and can be send to mobile GSM having internet connection. The person having mobile will connect to the internet and capture the video file or image into his mobile and can easily access the information. By developing remote based application into the mobile we can see the video files and images of the desired target. Electronic trigger which electronically releases the bolt to fire can be send by mobile in terms of signals to the electronic circuit and it passes to the gun and executes the target object easily, Secondly if the gun is placed nearly distance with the mobiles. It can execute commands & see the video files

and images, by connecting electronic circuit with Bluetooth/WiFi. At this stage there is no need of internet connection. Mobile phone application will be connected to the bluetooth and it captures all the data & send the data in the term of signals to electronic circuit. It will direct connect with the electronic circuit, as it will paired with Bluetooth/WiFi by providing password to the electronic circuit and execution will be faster and more accurate , as distance is less compared to remote place connection.

IV. SOLUTION

Input Components

Input components are those devices that are used to enter data or information into the electronic information processing systems. These devices are usually characterized according to their functionalities, and are commonly used as peripherals or integrated units connected with the system.

Output Components

Output electronic components are devices over which processed information can be viewed as output results. Like input components, these devices are also attached as peripherals or integrated units with the information processing system.

Advanced Input and Event Handling

This chapter provides information to help you take advantage of the graPHIGS API's advanced input and event handling capabilities. It contains a discussion of logical and physical input devices, input device triggers, cursor shape control, and extensions to the PHIGS input model.

Logical Input Devices

In order to promote application portability, the PHIGS standard adopted the concept of *logical* input devices. The logical input device model shields your application programs from differences in hardware input capabilities by providing a consistent method of acquiring input. The PHIGS standard defines six logical input device classes. A class is defined by the measure returned by the device as described below:

Device

1=LOCATOR

Usually implemented as a cursor controlled by a mouse, stylus, or puck, the measure of a locator device is a view identifier and the position of the screen cursor in World Coordinates (WC).

2=STROKE

A stroke device generates a measure which consists of a view identifier and a set of points in World Coordinates (WC) defined by a screen cursor.

3=VALUATOR

A valuator device provides scalar values within a specified range and is typically implemented with a dial.

4=CHOICE

A choice device generates integer input based on a selection made from a button type device such as the function keys on a computer keyboard.

5=PICK

A pick device is used to select graphical elements and, like the locator and stroke devices, is usually implemented with a screen cursor controlled by a mouse, stylus, or puck.

6=STRING

A computer keyboard is typically used to implement a string device which supplies character data to an application program in the form of a character string.

Input Triggers

The logical input device model also includes the concept of triggers. A *trigger* is used to indicate a significant point in time when an operation is to be performed on the measure or the state of the logical input device.

Input Echo

In addition to the measure and trigger, a logical input device may generate output to indicate the current state of the device's measure or to acknowledge the receipt of a trigger. This output is usually visible or audible and is called the input device ECHO.

Input Modes

The method of obtaining the measure of a device depends upon the device's Operating Mode. The three modes defined by the PHIGS standard are 1=REQUEST, 2=SAMPLE, and 3=EVENT as defined in the following sections.

V. RESULT

Common Types

Some common input devices include keyboards, mouse, microphones, image scanners, digital cameras, webcams, light pens, bar code readers, fingerprint scanners, game pads, television remote controls and stylus pens. Some common types of output devices include television screens, computer monitors and LCDs (liquid crystal displays), audio speakers, audio headphones and printers. These common output devices are either interconnected with information processing systems using wired/wireless media, or are simply found attached (integrated) within the systems.

VI. CONCLUSION

A wireless communication system has a number of advantages, not least the mobility of the devices within the environment. It is a simple matter to relocate a communicating device, and no additional cost of rewiring and excessive downtime is associated with such a move. It is also a simple matter to add in a communication device to the system or remove one from the system without any disruption to the remainder of the system. Other than the initial outlay on setting up the cell sites, the cost of running and maintaining a radio based communications solution is minimal. Some of the more expensive camera phones have only a few of these technical disadvantages, which apply most acutely in low light conditions and in any case have not inhibited their widespread use. the BlackBerry Storm2, Droid X, Motorola V980 and Nokia 5800 also have a separate camera button features for quickness and convenience. Some are designed to resemble separate low-end digital compact cameras in appearance and to some extent in features and picture quality, and are branded as both mobile phones and cameras. Compared to mechanical guns,

electronic guns are more consistent, more accurate and can fire faster. They can also be smaller and lighter than their mechanical counterparts. Since triggers only have to activate the circuit board and do not physically activate the firing mechanism, the trigger pull can be very light and very short. Electronic guns can also operate on a much lower pressure than mechanical guns and guns. Mechanical marker with the ability to increase your firing speed and shooting fully automatic or use another firing mode. You can also decrease the weight of the trigger pull (make it easier to pull back smoothly) and shorten the trigger pull. Electro-mechanical can also be bought at a price that is much less than true electro-pneumatic guns and comparable to many mechanical guns. they are not as accurate or as consistent as most electronic guns. They are as loud as mechanical guns and need a higher air pressure (usually over 600 psi) than electronic guns. Using wireless communication with mobile from remote place, you can control all the operations of the electronic mechanism weapons which are sending signal and connecting with the internet for capturing with the images and video files using inbuilt camera & latest wireless technology.

VII. ACKNOWLEDGEMENT

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