Border security force in valuable areas through Internet of things

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Abstract: **Now a days a country has contain must and should two thing one is technical development and protect them self from other countries. Protection or security is very difficult to the some pieces countries like India. If suppose any countries can suddenly attacked to the these type of country at that time not facing the problem and then loss the soldiers in this type of the attacking damage the security system of that countries and also some type of problems are increased. In this paper we proposed is we can attach one angle selection router in the bottom of the gun and also fix the camera for observation and target angle fixing. And also trigger on button used .this system is interacted to the central security system. Soldiers are observed avoid the country roles any unknown person enter the boundary soldiers send the signal to gun . At this time gun will be fair. By using this idea we can try to save the soldiers.**

Index terms- IoT, smart phone, RFID.

I. INTRODUCTION:

Internet of things is a interaction between the things that consists of sensors and human. The main concept of the IoT is to allow things to be connected any time, any place with anything and any one, and any network and any service. By developing this we need a common operating platform that is middle ware. The middle ware platform enables sensor data collection, processing and analysis. Presently we design and implementation details of our proposed middle-ware solution namely mobile sensor data processing engine (MOSDEN). MOSDEN is designed to support sensing as a service model natively. MOSDEN is a true zero programming middle ware. That means user do not need to write program code this MOSDEN middle ware is used for push and pull data streaming. For data transaction between android mobile and sensors we can develop a special plug-in that is used for the better communication between the sensor and human.

II. BASIC INFORMATION ABOUT IOT WORK:

in this section, we briefly discuss the background and our motivation behind this work. By using IoT we can connected to billions of thing to the Internet. This method is not possible and practical to connect all of them to the Internet directly. This is mainly due to resource constraints (ex. network, communication capabilities and energy limitations) connecting directly to the Internet is expensive in term of computation bandwidth usage and hardware cast point of view. Enabling persistent Internet access is challenging and also negatively impacts on miniaturization and energy consumption of the sensor. Due to such difficulties, IoT solution needs to utilize different type of devices with different resource limitation and capability.

We believe that an ideal IoT middle ware solution should be able to take advantage and adapt to these different type of devices in order to make the solution more efficient and effective. One of the most critical decision that need to be taken in the domain of IoT is where and when to process the collected data.

III. WITHOUT IOT:

fig1:

this is the figure representation for now a days attacking by using gun just observe about figure this is the simple figure representation of the face to face fighting with gun. In this fighting our side also same problems are occur because both are fighting face to face. Hear one impotent issue arises that our security and our human support persons protections also very impotent. In this face to face fighting has no guaranty life.

Boundary security force is very important for the any place or buildings etc.. now a days very challenging issue so we can allocate one person and then protected the our property total one person or number of persons will be allocated at the single task. It is not good news at that time we can loss the human energy and time and money totally waist Sterne times this are wasted do to the sum reasons so existing system has maintain coast is high but security is low in existing system security will be totally depends on the human mentality that means that person stress and stamina in this system at the time of war will be presented face to face fight will be there at that time hear chance to loss the human. In this existing system fully depends on the risk hear chance to loss the human life

with IoT:
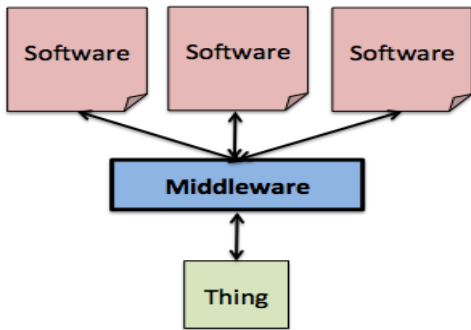
Fig 2: simple architecture about the IoT

in the border security force has used advanced technology more useful for the security of anything. In this advanced system we are used one camera for the observation the what is going on and one power control sensor is used that is used for the trigger on and also we can attached the one more sensor that is occupancy sensor. The occupancy sensor is used for the alerting the observer. If any human try to enter the our border that will be give the alert to the observer . It is very better for the observer brain absent in bottom of the gun one angle setting equipment is presented. That is used for the fix the target. In this methodology at less amount of cast we can give the more security and also it has less human energy. That means single person will be control number of guns. In this methodology is providing more security.

Implementation:

cy sensor

in this paper implementation we are taken the some physical objects that are arduino uno board for receiving the signal and smart phone or android phone for sending signal from human convenience and we can take the one gun and also additionally we can take Ethernet shield and also we can take the camera and occupancy sensor and in the bottom of the gun one angle fixed rotter is present.

Ethernet shield is helpful at the time of we are presented outside of the home we can easy to operate the power in our home. Camera used for the observing the surrounding and also fix the target both uses camera will be used. And we can used occupancy sensor that is use for alerting controller or observer if suppose that person mind is absent. In the bottom of the gun one angle setting rotor is presented. That is used for the changing the gun direction. Rotor is very helpful for the fix the target selecting.

Now let's start for implementation of this paper firstly we can concentrate on the connection of arduino uno chip and trigger on mission. Every trigger on mission has two connections one is +ve and other one is -ve. The -ve wire will be attached to the ground in power side ports. Other +ve wire will be connected to the digital side 3rd port by using the breadboard we can easily connected

Now comes to the programming side implementation. In this paper is implementing on the android platform because this program run on the smart phone. So defiantly we are developing the program in the android platform.

In this paper smart phone will be send the signal to the arduino uno chip in this chip in side one web server is presented and it have the capabilities to receive the signals request. The signal has mentioned the states of trigger.

By using the IP (Internet protocols) address of the chip and Ethernet server functionality programming will be developed. Mobile send the HTTP request in JSON (Java server on net) format signal will be send chip inside server will be receiving that signal and chip server will be work on the given states of trigger. After that for more user convenience we can create one button for changing the states of the trigger. In this button signal will be send on HTTP protocols format and this program will be run on the web server

This all the operating is going on by helpful the camera and rotor and occupancy sensor. By using those equipment we can protected our property very safety with low coast.

Results and discussions:

Fig 3: Angle setting gun.

In this above figure we can easily analysis what is the process is going on and how it is used total representation in the fig 3. It is very easy processing to control the operate from near and long distance. By using this problem we can save the money and time without tension. In this technology is very useful for all kind of peoples. Each and every second we can observe what's going on.

By using the camera we can easily observe that ways no need to waiting for security alerting information because all are visible. And without man we can operate by using the rotor object. It helpful for the save the human. And by using the occupancy sensor we can alert the observer or controller. This is additional future in this method. And final we can use some electrical mechanism that is useful for control the trigger. No need tension about the IoT basics etc... It is just

mobile operating. It can operate uneducated peoples also.

IV. CONCLUSION:

We hope in the border security force has used advanced technology more useful for the security of anything. In this advanced system we are used one camera for the observation the what is going on and one power control sensor is used that is used for the trigger on and also we can attached the one more sensor that is occupancy sensor. The occupancy sensor is used for the alerting the observer. If any human try to enter our border that will be giving the alert to the observer. It is very better for the observer brain absent in bottom of the gun one angle setting equipment is presented. That is used for the fix the target. In this methodology at less amount of cast we can give the more security and also it has less human energy. That means single person will be control number of guns. In this methodology is providing more security.

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