



THWART THE CAPTURING OF VIDEOS AND IMAGES IN UNAUTHORIZED PLACE THROUGH CAMBLOCKER

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Abstract: *Sensor network and mobile application are ubiquitous today. Mobiles are used for both legal and illegal process. Most of the people use the mobile in apposite manner but some of their used in bad comportment. For example, capture the videos in the theatre. We are proposing an automated system that will protect from video recording and capturing images in an authorized place such as theaters, temples, trial rooms etc., and also for women's safety. The proposed system consists of a sensor network and mobile application named as CamBlocker. This app will be inbuilt in each person's mobile. If the person enters into the range of the signal, then the sensor sense the CamBlocker application and activated the app. After the activation of CamBlocker app, that will automatically chunk the camera application in our mobile. The CamBlocker will protect the person to take unwanted images and videos. The person who tries to open camera inside the range of the signal the app will automatically close the camera and prevent from recording.*

Keywords: *Mobile Application, Sensor Network, CamBlocker.*

I. INTRODUCTION

Nowadays, cameras are used frequently. Since 2004, Japan was used 75% of smart phones [1]. From the past 2015, more than 90% of people using smart phones and it is expected swell to 100% of users in future. 83% of all phones have cameras [2]. The cram says that 90% of all people take pictures only done on camera mobile. The statistics from 2007 to 2015 will be shown in the Figure 1. Most probably they used their smart phones for capturing the picture and recording the videos. The working process of camera is similar to the function of the human eye [3]. Camera mobiles are mostly used for capturing memories that means we can take a picture of our friends or our family's trip to the beach, museums, temple etc. if we want, we can print the picture in papers or we can just view them on a systems, laptops, etc. We can also use it as a scanner and it is easier to take a snapshot and



upload the taken picture when we using the smart phone. In this paper, we proposed a new technology to block the camera application while recording in theatre, trial rooms, temples etc.

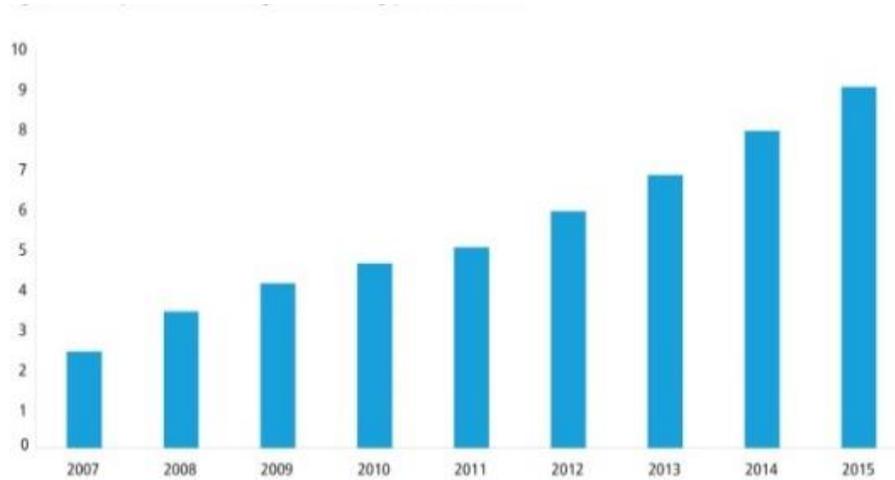


Figure1: Bar Chat

II. EXISTING AND PROPOSED SYSTEM

a) Existing System

In the existing system [1], they use two devices such as camera detector and camera neutralizer. All cameras contain CCD (charge coupled devices) lens and CMOS (Complementary Metal Oxide Semiconductor) sensor which are used to capture the picture and recording the videos. Only the CCD and CMOS sensor can operate the camera to snap the picture and videos. Camera detector is used to detect the CCD lens of the camera and the camera neutralizer used to neutralize the camera mode. So that the user can't able to taking the images and recording the videos.

b) Proposed System

There is a disadvantage in this existing system (i.e.) the cost of the devices is too high and it is only available in the aboard not in India. In this proposed system, we use the automated system that contains Mobile Application and Sensor Network with Signal Radiator for blocking the camera application in our mobile phones. An application will be provided to each person's mobile by default. Whenever the person enters into the range of the signal the mobile will be automatically paired with the signal. The application will protect the person from opening the camera in the mobile. Whenever the person tries to open camera



inside the theatre the application will automatically close the camera and prevent from recording. The comparison of existing technique with proposed technique will show in the Table 1.

Table 1: comparison of existing techniques with proposed techniques

Technique	Existing Technique	Proposed Technique
Blocking Camera	Camera Detector and Camera Neutralizer	Sensor Network with Signal Radiator and Mobile Application

III. HARDWARE

The Kit contains Micro Controller, Universal Asynchronous Receiver and Transmitter (UART) and Liquid Crystal Display (LCD) and Sensor Network with Signal Radiator. The Micro Controller needs power supply, which contains Step down transformer, Bridge Rectifier, Filter Circuit and Voltage Regulator. The Sensor is going too paired with the Mobile application and blocks the camera application. The block diagram and sample kit of our proposed system will be shown in Figure 3 and Figure 4 respectively.

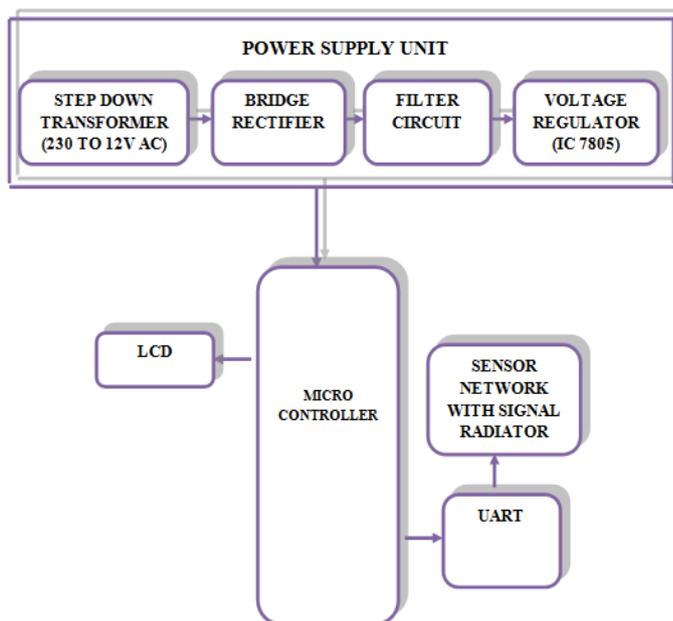


Figure 3: Block diagram

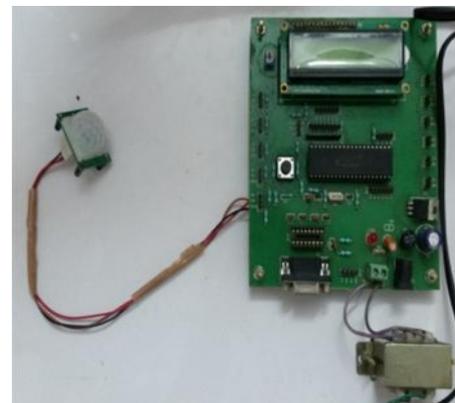


Figure 4: Sample kit

IV. Software

CamBlocker is the inbuilt application which is paired into the sensor network to block the camera application. To develop the mobile application, we used Android-Studio (SDK).



Figure 5: Smart Phone

V. Emulation

The Camera application will be blocked using CamBlockerApplication and Sensor Network with Signal Radiator. The block diagram of the Hardware is shown in the Figure 3. The Sensor Network can be worked with the support of Micro Controller. Micro controller is a small computer with an integrated circuit. It is used to controls the products and devices such as Automobile engine control system, Appliances, Remote system etc. There is an power supply for Micro Controller which consist of Step down transformer is used to convert Secondary voltage to primary voltage, it transforms 230 v to 12 v AC. Bridge Rectifier is used to converts the voltage AC to DC. Filter Circuit is used to remove unwanted frequency from the Bridge rectifier. Voltage Regulator is used to maintain a constant voltage level and also remove unwanted signal or noise. LCD is to display the status of the Micro Controller. UART is the universal Asynchronous receiver and transmitter, which is the computer interface to its attached serial devices. Sensor Network is activated with the help of Micro Controller and UART. The Sensor Network senses the mobile application which is inbuilt in our Mobile. Whenever the person enters into the range of the signal, the Mobile application is paired into the Sensor Network. Once it paired into the Sensor the camera application will be blocked. Consequently they do not take photos and videos. The working process of our proposal is shown in Figure 6.



a) **Working process:**

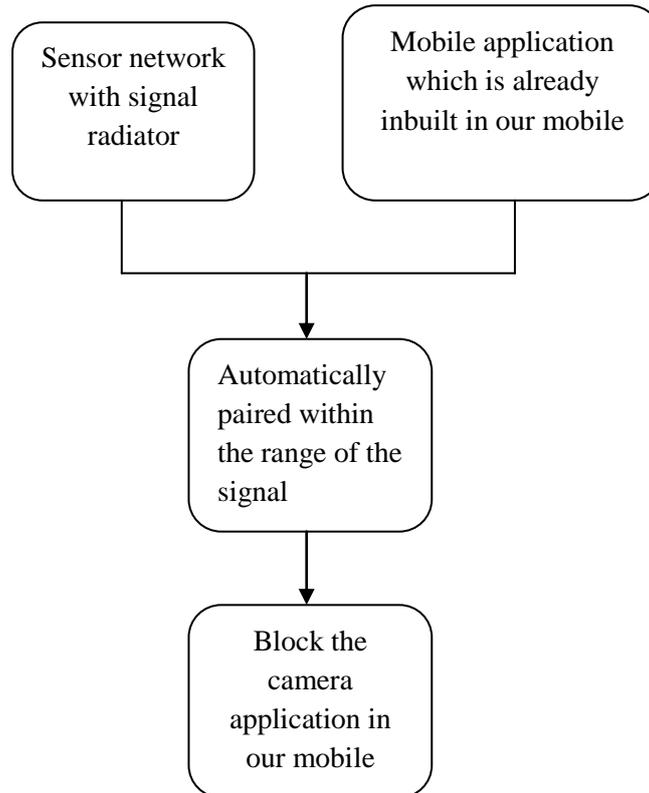


Figure 6: Working process

VI. CONCLUSION

The raise of mobile phones including camera is more ubiquity. Some of the people use the camera in appalling manner [4][5][6]. We propose an automated system to prevent the pirating of capturing image and video. This system contains the sensor network and mobile application. The mobile application will automatically pair with the sensor when the person who having the mobile, enters into the range of the signal. This automated system will be 100% useful for avoid the recording of videos in theatres, trail rooms, etc. In this approach, the coverage area is squat. This technique only used for blocking the camera which is in the mobile, not all the cameras like hidden cameras. The future work will be, to increase the coverage area like large environment and to block the hidden cameras also. This technique mainly used for the women's safety and has to be more useful for entities, such as people.

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