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ANTI-SPY TOOL DETECTION OF HIDDEN CAMERAS AND MICROPHONE

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ABSTRACT

This paper aims to help people maintain their safety and security by building an application with the help of which spy cameras can be easily detected. It finds application in courtrooms and other places where cameras are prohibited. The laser beam is retroreflected by the camera, and photos are taken, which are then used to detect the camera. Normal led light scans the area to be protected. Finally, colour segmentation is used to locate the green component that represents the camera's current location **Keywords:** location, camera, detect, application, protection.

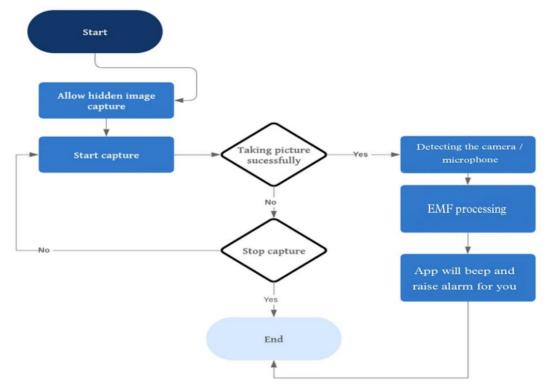
1. INTRODUCTION

A technology, the use of mobile phones has so become vast that they are allowed to use in private areas or restricted venues like offices, conference halls, malls, But even in terms of that, there are some places where they do not permit individuals to procure their portable phones inside a open or private zone, citing the argument "this can be a restricted place and please submit your gadgets to avoid any disruption." There are some fascinating creatures in society that exist just to "take advantage of the people and turn it into a trade." When it comes to security and security, women's lives play a critical part. There are cameras installed in some areas, and there is no doubt that if a spy camera is there, everything will be detected. The one that is highly paramount these days is amcorders or cameras at concealed places. The information is made open, posturing a danger to their lives

2. METHODOLOGY

By distinguishing concealed cameras, the Covered up Camera Locator can secure your protection. While staying at a hotel with your family, you may use the hidden camera detection app to locate any spy cameras installed in the rooms. If you're going to a public venue, such as a shopping mall, you may use a spy camera detector to examine the changing rooms for concealed cameras. If you are out of town with your family and sleeping in a private room or hotel room, you may use a hidden camera and hidden microphone detecting software to protect your privacy. Object Detector and Classifier with TensorFlow Library model Object Detection and Classification with TensorFlow Uses the Google TensorFlow Machine Learning Library model to detect object with your Mobile cameras in real-time, displaying the label and overlay on the camera image.

2.1 Flowchart-





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3. SYSTEM REQUIREMENTS

a. Software Requirements

Windows 11
XML and Android programming
Android(Java code)
android studio 2021.2.1 (Chipmunk)
TensorFlow 2.8.0

b. Hardware Requirements

Processor	1.6 GHz or Faster Processor
RAM	1.5 GB
Disk Space	4GB of Available Hard Disk
Graphic	DirectX 9-Capable Video Card
Display	1024X 768 or Higher Resolution

4. SYSTEM MODULES

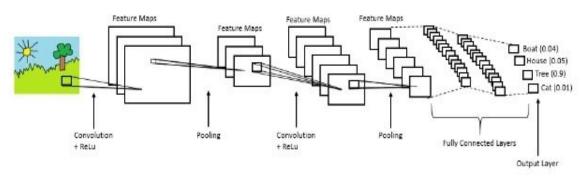
- 4.1 Emf detector This app examines the magnetic activity in the vicinity of the device. This programme will beep and raise an alarm if magnetic activity appears to be comparable to that of a camera, so you may examine further. Electrical devices have a magnetic field, which our software monitors with a magnetometer sensor to give you a sense of whether or not there are any possible electronic gadgets in your vicinity. Instead of utilising a manual listening device detector, this programme may be used to locate probable spy gadgets. The magnetic field value is determined by the magnetometer sensor's quality and location. Do not depend exclusively on its readings; instead, personally search the area for concealed cameras and microphones. To use the app, your phone must have a magnetometer sensor.
- **4.2 manual detection** What good is this software if I have to manually detect it? If the app detects magnetic activity that is comparable to that of the camera, it will alert you. If the app beeps, look for a lens. The app cannot detect if the suspect is wearing a lens, but your eyes can; similarly, the app cannot see magnetic/ electromagnetic activity, but it can analyse it! The app will assist you many times, but it may also fail at times, requiring your involvement.
- 4.3 Object detection Object Detection is intended with TensorFlow Library model Object Detection and Classification with TensorFlow Uses the Google TensorFlow Machine Learning Library model to detect object together with your Mobile cameras in real-time, displaying the label and overlay on the camera image. TensorFlow is an open-source end-to-end platform for creating Machine Learning applications. it's a symbolic math library that uses dataflow and differentiable programming to perform various tasks focused on training and inference of deep neural networks. It allows developers to form machine learning applications using various tools, libraries, and community resources. TensorFlow is that the leading library of all since it's built to be open for everyone. Tensorflow library consolidates distinctive API to built at scale profound learning engineering like CNN or RNN. TensorFlow depends on chart computation; it permits the designer to picture the advancement of the neural arrange with Tensorboad. This device is valuable to investigate the program. At long last, Tensorflow is developed to be sent at scale. It runs on CPU and GPU.



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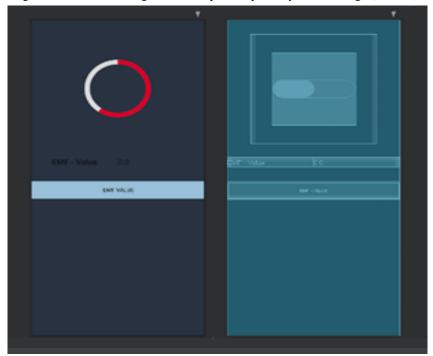
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Tensor flow Architecture

5. RESULTS

5.1 emf detector detecting the camera if the magnetometer speed expels beyond the range (80-120)



5.2 Manual detection



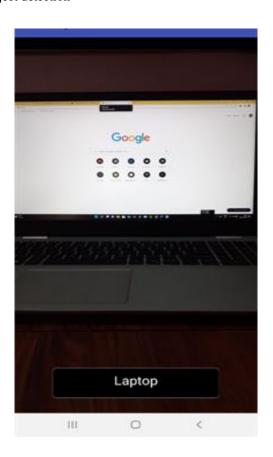


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5.3 Object detection -working of object detection



6. CONCLUSION

This paper surveys as an approach for detecting the cameras in the cluttered environments and can also be detected when lights turned off using flashes (an old practical method) for getting prevented victim from the Scandal issues. This application provides an assurance for maintaining the security to the top level extent in our lives

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