Dangerous Selfie: Effective Accident Avoidance with Multi Zone Secured Implementation with Movie Piracy Prevention System

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Abstract - This project is about restricting the people from taking selfies under certain conditions like when they are in movie theatre, railway station or tracks, and hill stations. It uses the help of the GPS that has been inbuilt inside the mobile phones which helps in detecting the location of the user. This project is developed for the android mobile users, which is a camera application that restricts the selfie under the special conditions. The android application will use the sensors present in the smart phone to find the parameters like sound, wind, etc. More than 1,500 reported accidents in US in 2020 were directly associated with pedestrians using smart phones, and this number is expected to double in 2020, thus it is an essential need for saving lives.

Key Words: Selfie, Android, GPS, Location, Sensors.

1. INTRODUCTION

In the existing system, more than 1,500 reported accidents in US in 2010 were directly associated with pedestrians using smart phones, and this number is expected to double in 2020. InfraSee, a system that is able to detect sudden change of ground for pedestrian mobile phone users. InfraSee augments smart phones with a small infrared sensor which measures the distance of the ground surface from the sensor.

In the proposed system, Mobile phone's angle of rotation is analyzed, overall mobile usage is analyzed. Our system will stop / Alert the user of no using the mobile phone during walking. In the modification, apart from proposed system we also analyze other major possibilities of getting accident. 1. Major accident is occurring because of taking Selfie in High Altitudes like Hill Areas, Our Android Application stops initiating the camera if user's Altitude is high from the Ground Level. 2. Usage of Mobiles during riding Bikes will also be a dangerous, so camera is not initiated if Environmental Air decibels are very high. 3. Camera is not initiated in Railway Station Zones because of High Voltage Current. 4. In Cinema Theatres usage of camera is avoided when surrounding Audio Decibels are really high. 5. During walking if Vehicle Horn is captured immediately Camera is initiated and background Vehicle photo is captured & shown to the user to get alerted along with Headphone Alert, so that accidents can be avoided.

2. MODULE DESCRIPTION

2.1 Android Application:

Android application is deployed for smart accessing of mobile. Android is an open source operating system. Anyone can update the open source application. We create camera application for taking selfie. Normally all camera application came with some additional editing styles. But our application came with some restriction to take selfie for security purpose as well as safety purpose. This application also has registration, so the users need to register their details.

2.2 Horn Detecting with Image Capturing:

In this module, we listen horn sound. People sometimes chatting on mobile during walking. At the same time someone used headphone also. This application listens horn sound via microphones. So, when horn sound detected then this application open and show one image in mobile screen. Using decibel, we are calculating the limit of sound image will triggered and buzzer alert on headset.

2.3 Location Based Camera Stoppage:

In this module, an application had some set of location information like longitude and latitude in database. Those locations are restricted area. People had no permission to take photos on those locations. So, when the mobile users try to take selfie in those locations our app automatically stop the camera. Mobile will identify the location by calculating longitude and latitude value. if prestored location is match with current location camera will stop automatically.

2.4 Altitude Based Camera Stoppage:

Altitude is a distance measurement, usually in the vertical or "up" direction, between a reference datum and a point or object. Height is the elevation above a ground reference point, commonly the terrain elevation. the vertical distance of a level, a point or an object considered as a point, measured from a specified datum; this is referred to over the radio as height. In this module, an application measures the altitude value during camera initiated. When an app user open camera to take selfie at the time of camera initiation automatically take the altitude value of the location. If suppose the altitude range high then this application stops the camera application. Avoid taking selfie at high altitude area like hills corner and building corner.

2.5 Railway Alert:

In this module, an application maintains the railway track's nearby locations. A user can never use camera application near to railway tracks. We also listening noise sound, because of someone try to take selfie during bike riding. So, if air noise is occurred the camera will be stopped automatically.

2.6 Theatre Alert and Decibel Detection:

In this module, an application listens decibel level in sound. If the sound is high it assumed as theatre. That time user can never use camera.

3. ARCHITECTURE

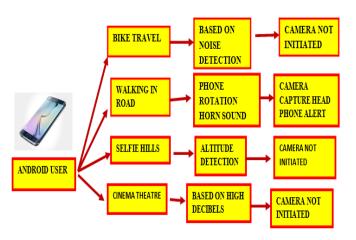


Fig -1: Architecture Diagram

4. PROPOSED SYSTEM

In the proposed system, Mobile phone's angle of rotation is analyzed, overall mobile usage is analyzed. Our system will stop / Alert the user of no using the mobile phone during walking. In the modification, apart from proposed system we also analyze other major possibilities of getting accident. 1. Major accident is occurring because of taking Selfie in High Altitudes like Hill Areas. Our Android Application stops initiating the camera if user's Altitude is high from the Ground Level. 2. Usage of Mobiles during riding Bikes will also be a dangerous, so camera is not initiated if Environmental Air decibels are very high. 3. Camera is not initiated in Railway Station Zones because of High Voltage Current. 4. In Cinema Theatres usage of camera is avoided when surrounding Audio Decibels are really high. 5. During walking if Vehicle Horn is captured immediately Camera is initiated and background Vehicle photo is captured & shown to the user to get alerted along with Headphone Alert, so that accidents can be avoided.

3. CONCLUSIONS

This project presented that the system provide security to the people and avoid more number of accidents. The application we had implemented will automatically stop the work of camera and people will not take selfie while they are in restricted area.

We have created a separate application for the camera, which restricts the selfies taken in dangerous areas like Railway Stations, Hill Station, while travelling in vehicle, and while walking using headphones and some restricted areas like movie theatres. In the future we like to implement these modules into the inbuilt cameras present in each of the mobile phones with better performance than this.

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