MULTIFUNCTIONAL BAG MONITORING SYSTEM

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Abstract - *People are travelling from one place to another place with important documents, things etc. facing many safety problems for luggage now a- days. So in such cases they feel handicap and need help to protect them. System suggests a new technology with one touch system using GSM, GPS so that person never feel helpless while facing such social problems or challenges like stolen a bag. Here we introduce a device which ensures the protection of luggage in bag. The problems we will overcome here using raspberry pi, GSM, GPS and camera, electromagnetic sensor, battery. If youre carrying a bag and in case bag is stolen and bag crosses geo fencing area automatically notifications will be send through SMS to owner at the same time the images will be captured and send to database so as thief can be identified. The bags location can be traced continuously through IoT System. As switch is placed opening and closing of the bag can be recorded in our database. By using face reorganization system bag can be opened. System consists of a android based application to trace the bags location. A bag tracking system will inform where your bag is and where it has been, how long it has been. The system uses geographic position and time information from the Global Positioning Satellites.*

***Key Words*: Raspberry Pi, Arduino, GSM, GPS, Electromagnetic sensor, camera**

1. INTRODUCTION

Bag security is a delicate issue and cannot depend only on insurance policies of valuable stuff, or human nature. Bag thefts and lost have been major causes of loss and extensive damage to owner that regularly need extreme care, sometimes often in emergencies. Thus, the needs for smart bag that rely on advanced GPS tracking system is important to safeguard your bag in the traveling. There are several advantages of GPS tracking devices to invest in and avoid thefts, possible attacks. To ensure safe passage in traveling even where traveling rout is not organized, Smart bag is a tracking system comes with several safety features, to monitor a bag on android application, alarm system, electro-magnetic switch, camera. Real-time data is provided with no intrusion to the valuable stuff that the smart bag carries. The system provides information regarding bag locations, position on the real time basis. This information can be collected by the RASPBERRY PI by using the different module and dispatch it to the monitoring station where it stores the information in the database and displays it on graphical user interface (GUI) which is user-friendly. This project consists of an android based remote bag disengaging system will provide elective, real-time bag location, mapping and reporting this information value and add by improving the level of service provided. A bag tracking system will inform where your bag is and where it has been, how long it has been.

The system uses geographic position and time information from the Global Positioning Satellites. Mostly Bag tracking systems are based on GPS and GSM. Short Messaging Service (SMS) is a feature available on all mobile phones which allows a small amount of text to be sent between one user and another. GPS consists of a network of 24 satellites in six different 12-hour orbital paths spaced so that at least five are in view from every point on the globe. Today, GPS has a wide range of other applications including tracking bag.

2. LITURATURE SURVEY

2.1 Baggage Tracing and Handling System using RFID and IoT for Airports

In this paper, the research to develop a working model of a bag- gage handling system using RFID tag and IoT which will track bags, assist in locating bags, alert staff if baggage not loaded correctly, identify a bag for security personnel to track. The main advantage of the system is that it consumes less time as the passengers dont have to wait for their baggage to turn up on the conveyer belt instead they are routed to different counters and ensures high security due to the unique identification number.

2.2 SMART BAG

In this paper, The system based on the microcontroller is found to be more compact, user- friendly and less complex. Though it is designed keeping in mind about the need for school kids, it can be extended for other purposes such as commercial research applications. Due to the probability of high technology (Android) used this system is well software controlled. The feature makes this system is the base for future systems. In future, we can use this idea of the smart bag to packing system in factories, shops, supermarkets etc. It consists of RFID reader interfaced with microcontroller chip to maintain the schedule as well as useful for bag verification, panic button, Bluetooth module and for tracking purpose. The communication process is served by using android application which will be on our android smartphone. Our phone is interfaced with Smart Bag. These features let you build a powerful and reliable product.

2.3 Child Safety Tracking Management System

In this paper, This is focused on the safety of children. To-day child safety is an important issue across the world as child crime is rapidly growing across the world we have discussed how a smartphone provides safety and monitoring

for the parents so that they can easily track their children according to their requirement. This application is developed on Android platform for this application the basic techniques. Required mentioned below:

(a) Geo-Fencing
(b) GPS (Global Positioning System)
(c) SMS (Short Messaging Service)

2.4 Smart Bag using Solar and RFID

In this paper, The environment in todays world is very stressful. Thus, there is a need for a Smart Bag is very useful in todays stressful environment. Which is exactly what our project aims at? We propose our very innovative RF-Id Smart Bag. The bag also has an RF-Id reader with microcontroller chip to check if the number of books matches the schedule for the day. Using the RF-Id we can also identify if any book is missing or if there is an extra book inside the bag

3. METHODOLOGY

The system provides information regarding bag locations, position on the real-time basis. This information can be collected by the RASPBERRY PI by using the different module and dispatch it to the monitoring station where it stores the information in the database and displays it on graphical user interface (GUI) which is user-friendly.

This project consists of an android based remote bag disengaging system will provide elective, real-time bag location, mapping and reporting this information value and add by improving the level of service provided. A bag tracking system will inform where your bag is and where it has been, how long it has been. The system uses geographic position and time information from the Global Positioning Satellites. Mostly Bag tracking systems are based on GPS and GSM. Short Messaging Service (SMS) is a feature available on all mobile phones which allows a small amount of text to be sent between one user and another. GPS consists of a network of 24 satellites in six different 12-hour orbital paths spaced so that at least five are in view from every point on the globe. Today, GPS has a wide range of other applications including tracking bag.

4. CONCLUSION

The system praposed this application is designed for locating missing or stolen bag. The solution represented in this paper takes the advantages of smartphones which offer rich features like Google maps, GPS, SMS etc. Some of the best works implemented in past rely on SMS based tracking which is not helpful to get an accurate location in our proposed system we have provided real-time tracking. We have added Geo-fencing and Emergency messaging services to enhance the system.

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