

ANTI-THEFT SMART WALLET

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Abstract - Now a days, smart wallet is a trend in a market. Comparing this Smart wallet with the commonplace wallet, which is available in the marketplace, Smart wallet has several features. We all forget our wallet at community places or at railway station or airport. So by using this wallet we can overcome the disadvantages of the normal wallet. By using smart wallet we can trace the place of the wallet, tick the pictures of the theft and many additional. The smart wallet can do all the thing that the typical dumb wallet does, however it does contain other features like mobile charging, anti-theft protection, etc. The smart wallet is always expensive than the regular carrier, but it is habitually well-made and looks glossy along with some extra tech incentive. So in this paper we propose a Smart wallet with features like notification to users, about for feature of our wallet and location of our wallet.

Key Words: GPS module, Bluetooth Module, Arduino Nano Board, Buzzer.

1. INTRODUCTION

Several of us mostly disremember our Wallet or sometimes become a target of Wallet theft too. Losing Wallet is a very excruciating involvement, so we are presenting a Wallet that almost follows you. Smart Wallet is the modern-day Wallet with GPS System involved in it. We just have to link our smart phone with our Smart Wallet and track it through the app. The Smart Wallet will be working in two manners namely Normal mode and Missing mode. When we are mislaid from the Wallet the Wallet enters into the lost mode. The creepiest feature is the built-in camera which snaps the image of the person who unlocks it in the lost and this image is directly sent on the Smart phone. In this paper we contemporary the Smart wallet with several unique features. The Smart Wallet is a trivial electronic device that supports an individual to store their personal information securely. It integrates the latest software to allow changed types of connectivity choices such as the internet and Bluetooth. The resolution of the device is to secure vigorous electronic information as well as money. However, unlike most menial proof strategies on the marketplace, the Smart Wallet proposals the choice for an specific to store incorrect password as well as photo of that particular person. This varieties it suitable for the user to carry around and it is practical in a wide range of situations. Other fascinating features of the Smart Wallet include an Biometric-lock that has password protection. The user-friendliness of the contents of the Smart Wallet is focus to a password request,

but it is possible to modification these settings to suit the predilections of the distinct. Therefore, this means that the proprietor can also select to store sensitive electronic information that is real-world in their day-to-day survives. As a gridlock for the safety features on the device, the Smart Wallet has a distinct system that permits the proprietors to upload their personal data. Among the assurances for the proprietors is the confidentiality of their data, but acquiescing their personal data is critical as it helps to trace it in circumstance it gets misplaced.

2. SYSTEM OBJECTIVE

1. Pair your wallet with your smart phone, via Bluetooth.
2. Get warning on your mobile if your wallet is out of range
3. Trace your wallet from your smartphone app by pressing the locate button. This will activate the buzzer on the wallet.
4. It increases Security and Control.
5. It also reduces Network Resource Costs.

3. LITRETURE SURVEY

Almost every one of us disremember our wallets at restaurants, offices, shops etc. Millions of people lose their wallets every single year, some tragic ones have been a victim of wallet theft too. Losing our wallet is always a worrying experience. The loss of valuable cash, the difficult task of abandoning of credit/debit cards & reapplying for government ID cards and many more. So we have developed the knowledge of Smart Wallet. This is not an innovative idea, for the implementation of Smart Wallet, the idea has existed for two years ago, by Azat Tovmasyan when he lost his wallet and disbursed over a month getting his lost documents reissued. This is yet an original plan for designing smart wallet with camera module, GSM-GPS module, and Bluetooth module for transmission of data. This idea is executed in Armenian. Similar kind of smart wallet by company Walli was implemented one year ago, this wallet involves card slot, long lasting battery, and passport. In this wallet there is hidden camera for captivating a picture of theft. We have furnished the smart wallet with numerous structures which perceive the misplaced wallet. Even with looking classically attractive, it really goes the additional mile. Hidden under the plastic exterior is a built-in power bank that offers charging. In

accumulation, it uses its connection to the app on your Smartphone to recognize when to activate. In the proposed system the Wallet will be working in two modes namely Normal mode and Missing mode. When we are away from the Wallet the Wallet enters into the missing mode. The creepiest feature is the built-in camera which snaps the image of the person who unlocks it in the missing and this image is directly showed on the Smartphone.

4. SYSTEM ARCHITECTURE

In this section we describe about the block diagram of proposed system of Smart Wallet. Each Module of the system is described as follows.

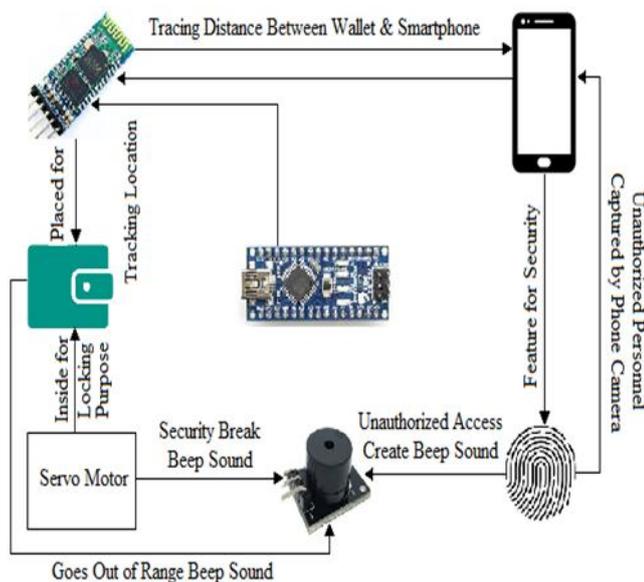


Fig. System Architecture

4.1 Mobile Module (Smartphone)

This is the system which is consolidate with the wallet with the help of Bluetooth Module. When the wallet enters in the lost mode the location of the wallet would be tracked with help of this module. The picture of the theft would be sent to this module. Bluetooth module is going to communicate with smart wallet with the help of this system.

4.2 Bluetooth Module

This module is basically handed down for Bluetooth Distance alarm system. At the start we have to pair our wallet with our mobile unit with the assist of this module. If the wallet goes far away the distance of 10m then the alarm in the mobile unit will indicate that wallet has entered in lost mode and also beep the buzzer. Bluetooth module HC05 is used in this system

4.3 Processor Unit

This is the main component of our Project. This component controls the entire system of Smart wallet. In Smart wallet we are going to using Arduino Nano Processor board. All the instructions are executed by this Component. All the instructions of user are managed by this component. Bluetooth module is controlled by this component.

4.4 Power Supply Unit

This part provides power supply to each and every modules in our project, Some module need 5V supply while some module need 9V supply voltage. So a fluctuating supply voltage is provided by this section.

5. DATA FLOW DIAGRAM

The processor unit is the main hub of Smart wallet system. This section controls the entire flow of a system of Smart wallet such as accomplishment of directives, controlling the instructions from the user etc. Thus we explain here working flow of entire system.

First of all we pair mobile unit with Bluetooth module. by using Bluetooth module we trace our wallet location suppose Bluetooth connection is lost or smartphone goes out of range, immediately the system Bluetooth module sent message to the smartphone and alert the user by turning on beep buzzer. If unauthorized person try to access the wallet at that moment the camera module capture the picture of that person who is trying breach the security of the wallet.

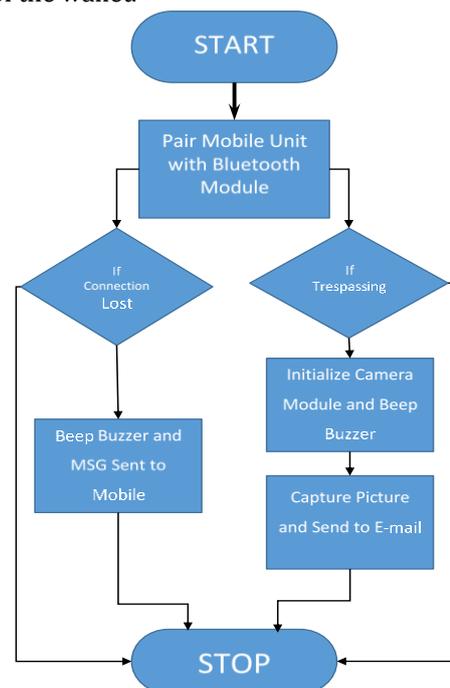


Fig. Dataflow Diagram

6. CONCLUSION

The developed model is a Smart wallet. The Smart Wallet outfits the use of real time system, which accounts for the proper working of the GSM and GPS system along with Camera Module System. As soon as the Wallet is unpaired with users Smartphone the GPS manages and the theft image is sent to the detailed phone number using GSM Module and WIFI module Smart Wallet also has nearly integral features like bio-metric security, position tracing, and many more. In future this proposed method can be enhanced by reducing the Smart Wallet size and make it more solid system. Many people will like it consequently going fast to buy.



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