HOME DOOR AND WINDOWS MONITORING SYSTEM

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ABSTRACT

Intrusion always happen if the door or windows of the house are left open. Apparently there is no warning system to monitor the door and windows state. The situation became more critical if there is a child in the house that tends to wander off to the street. It becomes worst especially at night or when the owner is on vacation where there is risk of breaking in. This paper presents the development of the Home Door and Windows Monitoring System to monitor the state of the door and windows by using Short Message Service (SMS) to interact between the system and the user. The system uses Arduino UNO to manage the operation, the GSM Shield to receive command and send message through SMS and the magnetic switch to trigger the system operation. The push button is use to gain access to enter or leave the house. The system is password protected and it can be set into three different operating modes. The Asking Mode where the user can ask the system about the state of the door and windows, the Notify Mode where the user can be notify about the state of the door without being ask, and the Secure Mode where the user can be alert if the door and windows are open. The prototype have been tested and functioned properly as to remind the user of the state of the door and windows of the house.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Many problems can occur if the door and window of the house are left opened. Burglar and intruder can get into the house to steal or do harm. The children in the house can wander off the streets because of the open door. The door and windows are very important because it is the only way to prevent something gets into the house and out of the house. Hence, a monitoring system to monitor the door and windows has to be developed and eventually able to alert user on the current status of the door and windows.

1.2 PROBLEM STATEMENT

There are three main elements of the security system which are the line of sight, the timing and the noise [4]. The line of sight is the lighting condition of the compound of the house. Burglar tends to enter a house with dark compound and have many blind spots such as unorganized plant. The timing is the time to get into the house and out of the