# PROJECT PROPOSAL

## PROJECT TITLE

Night Time Home security alarm and monitoring system

## INTRODUCTION

With the development of human kind, safety has become a most important factor in day today lives of people. Now a day's people tend to choose their residence mainly based on the security system present in the residence place. This factor has become more and more important in the present society, as the ways to break security systems are also improving with the development of new technologies. Therefore, a strong security system should be needed in order to ensure the proper safety of the properties and the lives inside the residence place.

Night Home security alarm and monitoring system is designed to ensure the safety of the house from external people at night time. This system only turns on in the dark and if it detects any movements through the sensor, it immediately send a signal to operate the alarm. At the same time a message will be sent to the owner of the residence immediately about the encroachment.

## **OBJECTIVES**

To ensure the safety of the properties inside the house at night time at a low cost.

To aware the owner about any illegal entries through mobile phone.

To aware the family members about any illegal entries through an alarm.

To get the help from neighbors and to pass the message about the illegal entries as soon as possible.

#### **METHODOLOGY**

In most frequently used security lamps, they turn on with presence of light but in this project we will discuss Home Security Alarm System which works when Night time only. In this system, security light only turns on when it is dark and when movement is detected at the same time a

message will be sent to the owner of the residence immediately. The light and the alarm turns on when it is dark and detected. In other words if there is light, security system is turned off when motion is detected.

For sending the message we are going to use NodeMCU wireless Wi-Fi Internet Development Board. For this process we are going to use the cloud communication system. For this purpose we have to use a specific software for the communication.

## **COMPONENTS NEEDED**

Arduino Uno board

ESP8266 NodeMCU

Light sensors

PIR sensors

Resistors

Alarm

DC Power supply

#### **GROUP MEMBERS-G2**

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