LASER LIGHT SECURITY

WHAT IS LASER SECURITY

LASER LIGHT SECURITY IS A SECURITY SYSTEM THAT USES A LASER BEAM TO DETECT INTRUDERS AND ALERTS THE USER WITH THE HELP OF ARDUINO AND GSM SHIELD SIM900 .THE LASER EMITTER SENDS A BEAM OF LIGHT TO THE RECEIVER WHICH IS THE LDR, AND WHEN AN OBJECT OBSTRUCTS THE BEAM, THE RECEIVER DETECTS THE CHANGE IN LIGHT AND TRIGGERS AN ALARM THROUGH THE ARDUINO MICROCONTROLLER. THE GSM SHIELD SIM900 MODULE IS THEN USED TO SEND AN ALERT MESSAGE TO THE USER THROUGH SMS OR PHONE CALL. THE SYSTEM IS ACCURATE, HAS A QUICK RESPONSE TIME, AND CAN OPERATE REMOTELY.

COMPONENTS USED

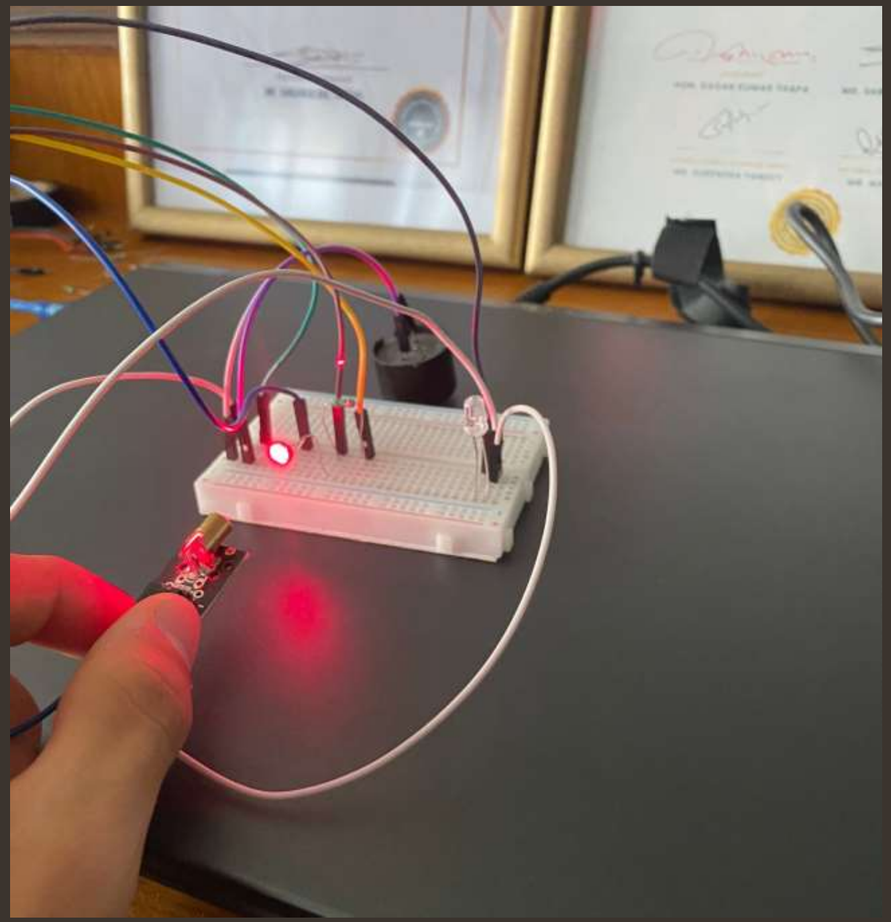
- AN ARDUINO UNO
- A GSM SHIELD
- LASER LIGHT
- BUZZER
- LIGHT DEPENDENT RESISTOR (LDR)
- BATTERY
- WIRES

WORKING PRINCIPLE

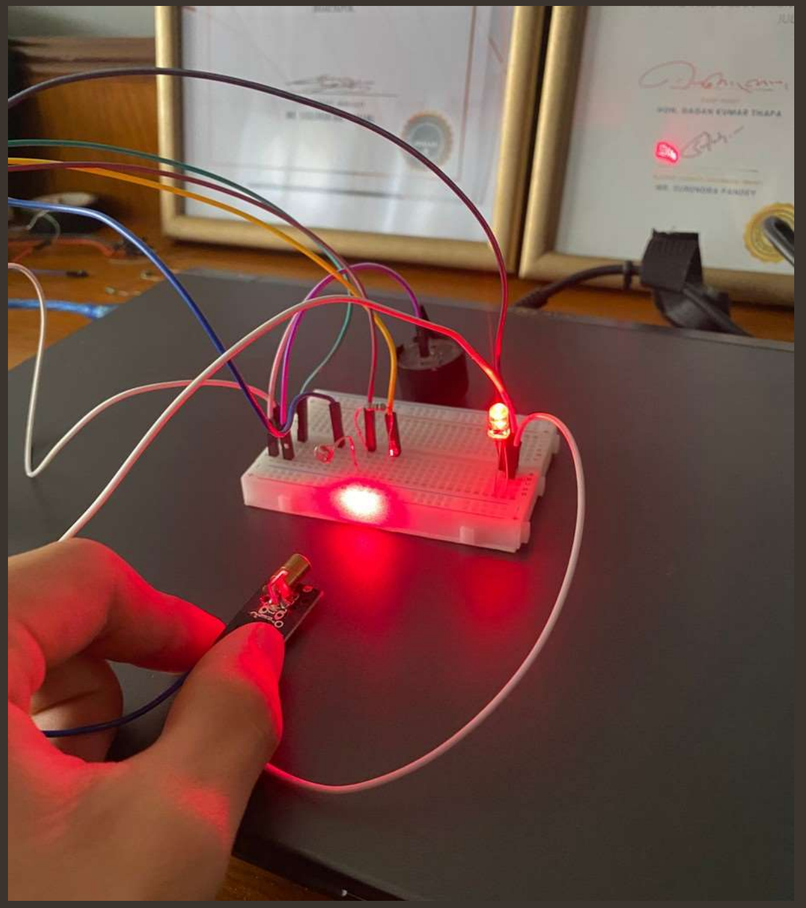
THE LASER EMITTER SENDS A BEAM OF LIGHT TO THE RECEIVER, WHICH DETECTS ANY CHANGES IN THE BEAM CAUSED BY AN INTRUDER. WHEN THIS HAPPENS, THE RECEIVER SENDS A SIGNAL TO THE ARDUINO MICROCONTROLLER, WHICH TRIGGERS AN ALARM AND SENDS AN ALERT MESSAGE TO THE USER THROUGH THE GSM SHIELD SIM900 MODULE.

PROGRESS

SO FAR, THE PROGRESS OF THE PROJECT HAS BEEN GOING SMOOTH AND ACCORDING TO THE GANTT CHART. THE PROJECT HAS COMPLETED ITS 5TH MILESTONE OUT OF ITS 10 MILESTONES. THE NEXT SLIDE SHOWS A PICTURE OF THE WORKING OF THE DESIGN.



THE TWO PICTURES SHOWS THE WORKING OF THE ALARM SYSTEM.



IN THE FIRST PICTURE WHEN THE LASER BEAM STRIKES THE LDR, THE ALARM IS NOT TRIGGERED AND IS SHOWN THROUGH THE LED LIGHT

IN THE SECOND PICTURE, THE LEDLIGHT IS TURNS ON WITH THE ALARMING OF THE BUZZER AS THE LASER DOES NOT STRIKE THE LDR

DEVELOPMENT DUE

WHILE THE MAJOR PART OF THE DEVELOPMENT HAS BEEN COMPLETED, THE AUTOMATED SMS FUNCTION HAS TO BE DEVELOPED WITH THE USE OF THE GSM SHIELD AND THE CONSTRUCTION OF THE BODY HAS TO BE DONE

THANK YOU!!