



Home Security Alert System – Project

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❖ PROJECT OVERVIEW:-

**THIS PROJECT IS A SMART HOME SECURITY SYSTEM THAT DETECTS ANY MOVEMENT NEAR A DOOR.
WHEN A PERSON OR OBJECT COMES CLOSE, THE SYSTEM AUTOMATICALLY TURNS ON A BUZZER TO ALERT YOU.
IT IS SIMPLE, EFFECTIVE AND VERY USEFUL FOR HOME SAFETY.**

How It Works:-

- 1. AN ULTRASONIC SENSOR IS PLACED ABOVE THE DOOR.**
- 2. THE SENSOR CONTINUOUSLY CHECKS IF SOMEONE IS NEAR THE DOOR.**
- 3. WHEN THE SENSOR DETECTS MOVEMENT:**
 - IT SENDS A SIGNAL TO THE ARDUINO
 - THE ARDUINO IMMEDIATELY TURNS THE BUZZER ON
- 4. WHEN THE PERSON MOVES AWAY, THE BUZZER TURNS OFF AUTOMATICALLY.**

THE WHOLE SYSTEM WORKS WITHOUT ANY MANUAL CONTROL — IT'S FULLY AUTOMATIC.



Components Used

✓ 1. ARDUINO UNO

THE MAIN CONTROLLER THAT READS THE SENSOR DATA AND CONTROLS THE BUZZER.

✓ 2. ULTRASONIC SENSOR (HC-SR04)

MEASURES DISTANCE AND DETECTS MOVEMENT NEAR THE DOOR.

✓ 3. BUZZER

MAKES A LOUD ALERT SOUND WHENEVER THE SENSOR DETECTS SOMEONE.

✓ 4. BREADBOARD

USED TO CONNECT ALL WIRES AND COMPONENTS EASILY.

✓ 5. JUMPER WIRES

USED TO CREATE THE ELECTRICAL CONNECTIONS.

✓ 6. POPSICLE STICK HOUSE MODEL

A CREATIVE MODEL HOUSE BUILT USING WOODEN STICKS TO GIVE THE PROJECT A REALISTIC LOOK.

THE SENSOR IS PLACED INSIDE THE HOUSE MODEL.

⌚ WHY THIS PROJECT IS USEFUL?

✓ HELPS PROTECT YOUR HOME

✓ VERY EASY TO BUILD

✓ GREAT FOR SCHOOL PROJECTS AND EXHIBITIONS

✓ A REAL WORKING SECURITY SYSTEM

✓ IMPRESSIVE PROJECT FOR A YOUNG TECH CREATOR 

❖ WANT THE CODE OR STEP-BY-STEP GUIDE?

⌚ NEED THE CODE?

FOLLOW THE YOUTUBE CHANNEL “TECHROBOTICS-AR” – THE COMPLETE CODE IS AVAILABLE THERE.

⌚ WANT THE FULL DETAILED STEP-BY-STEP GUIDE?

GET THE PREMIUM VERSION – IT INCLUDES:

- **WIRING DIAGRAM**
- **FULL EXPLANATION**
- **HOW TO BUILD THE MODEL**
- **HOW TO SET UP THE SENSORS**
- **BONUS TIPS IN ENGLISH**
- **LINK:-**
[HTTPS://WWW.YOUTUBE.COM/CHANNEL/UCVhDszWRcVS84PTI5zAMEQ](https://www.youtube.com/channel/UCVhDszWRcVS84PTI5zAMEQ)