Bal Bharati PUBLIC SCHOOL MANESAR

Activity name: Obstacles Avoider using Arduino

Class: VIII

Date: 11/11/24

Description: Students of class VIII developed an obstacle detection system using an ultrasonic sensor (HC-SR04) and an LED to demonstrate distance measurement and visual feedback. The sensor emitted high-frequency sound waves, detecting obstacles by measuring the time taken for reflected waves to return. When an object came within a predefined range, the microcontroller activated the LED as a visual alert. This project helped students to understand the principles of ultrasonic sensing, electronics, and programming. It also highlighted practical applications like robotic navigation and parking assistance, making it an engaging and educational hands-on experience.

Glimpses: