

Design and Implementation of a Bluetooth-Based Misplaced Object Finder Using DFRobot Arduino Interfaced with Led and Buzzer

Authors : Bright Emeni

Abstract : The project is a system that allows users to locate their misplaced or lost devices by using Bluetooth technology. It utilizes the DFRobot Beetle BLE Arduino microcontroller as its main component for communication and control. By interfacing it with an LED and a buzzer, the system provides visual and auditory signals to assist in locating the target device. The search process can be initiated through an Android application, by which the system creates a Bluetooth connection between the microcontroller and the target device, permitting the exchange of signals for tracking purposes. When the device is within range, the LED indicator illuminates, and the buzzer produces audible alerts, guiding the user to the device's location. The application also provides an estimated distance of the object using Bluetooth signal strength. The project's goal is to offer a practical and efficient solution for finding misplaced devices, leveraging the capabilities of Bluetooth technology and microcontroller-based control systems.

Keywords : Bluetooth finder, object finder, Bluetooth tracking, tracker

Conference Title : ICCEES 2024 : International Conference on Communication Electronics and Embedded Systems

Conference Location : Amsterdam, Netherlands

Conference Dates : January 15-16, 2024