

DESIGN of EARTHQUAKE SENSING and INDICATING SYSTEM

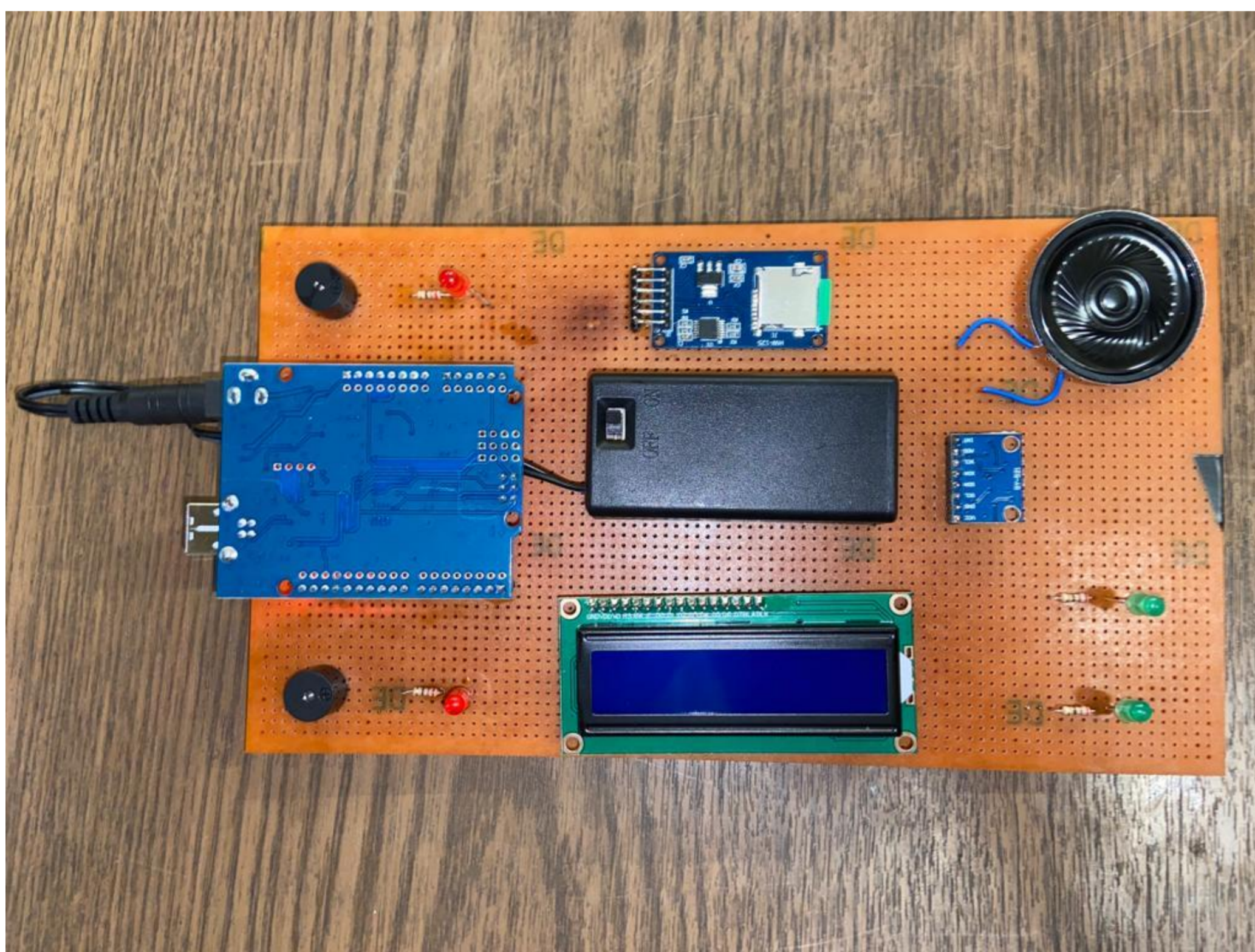


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Abstract

The earthquake system project was designed and produced to measure the magnitude of the earthquake and to give audible and visual warnings in case of an earthquake. A shock is detected and the detected magnitude is displayed on the LCD screen. Additionally, if the earthquake is greater than 3.0 magnitude, an audible alarm system and LED warning will be activated.



Main Components

- MPU6050 Gyro Sensor
 - Arduino Uno
 - LED
 - LCD Display
 - Battery
- Arduino Micro SD Card Module
 - Speaker
 - Buzzer

Short Working Principle of the System

The magnitude of the earthquake is determined by measuring the vibrations occurring during the earthquake with the Gyro Sensor fed by Arduino Uno. The determined magnitude is written on the LCD display, and a warning is given via LED and buzzer.

Conclusion

The design of the earthquake sensing and indicating system presented represents a significant stride towards enhancing human safety in seismic-prone regions. Through a meticulous integration of advanced sensor technologies, real-time data processing, and intuitive user interfaces, this system offers a solution for earthquake magnitude detection and timely warning dissemination.

References:

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