Research Capstone January 19, 2026

Group 5

DEVELOPMENT OF MEDICAL ALERT BUTTON SYSTEM TO IMPROVE CLASSROOM EMERGENCY RESPONSE AT ATEC TECHNOLOGICAL COLLEGE INC.

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PROBLEM STATEMENT

Medical emergencies in classrooms need immediate response, but current methods cause delays.

Teachers and students rely on phone calls or leaving the room, which is inefficient during emergencies.

Delayed alerts can endanger the health and safety of the person involved.

SOLUTION OVERVIEW

What is your prototype?

A mobile-based medical alert system using a smartphone and a web application designed for classroom emergencies.

How does it solve the problem?

The web-based system allows teachers or students to select the type of medical emergency, which triggers an alert sound and notification on a central monitoring system.

One key benefit:

Easy to implement and provides fast emergency alerts using existing devices.

PROTOTYPE DESCRIPTION

What the prototype looks like:

A smartphone displaying a web-based medical alert interface with buttons for different sicknesses (such as asthma, fainting, and dizziness), connected to a monitor with a speaker mounted on a cardboard base for audio alerts.

Main features:

Web-based system with selectable medical emergency buttons

Alert sound triggered when a button is clicked

Screen casting from phone to monitor for clear visibility

Loud speaker for audible emergency notifications

How users interact with it:

The teacher or student opens the website on a phone, selects the type of sickness, and the system immediately alerts the faculty through the monitor and speaker

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HOW IT WORKS

Step 1:
The teacher or student opens the medical alert website on a smartphone.

Step 2:
The user selects the type of medical emergency (e.g., asthma, fainting, dizziness).

Step 3:
An alert sound is triggered and displayed on the monitoring screen with a speaker, notifying the faculty immedi
ately.

TOOLS/ TECHNOLOGY USED

Software / Tools:

Web-based medical alert system

Screen casting / screen mirroring

Hardware:

Smartphone

Monitor

Speaker

Cardboard base for the receiver setup

Platform:

Web-based system

Mobile device

BENEFITS & USE CASES

Advantages:
Faster emergency notification
Easy to use and low-cost
No need for complex hardware

Who will use it:
Teachers
Students
School staff and faculty

Example use case:
A student experiences an asthma attack, the teacher selects “Asthma” on the website, and the faculty is immediately alerted through the monitor and speaker.

CONCLUSION/ NEXT STEPS

Current status:
The prototype is functional and successfully sends alerts using a web-based system.
Next improvements:
Add room number identification
Include more emergency options
Improve alert sound and interface design.

The medical alert system helps improve classroom safety by providing a fast and simple way to respond to medical emergencies...

THANK YOU