

SmartGuard: An Emergency Alert System for Android-OS

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The purpose of this project is to create a wristband that would be able to work with an average smartphone that would alert emergency contacts with a pre-set message, and include other features for the user if they do not have access to our wristband and its technology. The preset message would let those contacts know the user is in danger, as well as their location. As long as they are in danger it would continue to send out the location to the emergency contacts so they would be able to track the user's whereabouts and locate them with ease. This is important to people in need of protection, such as college students traveling through a new city or a parent who worries for their child. To begin creating this project knowledge on electrical engineering and computer science is required. First, begin by creating a simple circuit that includes a bluetooth module that connects to a button via an Arduino board connected to a breadboard. Following this, the connectivity of the bluetooth module will be tested along with the button through the Arduino program, by implementing a function that prints "Help!" when the said button is pressed. Following this, create a well designed application that encompasses the following features: a timer screen, touch screen, and settings screen. By creating this application the application was successful at alerting the emergency contacts of the user's location. From this we were able to conclude that the application was successful in completing its purpose.

Awards Won:

Fondazione Bruno Kessler: 1st Alternate