WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

ALCOHOL PERCENTAGE DETECTION USING BLUETOOTH TECHNOLOGY

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ABSTRACT

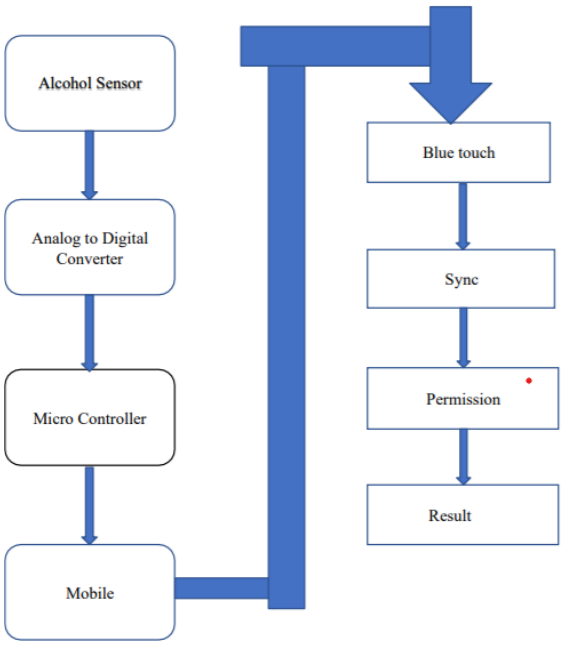
In this digital era, leading a luxuries life has createda trend and alcohol consumption added a spice to it. Due to the wide spread of consuming alcohol, slowly it become as a daily activity. As a result, health monitoring has decreased. So the further willnot be as our fantasy world. The "BLUE TOUCH" will be a barricade as a sparkle solution. Through the blue touch access, this device display's the percentage of alcohol consumed. As it is a non-invasive biomedical sensor, a painless test will be done. And by the immediate result, we can analyzeour situation. This “BLUETOUCH” is a specially designed mobile interface which will be used in detection of the alcohol percentage consumed by aperson. This main functionality is Bluetooth. This application has been designed by the connection ofinterfaces. Each interface that is attached here willbe working on its designed purpose to get the desired output. The result of the working interfacewill give access to the next interface to perform itsaction. As completing every interface, finally we will be getting the display screen of our expecting result.

Keywords: *Alcohol, Bluetooth, Android, Alcoholsensor, Android studio.*

1. INTRODUCTION

This project is used as an "Alcohol detector". Alertis sent on an Application installed on Androidmobile. This project can be used in Colleges, University campus, Industries and companies. The main objective of the project is to detect whether the person has consumed the alcohol or not. Alcohol sensor is used to detect thealcohol. Microcontroller sends alert to Androidmobile using Bluetooth transmitter. Person has to breathe out in front of Alcohol sensor. Generally this project should be installed on the entrance gate of college or company. If the alcohol percentage is more than the threshold value then microcontroller turns on the Buzzer immediately. Then an alert message is sent to Bluetooth encoder and then it sends it to Bluetooth transmitter. User needs to install an application on his/her mobile which is used to view these alert messages.

2. PROCEDURE



The Block Diagram represents how our project will work. Firstly, when we set the Alcohol sensor it will transfer the signals to Analog to Digital converter (ADC)then this converter converts theanalog signal into digital signal and then send to microcontroller after that it will send to the Bluetooth encoder followed by the Bluetooth transmitter finally we will get results in the Android mobile

3. ANDROID STUDIO

Android studio is one of the platforms which provide vast options in mobile application development. It is a user friendly application where this allow you to divide your project into units of functionality that you can independently build, test and debug.

The android studio is completely free software and we can use it easily in our pc's. This provides us a rich UI development environment with templates to give new developers a launching padinto Android Development.

Using Android studio we develop an app that provides the interface to perform the action ofchecking alcohol consumption levels. Dependingon the extent to which the victim has drunk it showscertain colors to indicate the severity.

It provides easier and effective way to perform the Activity. It can be learned and implemented quicklyin no time. But, it has Version Dependencies means it works based on the API level.

4. RESULTS AND DISCUSSION

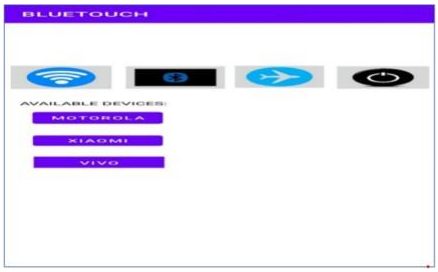
The result of this project is by using this blue toothtechnology which is connected to Alcohol sensor we can monitor alcohol percentage consumed by the person. This project is used as an "ALCOHOL DETECTOR". If alcohol consumption is detectedthen buzzer is turned on and alert message is sent to application installed on android mobile using Bluetooth technology. We can use this in colleges, companies, industries and university campus. The main objective of this project is to detect whether the person has consumed alcohol or not . An alcohol sensor is used to detect alcohol. The microcontroller sends alert to android mobile usingBluetooth transmitter.

5. FIGURES

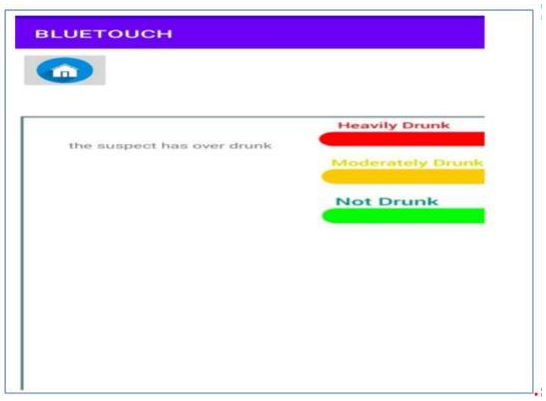

BLUE
TOUCH


BLUETOUCH
Sync Your Meter
>>>


BLUETOUCH


BLUETOUCH
AVAILABLE DEVICES:
MOTOROLA
XIAOMI
VIVO


BLUETOUCH
Device Permission Required
ALLOW
DECLINE



6. CONCLUSION

The microcontroller-based alcohol content detector is designed to prevent traffic accidents. This article describes the entire design through the description of hardware components and software workflows. Because this system is small, inexpensive, easy to use, and it is installed on the mobile, so it has goodeffect on preventing highly Alcohol consumed persons. We will be detecting the percentage of alcohol consumed by the person using the detection sensor and will be monitoring the results in our mobile through a mobile application i.e., blue touch application. Here we have used seven interfaces inthis mobile application to view the results. These interfaces are inter-connected with each other in this application

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