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HEART BEAT SENSOR USING ARDUINO UNO

Pavan Kumar P[1] , Nishanth J Rao[1] , Mrs.Sangeetha V.[2]

[1]UG Students, Department of Electronics and Communication Engineering, K S Institute of Technology, Bangalore, Karnataka, India
[2]Assistant Professor, Department of Electronics and Communication Engineering, K S Institute of Technology, Bangalore, Karnataka, India

ABSTRACT:

Monitoring body temperature, heart rate and blood pressure are the basic things that we do in order to keep us healthy.More than 2million people are at high risk of having heart attack. So in this way our project focuses on how we can utilize this problem and find a solution.

1 INTRODUCTION:

The heart beat rate is checked with help of the sensors like heart beat sensor.That is used to fix in human's finger and monitor every seconds.The sensed data is send to the controller if any variation is occur in the data the alert signal is send to the medical person. The heart rate is varied with respect to the human age, like the normal person having 72 bpm (beats per minute), the aged person having 90 bpm and the child having 120 bpm. In this heart rate is increased when the human doing an exercise it is increased and the rest of the time it is going to a normal condition.

2.LITERATURE SURVEY:

[1] K.S.Abbiramof KSCET, Chennai, Tamil Nadu, India proposed a developing frameworkwhich will diminish the demise rate because of heart assault by early location of heart assault. In our project we are usingg pulse sensor to quantify the pulse and offer the data. Thepulse sensor will ceaselessly screen pulse of a client. We effectively set the edge an incentive in theframework.TheArduino will check the code share the data with area of the client to the closest wellbeing division and to the relatives.

[2]Samar of Sharjah University, UAE, they proposed a system that checks for vehicleimpact through the identification of heart assaults that drivers may experience the ill effects of. They proposed a voice controlled mobile heart attack detection service display and a motioncontrolledshow. Then the fuse sensors provided its fame with clients andexpandingaccessibility.

[3]Arulananth T.S suggested in the respective paper that heart rate is measured by either theECG waveform or by sensing the pulse of the user. The withdrawal of a supply route of blood is constrained through it by the customary withdrawals of the heart. The beat can be felt from those zones where the course is near the skin. The project estimating by placing the finger tip on the pulse and Arduino microcontroller is performed.

3.METHODOLOGY:

In this heart-rate signals are selected from finger using sensor module which was amplified in order to convert them toobservatione. These signals were counted by a arduino module and displayed on the LCD. Arduino board is programmed with the code to run the proposed heart rate counting system using the correct software.

4.CIRCUIT DIAGRAM

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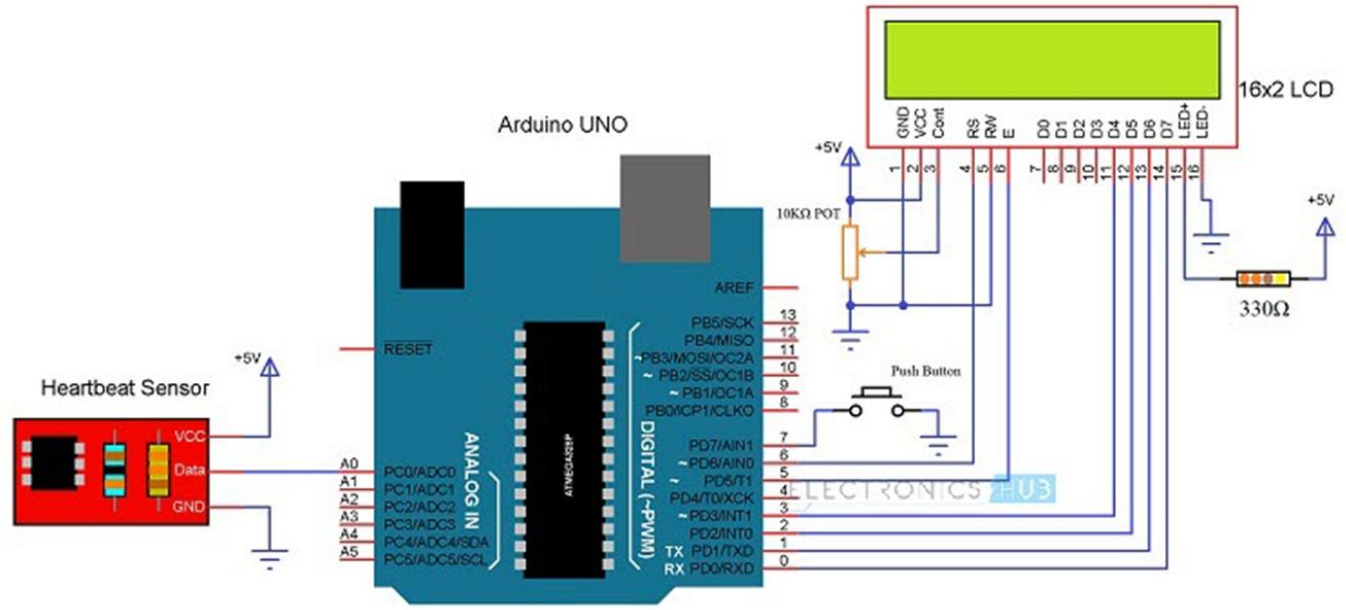
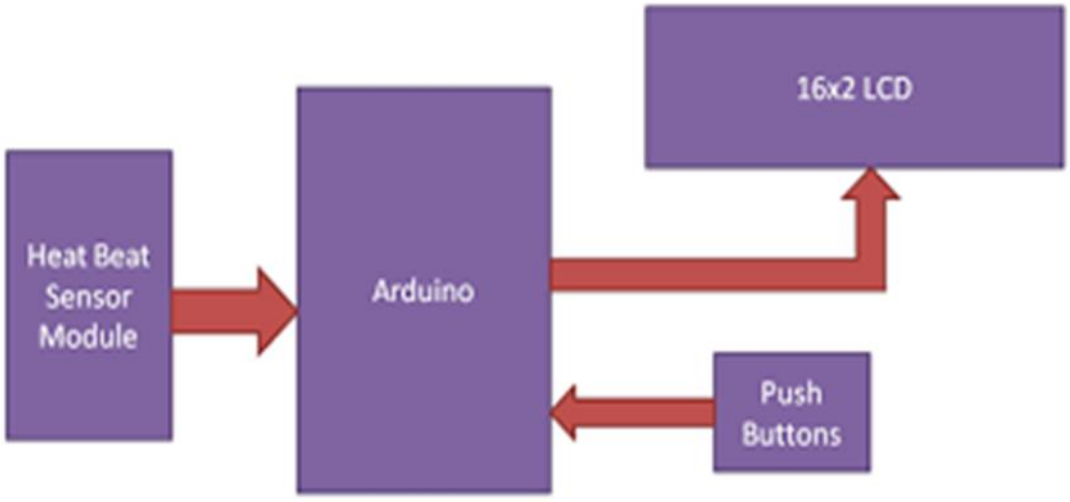


5 BLOCK DIAGRAM:



6.CONCLUSION:

The use of the project is to measure the patient health in every seconds and the data can be noted ,so the patient is no need to go to the hospital in any time. If the heart attack occur in the patient side the message is pass through the mobile to the doctor, and this is done though a comparison of sensor value and threshold value if any variation is occur to alert the user. Also the checking that the patient is available everywhere, so it is more helpful in rural areas user, and the output is given the accurate value and faster operation of this system.

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