

# People Mood Changing using Mobile App

R.Venkatesh, S.Arun Balaji, M.Gayathri, A.Muhilavan, P.Nevetha



**Abstract:** This System present a coordinated wearable framework that joins a pulse (HR) checking framework with a stage counter. This structure fit for wear and has a mobile application, and a node. The Data received from the wearable gadget is uploaded to a cloud server and that data can be viewed through a smartphone application that displays the information about the heart rate and the number of steps walked to the user. The smartphone application takes a survey about the user's favorites once at first when they register. Whenever the heart rate goes above 80 along with the steps inactive, the YouTube link will be sent as SMS to the registered mobile number in order to reduce their heart rate to normal. According to recent studies in India , the death rate in 2018 is 34 percent due to heart attack. The key cause or symptom of a heart attack is a rise in blood pressure if we can control our blood pressure properly by decreasing the mortality rate from 10 to 15 percent.

**Keywords :** HR monitoring system, step counter, wearable gadget, cloud server.

## I. INTRODUCTION

The progression counter is programmed identification of strolling steps taken by a personality's. It's a segment of human activity acknowledgment or better strolling location. Step checking is turning into a significant job in the medicinal services framework to screen the human's everyday schedule.[2] In the present time of innovation, step including system utilizing worked in sensors in a very cell phone has been turning into a dynamic and significant zone because of accompanying many inserted sensors, for example, accelerometer, spinner, magnetometer which give important data of client's specific situations and exercises. Numerous scientists are moved toward the progression including methods by an implicit type of sensors in cell phones with various perspectives.

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Be that as it may, there are numerous difficulties to inspire a substitution step counter method under progressively sensible conditions. These difficulties bolster user choice to attempt to accomplish this work. The inspiration is to chase out a precise advance tallying strategy without considering a few strolling paces and portable positions.[1] This System propose a progressively dependable advance recognition method for human strolling exercises and heartbeat by utilizing an Accelerometer sensor[3].

## II. LITERATURE SURVEY

### 1) Body temperature measurement for remote health monitoring system.

From the start, the temperature sensor gadget has been tried and furthermore the outcome was contrasted and business advanced thermometer. Estimation at the armpit utilizing an advanced thermometer was set as a result of the worth. The test outcome shows that the planned temperature sensor gives better than a business advanced thermometer when the estimation is taken inside the hand. Along these lines, hand temperature estimations were considered inside the investigations. Moreover, for a transportable gadget, the temperature is increasingly advantageous to be estimated close by. The temperature estimation gadget was connected to the patient's hand gathering while the specialist/clinician was watching the patient's conditions miles away through homesmartclinic site. The patients were observed for 6 hours. the objective of this task has been effectively accomplished. The framework gives solid estimations and incredibly easy to understand. The gadget and furthermore the framework is improved as far as estimating and the combination of greater estimation gadgets, for example, electrocardiography (ECG)[4].

### 2) Application and Design of Patient Temperature Acquisition System Based on Wireless Sensor Network

This investigation generally consolidates two areas: A zigBee remote system correspondence work test and the framework work test. In the ZigBee remote sensor[7] organize correspondence work test, the apparatuses should have been utilized are the equipment gadget CC2531 USB Dongle or CC Debugger (reproduction download) associated with the CC2530-EB improvement board. The product apparatus is Texas Instruments Packet Sniffer, IEEE802.15.4/ZigBee convention type, at that point it can catch ZigBee remote information parcel in the earth, and comprehend the working states of ZigBee arrange through the investigation of the information bundle. In the upper PC, input obtaining orders and watch the host PC interface. The test aftereffects of the correspondence capacity of the ZigBee remote sensor organize show that the accepting interface on the PC can show the temperature information transferred by the terminal hub, which demonstrates that the framework works typically, and has a decent correspondence work.

The structured patient's internal heat level procurement framework dependent on ZigBee remote system is little and has low vitality utilization, simple for patients to wear[9], and the precision of temperature obtaining is high, appropriate for being advanced in enormous scope medical clinics with countless patients.

### 3) Health Monitoring System Based on GSM

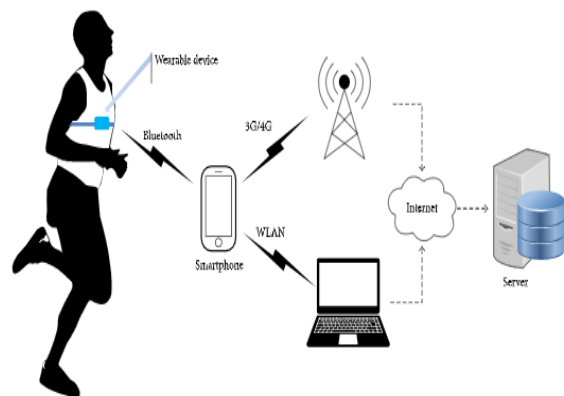
Through using this model circuit containing MCU, Global System for Mobile[6] , Modem, Liquid Crystal Display and other devices in the objective circuit where the messages can be exchanged with the associated remedial ace at defined time intervals, providing enormous sensitive measures to the patient care. The system is proposed to provide consistent heartbeat and monitoring temperature for human access, and to report through remote correspondence.

The sensor perceiving heartbeat Is interfacing with nearby LCD microdriver that displays the beat speed of the guts. The venture's goal is to reduce the cost of living in hospital and support. Wellness application test is really suggested asking for alarms to monitor hospital workers for clinical wellness if appropriate.

In different zones the gadget is upgraded as described below: After some time an Liquid Crystal Display with graphics displays a chart of the difference in heartbeat rate. All together, tone is inserted into the gadget that sonority is a yield on any case that gets a heartbeat. Sequential yield is annexed to the computer all together to send the guts speed to the PC for additional on the site or disconnected inquiry. This can push the patients to easily convey this contraption with them any place they are going.

### III. FRAMEWORK ENGINEERING

The proposed watching structure contains three areas: a remote wearable gadget[9], phone, and server. Figure (1) shows plan of the device. The wearable gadget fuses 2 cathode[8] touring paths for estimation in electrocardiogram hails, three-center point speed-up meter for estimation in signal phase and microcontroller (MSP430) with ultra-low capacity for getting data and computations. Transmission of data between portable contraption and wireless driven by methods for BLE. A mobile phone application was made to get customer info and shows heart rate, step check, practice power, velocity, division, and the calories utilization specific details. The sensor's data could be sent to the mobile phone ceaselessly; the waveforms of Electrocardiogram and phase indications may be in like manner appear on screen of the wireless. If structure recognizes an instance of over working out, the mobile phone alarm (sound and vibration) activates to alerts the customer. All the way heart-rate, moves count and GPS territories[7] are submitted to a central server (internet human administrations place) by methods for a 3G adaptable framework, to enable clinical staff to screen the development status of the customer.

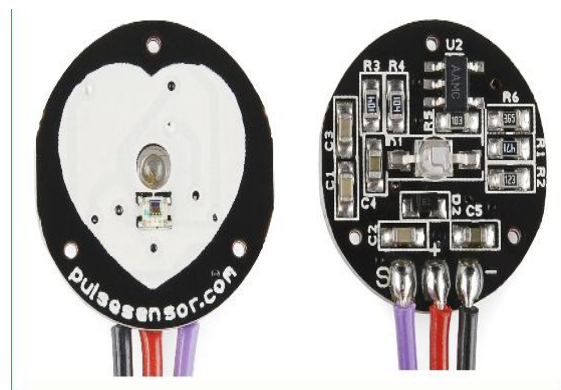


### IV. WEARABLE GADGET

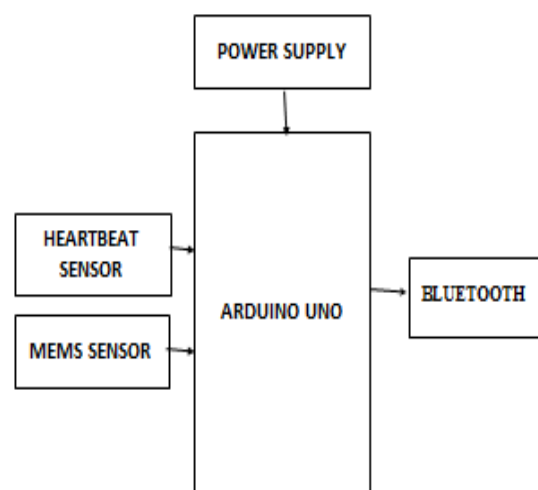
#### Heart Rate/Pulse Sensor

##### Details

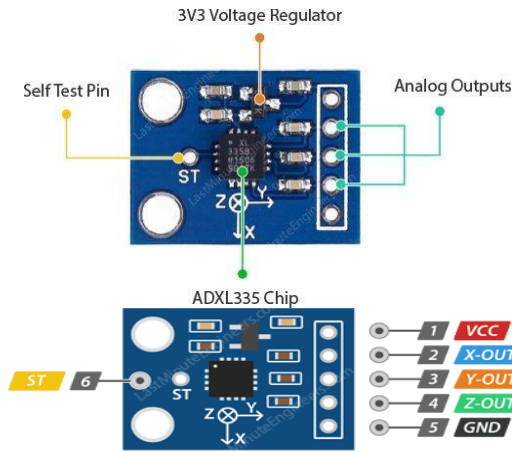
- Paint : Red
- Product : FR4
- Spanning power supply : 3.5V/9V
- Agrandissement : 320
- Wavelength: 609NM
- Material mass :15gram
- Box Measurements: 87\*74\*4.5mm



### V. SYSTEM ARCHITECHTURE



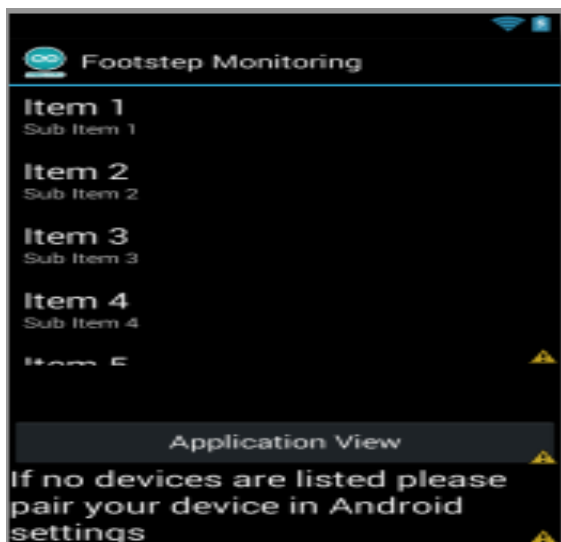
#### Hardware Overview of ADXL335 Accelerometer:



ADXL335 Pinout Last Minute ENGINEERS.com

Working Voltage	1.5V – 3.5V
Working Current	340μA (typical)
Detecting Range	±4g (Full Scale)
Temperature extend	–30 to +95°C
Detecting hub	3 axis
Affectability	280 to 340mV/gram (Ratiometric)
Stun Resistance	Up to 10,000gram
Measurement	4.2mm x 4.2mm x 1.47mm

## VI. IMPLEMENTATION



## VII. SOFTWARE DESCRIPTION

### Arduino IDE

The Arduino environment of integrated growth- or Arduino Software (Integrated Development Environment) - contains technology composing project planner, notification zone, book facilities, a toolbar with baseline capacity catches and menu progression. It interacts with the Arduino and Genuino systems to pass and speak with the services.

### MYSQL – BACK END

The MySQL Reference Manual covers most zones of MySQL use. In the event that you can't discover the answer(s) from the manual, you can get support by buying MySQL Enterprise, which offers far-reaching help and administrations. MySQL Enterprise additionally gives a far-reaching information base library that incorporates several specialized articles settling troublesome issues on mainstream database points, for example, execution, replication, and relocation.

### Eclipse Integrated Development Environment

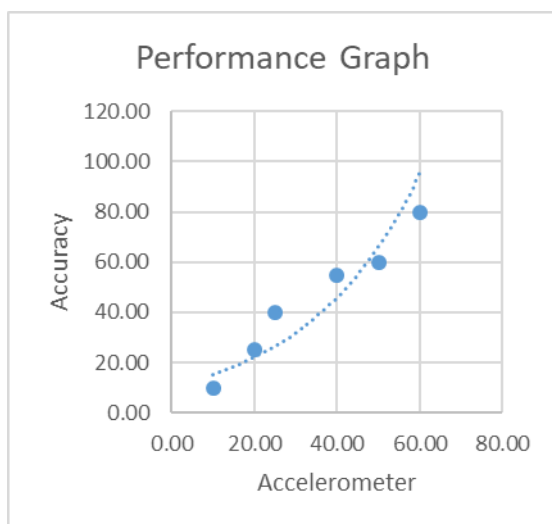
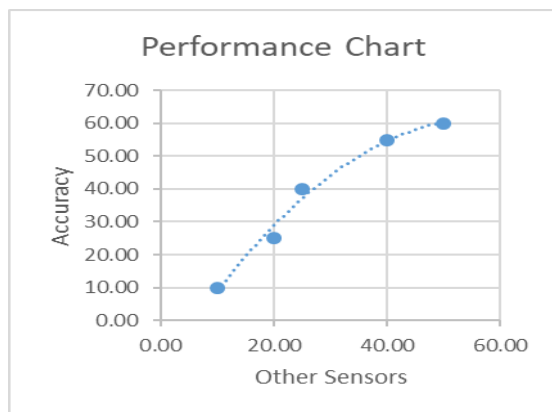
Eclipse is a consolidated progression condition (Integrated Development Environment) used in Personal Computer programming.



It incorporates an extensible workspace and a foundation module system to Earth Adjustment. Eclipse is completed by and large in Java and its basic use is used to render Java applications, even it may similarly to be found in other programming languages through patterns, like Ada, ABAP, C, C++, C#, Clojure, COBOL, D, Erlang, Fortran, Groovy, Haskell, JavaScript, Julia, Lasso, Lua, NATURAL, Perl, PHP, Prolog, Python, R, Ruby (Ruby for Rails Recall System), Rust, Scala, and Scheme. Progression conditions tighten up the Eclipse Java improvement devices (JDT) for Java and Scala, Eclipse CDT for C/C++, and Eclipse PDT for PHP, among others

### VIII. RESULTS AND DISCUSSION

Heart Beat	Step Count	Action
>90	<10	Alerts User
>90	>20	No Alert
<90	<10	No Alert



Compared to other technique they use more sensors to calculate blood pressure, their level of accuracy is low (60%), In our technique accuracy rate(80%), where we use only two sensors.

### IX. CONCLUSION

This report plots an integrated wearable framework for observing the Heart rate and the moves check. We incorporated a pedometer based accelerometer with 2 anode

electrocardiogram touring path to minimizing dimension and mass of the gadget. Bluetooth impedance encourages association with cell phones for the presentation recording and transmission of information in this manner upgrading the adaptability and ease of use of the gadget for wellbeing observing applications. The symptom of a heart attack is high blood pressure if we regulate our blood pressure properly we will reduce the death rate.

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