

Mini-Project – Sensor Lab (ITL603)

PROPOSAL

Smart Heart-Rate BPM Meter

T. E. Information Technology

By

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Shivam Bhosale	30
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Mentor:

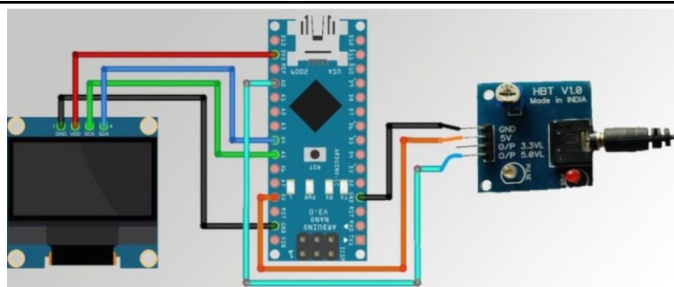
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Mini Project Proposal

(strictly one page)

Project Title	Smart Heart-Rate BPM Meter
Project Members (Mention Leader in Bold)	Parth Dali Harsh Bhikadiya Shivam Bhosale Pranav Dalvi
Situation/Problem/Opportunity/Need	There are many low-cost pulse sensors in the market that can be used to make a pulse BPM meter, but when it comes to accuracy and stability, the sensors are not reliable.
Problem Statement	To develop a heart rate monitoring system using an easy pulse sensor. And then generate details of the same using an esp wifi module on the user's device.
Objectives	To check the heart rate and display a detailed analysis of the result on a mobile application/website.
Method /Approach (Steps/Modules/Proposed Work/Architectural Dia.)	
Success Criteria (Advantages / Performance Metrics)	<ul style="list-style-type: none"> • Detailed analysis of the user's heart rate. • Simple interface • Separate analog and digital output • Low-cost setup • High and Low heart rate detection
Resources (People ,Time, hardware / software resources, cost, other)	Arduino Uno, Esp Wifi Module, Easy Pulse Sensor, Led Display, Breadboard, Power Supply, Connecting wires. Cost: Approx 1500.
Risk and Dependencies	<ul style="list-style-type: none"> • Timely monitoring required
Remark (can be continued as BE Project/Outhouse Project)	No.

<p>References (IEEE Format)</p>	<p>[1]how2electronics.[online].Available https://how2electronics.com/heart-rate-bpm-meter-using-easy-pulse-sensor-arduino/ (Accessed:Jan 23 ,2022)</p> <p>[2]https://www.circuitbasics.com/how-to-set-up-a-web-server-using-arduino-and-esp8266-01/(Accessed:Jan 23, 2022)</p>
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