TO WHOM IT MAY CONCERN

I hereby certify that TAMANA VERMA (211558) & ABHISHEK (225782) of Shaheed Bhagat Singh State University, Ferozepur has done Minor Project in the B-Tech 6th semester to fulfil the requirement for the award of degree of Bachelor of Technology in Electronics & Communication Engineering. The candidate worked on Smart Blood Oxygen And Heart Rate Monitor With Automatic Data Saving System project in the institute under my supervision.

The project aimed to develop a device capable of monitoring blood oxygen levels and heart rate, with an integrated automatic data saving system. We displayed excellent analytical skills and dedication, resulting in a functional prototype that efficiently monitors and records vital health data.

During the project, we was responsible for designing the system, programming the device, and integrating sensors. Their work led to a reliable product that records and saves vital health information automatically.

Wishing him/her a great success in life.

Name and Signature of the Supervisor

CANDIDATE'S DECLARATION

I, Tamana Verma & Abhishek, hereby declare that the project titled "Smart Blood Oxygen and Heart Rate Monitor with Automatic Data Saving System" is my original work. This project was carried out under the guidance of Mr. Chakshu Goel.

I confirm that the work in this project report is original and was done by me. This project has not been submitted to any other institution for any degree or certification. All the information and data presented are real and were collected through my own efforts. I have followed all the rules and guidelines provided by Shaheed Bhagat Singh State University, Ferozepur while working on this project.

I am grateful to my supervisor, Mr. Chakshu Goel, for their support and guidance throughout the project. I also thank everyone who helped me during this project.

Signature of the Student

This is to certify that the above statement made by the candidate's is correct to the best of my our knowledge.

Signature of the Supervisor

ABSTRACT

This report introduces a smart device that measures blood oxygen levels and heart rate, automatically saving the data for easy access. Using advanced sensors, the device ensures accurate readings of blood oxygen saturation (SpO2) and heart rate. It connects seamlessly to mobile devices and cloud storage, allowing users to securely store and access their health data whenever needed.

The automatic data saving system enables users and healthcare providers to review historical health information easily. This helps manage health proactively by tracking trends over time. The device can send alerts if readings fall outside the normal range, providing early warnings of potential health issues.

To enhance its functionality, the device uses smart technology to recognize patterns in the data and predict possible health risks. This makes it a valuable tool for continuous health monitoring, offering a simple, reliable, and effective way for people to monitor their vital signs and take preventive actions when necessary. This technology is particularly beneficial for individuals with chronic conditions or those needing regular health monitoring.

ACKNOWLEDGEMENT

I am highly grateful to Dr. Vishal Sharma, Head, Department of Electronics & Communication Engineering & Dr. T.S. Sidhu, Institute's Director, Shaheed Bhagat Singh State University, Ferozepur for providing this opportunity to carry out Minor Project.

I would like to expresses my gratitude to other faculty members of Electronics & Communication Engineering department for providing academic inputs, guidance & encouragement throughout the period.

The help rendered by Supervisor Mr. Chakshu Goel for experimentation is greatly acknowledged. Finally, I express my indebtedness to all who have directly or indirectly contributed to the successful completion of my industrial training.

Name of Candidate

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