Heartbeat Monitoring System

Prepared by Harsh Tamakuwala(16IT137) Tapas Vashi (16IT143)

Under the supervision of

Prof. Amit Parmar

A Report Submitted to
Charotar University of Science and Technology
for Partial Fulfillment of the Requirements for the
Degree of Bachelor of Technology
in Information Technology
IT445-Software Group Project-4(7th Sem)

Submitted at



DEPARTMENT OF INFORMATION TECHNOLOGY

Chandubhai S. Patel Institute of Technology
At: Changa, Dist: Anand – 388421

July-October 2019-20





This is to certify that the report entitled "Heartbeat Monitoring System" is a bonafied work carried out by Mr. Harsh Tamakuwala (16IT137) and Mr. Tapas Vashi(16IT143) under the guidance and supervision of Prof. Amit Parmar for the subject Software Group Project-4 (IT445) of 7th Semester of Bachelor of Technology in Information Technology at Faculty of Technology & Engineering – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, have duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred to the examiner.

Under supervision of,

Prof. Amit Parmar

Assistant Professor Dept. of Information Technology CSPIT, Changa, Gujarat.

Prof. Parth Shah

Head & Associate Professor Department of Information Technology CSPIT, Changa, Gujarat.

Chandubhai S Patel Institute of Technology

At: Changa, Ta. Petlad, Dist. Anand, PIN: 388 421. Gujarat

TABLE OF CONTENTS

Acknowledgement	i
Abstract	ii
Chapter 1 Introduction	1
1.1 Project Summary	1
1.1.1 Purpose	1
1.2 Scope	1
1.3 Objective	1
Chapter 2 System Requirements Study	2
2.1 User Characteristics	2
2.2 Tools & Technology Used	2
Chapter 3 System Design	3
3.1 Project Flow.	3
Chapter 4 Implementation Planning	4
4.1 Implementation Environment (Single vs Multi user, GUI vs Non GUI)	4
4.2 Coding Standards	4
4.3 Snapshots of project	6
Chapter 5 Limitations and Future Enhancement	9
Chapter 6 Conclusion	10
References	11

ACKNOWLEDGEMENT

We have found this rare opportunity to evince a word of thanks to all those who played a key role in the successful completion of our project. We are thankful to our Head of Department **Prof. Parth Shah** Sir for giving the chance as well as support for all the time being. And his able guidance and continuous encouragement made us work in all the challenges during project development.

We express deep gratitude to **Mr. Parth Shah**, assistant professor and internal project guide from Faculty of Engineering, CHARUSAT for their valuable suggestions, help and moral support. Finally, most of all, we thank our family members for their unconditional love, encouragement and support to complete our project work.

We also thank to all those who could not find a separate name but have helped directly and indirectly.

Abstract

- This project shares an insight of "Heartbeat Monitoring System", how it works, which system does it use what other features it possess and what else can we do and implement using it.
- Cardiovascular disease is one of the main causes of death in the many countries and in 1999, it accounted for over 15 million deaths worldwide. In addition, several million people are disabled by cardiovascular disease (WHO, 1999). This project "Heart beat monitoring by GSM technology" can be used in hospitals and also for patients who can be under continues monitoring while traveling from place to place.

LIST OF FIGURES

Fig 4.3.1 Arduino UNO and pulse-width Sensor	06
Fig 4.3.2 Heartbeat Monitoring Image-I	06
Fig 4.3.4 When finger is placed	07
Fig 4.3.5 When finger is not placed	07
Fig 4.3.6 Heartbeat graph generated	08