MINI PROJECT REPORT ON

HEAT STROKE DETECTION DEVICE

SUBMITTED BY

Krishnakumar Marapalli

Grishma Nagvadaria

Yash Patil

GUIDED BY

Mr. Swapnil Gharat

MANJARA CHARITABLE TRUST

RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI

(Permanently Affiliated to University of Mumbai)

Juhu Versova Link Road, Andheri (West), Mumbai-53

DEPARTMENT OF INFORMATION TECHNOLOGY

UNIVERSITY OF MUMBAI 2019

MANJARA CHARITABLE TRUST

RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI

(Permanently Affiliated to University of Mumbai)

Juhu Versova Link Road, Andheri (West), Mumbai-53

DEPARTMENT OF INFORMATION TECHNOLOGY

CERTIFICATE

Date: _____

This is to certify that, the mini project work embodied in this report entitled, *"**HEAT STROKE DETECTION DEVICE**"* submitted by "***Krishnakumar Marapalli*** *bearing Roll No.* A-537", "**Grishma Nagvadaria** *bearing Roll No.*A-547", "***Yash Patil*** *bearing Roll No.* A-551" for the award of ***Third year in Bachelor of Engineering (T.E.)*** degree in the subject of ***Information Technology***, is a work carried out by them under my guidance and supervision within the institute. The work described in this mini project report is carried out by the concerned students and has not been submitted for the award of any other degree of the University of Mumbai.

Further, it is certified that the students were regular during the academic year 2019-20 and have worked under the guidance of concerned faculty until the submission of this mini project work at ***Rajiv Gandhi Institute of Technology, Mumbai.***

Mr. Swapnil Gharat

Mini Project Guide

Dr. Sunil B. Wankhade

Head of Department

Dr. Sanjay U. Bokade

Principal

MANJARA CHARITABLE TRUST

RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI

(Permanently Affiliated to University of Mumbai)

Juhu Versova Link Road, Andheri (West), Mumbai-53

CERTIFICATE OF APPROVAL

This Mini project report entitled

HEAT STROKE DETECTION DEVICE

Submitted by:-

Krishnakumar Marapalli A-537

Grishma Nagvadaria A-547

Yash Patil A-551

In partial fulfillment of the requirements of the degree of **Third year in Bachelor of Engineering in Information Technology** is approved.

SEAL OF INSTITUTE

Internal Examiner

Date:

External Examiner

Place:

ACKNOWLEDGEMENT

With all reverence, we take the opportunity to express our deep sense of gratitude and wholehearted indebtedness to our respected guide, **Prof. Swapnil Gharat**, Department of Information Technology, Rajiv Gandhi Institute of Technology, Mumbai. From the day of conception of this project his active involvement and motivating guidance on day-to-day basis has made it possible for us to complete this challenging work in time.

We would like to express a deep sense of gratitude to our respected **Head of the Department**, **Dr. Sunil B. Wankhade** who went all the way out to help us in all genuine cases during the course of doing this project. We wish to express our sincere thanks to **Dr. Sanjay Bokade**, **Principal**, Principal, Rajiv Gandhi Institute of Technology, Mumbai and would to like to acknowledge specially for giving guidance, encouragement and inspiration throughout the academics.

We would like to thank all the staff of Information Technology Department who continuously supported and motivated during our work. Also, we would like to thank our colleagues for their continuous support and motivation during the project work. Finally, we would like to express our gratitude to our family for their external belief in us. We would not be where we are today without their support and encouragement.

Krishnakumar Marapalli

Grishma Nagvadaria

Yash Patil

Date:

Place:

ABSTRACT

Many people get heat strokes during the summers because they play in the sun for too long..Heat stroke can potentially be harmful to humans while exercising in hot environments. Many diseases are caused by heat or high temperatures, such as heat cramps, heat exhaustion.In order to prevent this dangerous situation; we designed a Wearable Heatstroke Detection Device (WHDD) with early notification ability.First, we used a number of physical sensors, such as the LM35 temperature sensor, heartbeat, and body temperature, to obtain medical data from exercise personnel. In addition, we designed risk evaluation functional components such as buzzer to detect the features of heat stroke for users. If a dangerous situation is detected, then the buzzer will beep for 15 seconds altering the user that he is getting a stroke.A notification will be popped and the SMS will be sent to the number that is being taken alerting that the use is under excessive temperature for a longer time.

Keywords: wearable device, heat stroke, LM35,temperature sensor, Bluetooth, Buzzer.

Table of Contents