

BMI, BODY TEMPERATURE AND HEART RATE MONITORING SYSTEM

A Thesis Project
Presented to the Faculty of the
College of Communication and Information Technology
President Ramon Magsaysay State University
Iba, Zambales

In Partial Fulfillment of the Requirements for the Degree Bachelor of Science in Computer Engineering

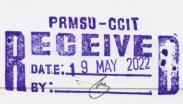


Bv

MARK ANTHONY BIEN T. CABAL MARTIN LOUIE A. CABAL VIRGILIO B.DUMAUAL JR PETE DION LEO B. ECLARINAL

May 2020

i





COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

CERTIFICATION

This thesis entitled "BMI, Body Temperature and Heart Rate Monitoring System", prepared and submitted by Mark Anthony Bien T. Cabal, Martin Louie A. Cabal, Virgilio B. Dumaual Jr. and Pete Dion Leo B. Eclarinal in partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Engineering, has been examined and recommended for Oral examination.

ENGR. BRYAN CARLOS B. ACAIN

Adviser

APPROVAL

Approved by the Panel of Examiners on Oral Examination on May 2020

ENGR. REGINA F. AMISTAD

Chairman

ENGR. RIOKY S. BARRERA

Member

ENGR. FROKAN G. CANTILLO

Member

ENGR. DIONISIO M. MARTIN, JR.

Program Chair, BSCpE

Accepted in partial fulfilment of requirements for the degree of Bachelor of Science in Computer Engineering.

MENCHIE A. DELA CRUZ, Ph.D.

Dean



COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

ABSTRACT

BMI, Body Temperature and Heart Rate Monitoring System is a project design that can measure the user's BMI, body temperature and heart rate and generate possible diagnostics based on the acquired health data. The system uses an ultrasonic sensor to measure the user's height, load cells to measure the user's weight, a pulse sensor to measure the user's heart rate and a temperature sensor to measure the user's body temperature.

The researchers have used the descriptive research method wherein the study focused on the current situation, and purposive sampling in determining the respondents of the study. The project development method used was the waterfall model.

This project was tested and evaluated on the following; The Evaluation of Device Quality and Acceptability of BMI, Body Temperature and Heart Rate Monitoring System as perceived by the respondents.

Fifteen respondents were involved in the testing and evaluation. Based on the evaluation, the respondents cast an overall average weighted mean of 4.06 with a qualitative interpretation of Very Good in terms of the Device Quality; the respondents cast an overall average weighted mean of 4.09 with a qualitative interpretation of Acceptable in terms of Acceptability.