



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

FINAL YEAR PROJECT REPORT

TITLE

INFANT MILK TESTING FEEDING BOTTLE

BY

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ABSTRACT

Milk is a multi-nutrient fluid and it is the primary source of nutrition for infants. It consists of 82% of proteins. The protein in the milk is classified into casein and whey protein. Milk protein consists of 82% of casein and 18% whey protein. These proteins are commonly found in the mammalian milk and the function of casein is to provide energy to human body, resistance (antibodies and others) and growth factor by building blocks of all living tissue.

The proportion of children who are currently breastfeeding decreases with increasing child age and cow/formula milk through bottle-feeding plays a major role in the initiation of the weaning process so many industries have come up with containers that emulate the breastfeeding environment for infants but contamination happens in any point of the milk storage.

The Infant Milk Testing Feeding Bottle tests for the quality of milk using sensor technology to ensure that the vulnerable infants are taking milk that is good for their health at any time with ease by monitoring the amount of casein in the milk, temperature and Carbon dioxide levels in the feeding bottle.

DECLARATION

I Mulepu Pollycap, an undergraduate student of a Bachelor of Computer Engineering solemnly declare that this research is my original work that has been done and prepared by myself. It has not been previously or concurrently submitted for the award of any academic degree, diploma or certificate of Busitema University or any other university. The materials borrowed from other sources and included herein have been properly cited and acknowledged. All information in this document has been obtained and presented in accordance with academic rules and ethical standards of the Busitema University Senate.

SIGN:

DATE:

APPROVAL

This is to approve that this Final Year Project Report has been fully and consistently worked on and submitted to the Department of Computer Engineering under the supervision of the undersigned supervisor.

SIGN:

DATE:

Mr. Bwire Felix

Department of Computer Engineering

Faculty of Engineering

Busitema University

DEDICATION

I dedicate this project report to my brother David Wanyange, my beloved mother Rose Nagudi Uncle Davis Wambwa and father Welishe Joseph for the love and support they have provided to me throughout this project period.

ACKNOWLEDGEMENT

Above all, I thank God the almighty for the wisdom and guidance from Him because nothing would I have accomplished without him.

I thank lecturers who supported and encourage me during this time in life and have always given me time for consultation. My project could not have been complete without the support of my classmates; Opiko Abraham, and all the other colleagues,

Lastly, I thank Busitema University Christian Union for the spiritual support at the time I felt lost and discouraged.

LIST OF ABBREVIATIONS

IDE	Integrated development environment
LED	Light Emitting diode
DC	Direct current
AC	Alternating current

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