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FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

FINAL YEAR PROJECT REPORT

TITLE: DOUBLE MODE PERSONAL SAFETY REPORTING SYSTEM

BY

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Submitted to the Department of Computer Engineering as a requirement of the award of a Diploma in Computer Engineering of Busitema University

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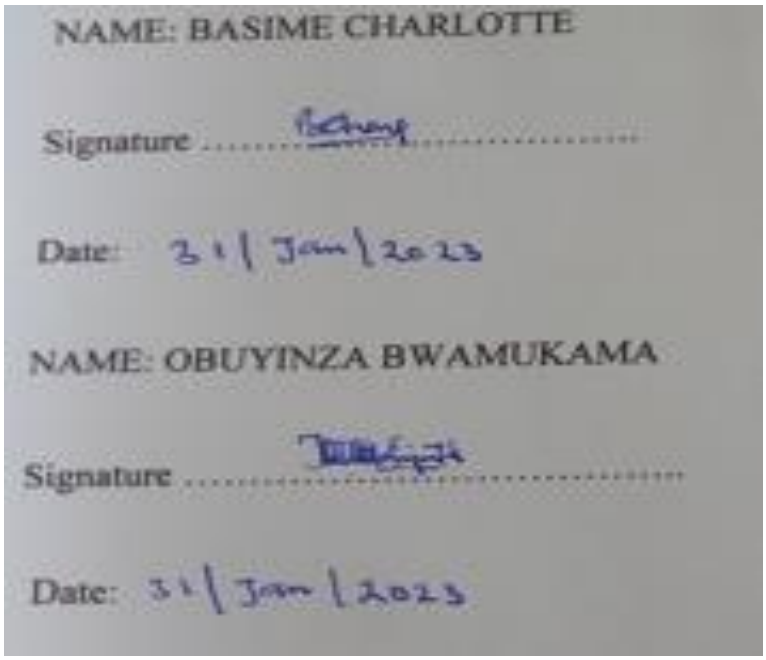
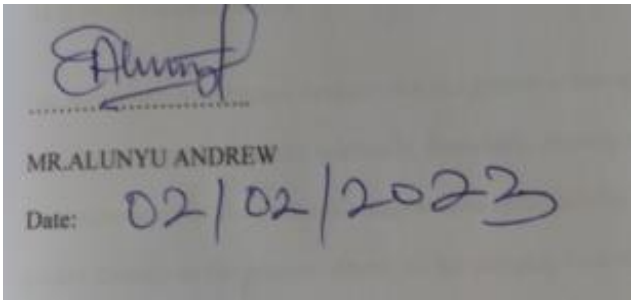
DECLARATION.

We do hereby declare that this project report was done by us and has never been submitted to any Academic Institution of higher learning for an academic award.



APPROVAL.

This is to certify that the project under the title “A DOUBLE MODE PERSONAL SAFETY REPORTING SYSTEM” has been done under my supervision and is now ready for examination.



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ABSTRACT

This report presents the design of a double mode personal safety reporting system. Human safety is a very important issue due to rising crime rates these days. This has however been defied due to lack of an effective means of communication as victims find it hard to reach out to their communication gadgets like phones, tablets and iPad when they are attacked hence people need a system that can ease communication among the people and authorities. The system consists of a switch for powering on the system, two buttons that power on the system ,two LEDs that indicate the mode the device is in, a GSM module that sends the alert messages to the authorities and guardians , an arduino nano microcontroller , a GPS module that traces the location of the user or victim. The objective is to develop a Personal safety system. This will help to ease communication.

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1 CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

The term incident means an occurrence that actually or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information or an information system. An incident may constitute violation or an imminent violation of law, security policies, security procedures or acceptable use of policies. A crime is an unlawful act punishable by state or other authorities.

With the high and increasing population in developing countries like Uganda where the current population is 48,632,084 people in 2022 and expected to grow by 2.71% by 2025, and 2.59% by 2035. This has led to an increase in unemployment among the population resulting into high criminal incidents like robbery, kidnap, rape, burglary, murder among others.

The crime rate in Uganda has been reportedly increasing annually. Uganda Police has released the Annual Crime Report for 2021, detailing the new Crime Plan, and how key priorities were tackled during the year. In 2021, there was a 0.1% general increase in the volume of crimes reported to police from 195,931 cases reported in 2020 to 196,081 cases reported in 2021[1].

According to Daily Monitor[2] Mr. Emilian Kayima, the police spokesperson by then (2018) said 25 cases were reported in three months, five ended up in the murder of the victims. Some of the victims include Charity Kyohirwe, 32, a resident of Masajja Parish in Makindye Division, and a 19-year-old girl Brinah Nalule. The trend overshot after the infamous kidnap of Suzan Magara, a 28-year-old cashier, whose body was found on the Southern Bypass in Wakiso District after 20 days in captivity. Daily Monitor reported that the Chief Magistrate's Court in Bubulo, Manafwa

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