POLITEKNIK SULTAN SALAHUDDIN ABDUL AZIZ SHAH

SMART DIGITAL MONEY BOX

NAME	REGISTRATION NO
Mira Arina Binti Arman	08DEP19F2014

JABATAN KEJURUTERAAN ELEKTRIK

SESI 2 2021/2022

POLITEKNIK

SULTAN SALAHUDDIN ABDUL AZIZ SHAH

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Mira Arina Binti Arman	08DEP19F2014

This report submitted to the Electrical Engineering Department in fulfillment of the requirement for a Diploma in Electrical Engineering

JABATAN KEJURUTERAAN ELEKTRIK

SESI 2 2021/2022

CONFIRMATION OF THE PROJECT

The project report titled "Design a Fingers Exergame to Improve Fine Motor Skill for Autistic Children Using Arduino" has been submitted, reviewed and verified as a fulfills the conditions and requirements of the Project Writing as stipulated

Checked by:

Supervisor's name : Pn. Mazlina Mahroji

Supervisor's signature:

Date :

Verified by:

Project Coordinator name :

Signature of Coordinator :

Date :

"I acknowledge this work is my own work except the excerpts I have already explained to our source"

1. Signature :

Name : **Mira Arina Binti Arman**

Registration Number : **08DEP19F2014**

Date :

DECLARATION OF ORIGINALITY AND OWNERSHIP

TITLE : SMART DIGITAL MONEY BOX

SESSION: SESI II 2021/2022

1. I, **1.** Click here to enter text.

   is a final year student of **Diploma in Electrical Engineering, Department of Electrical, Politeknik Sultan Salahuddin Abdul Aziz Shah**, which is located at **Persiaran Usahawan,40140 Shah Alam Selangor Darul Ehsan**. (Hereinafter referred to as 'the Polytechnic').

2. I acknowledge that 'The Project above' and the intellectual property therein is the result of our original creation /creations without taking or impersonating any intellectual property from the other parties.

3. I agree to release the 'Project' intellectual property to 'The Polytechnics' to meet the requirements for awarding the **Diploma in Electrical Engineering** to me.

Made and in truth that is recognized by;

a) **Mira Arina Binti Arman**) .
(Identification card No: - 000107140450)) ....…….
) **Mira Arina Binti Arman**

In front of me, **Mazlina Bint Mahroji** (Click here to enter text.)) .....……
) **Mazlina Binti Mahroji**
As a project supervisor, on the date:

ACKNOWLEDGEMENTS

I have taken efforts in this Project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them. I am highly indebted to (Name of your Organization Guide) for their guidance and constant supervision as well as for providing necessary information regarding the Project & also for their support in completing the Project.

I would like to express my gratitude towards my parents & member of (Organization Name) for their kind co-operation and encouragement which help me in completion of this Project. I would like to express my special gratitude and thanks to industry persons for giving me such attention and time.

My thanks and appreciations also go to my colleague in developing the Project and people who have willingly helped me out with their abilities.

ABSTRACT

Saving is a good practice for every individual who wants something by doing money savings in longterm. Most savers have difficulty making a regular commitment. Had trouble recording the amount of savings, kept saving until the desired target was reached and no withdrawal of money in the event of an emergency. The project proposes assistance in terms of calculating the amount of money saved, maintaining storage until it reaches the target and providing the opportunity for emergency withdrawals only once during the storage period. This box will be connected to the mobile phone using a wifi connection. It will tell the user, whether there is any saving or not on that day. it will also calculate the amount of saving each time there is an addition. The system is realized using a Node MCU, which is programmed to control all controlled circuits. As a result, the project managed to maintain the commitment of savers to stay saving and was able to attract teenagers to save with the included technology.

ABSTRAK

Menabung merupakan satu amalan yang baik bagi setiap individu yang menginginkan sesuatu dengan melakukan peyimpanan wang dalam jangka masa panjang . Kebanyakan penabung mengalami kesukaran dalam memberi komitmen yang tetap. mengalami masalah mencatat jumlah penyimpanan , kekal meyimpan sehingga mencapai target diingini dan tiada pengeluaran wang ketika berlaku kecemasan . Projek ini mencadangkan bantuan dari segi pengiraan jumlah wang yang ditabung , megekalkan penyimpanan sehingga mencapai target dan memberi peluang pengeluaran kecemasan sekali sahaja sepanjang tempoh peyimpanan. tabung ini akan di sambungkan ke telefon bimbit penyimpan dengan menggunakan sambungan wifi . Ia akan memberitahu pengguna, sama ada terdapat penyimpanan atau tidak pada hari tersebut . ia juga akan mengira jumlah penyimpanan setiap kali ada penambahan . Sistem ini direalisasikan menggunakan MCU Node, yang diprogramkan untuk mengawal semua litar yang dikendalikan. Hasilnya, projek ini berjaya mengekalkan komitmen penabung untuk kekal menabung dan dapat menarik minat remaja untuk menbung dengan teknologi yang disertakan .

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1 INTRODUCTION

1.1 Introduction

Nowadays many people were affected by the covid 19 pandemic in many ways and became a crisis in their lives. One of which is the crisis in economic and financial terms. This crisis occurred when a Malaysian was ordered to lockdown to stop the spread of covid 19. Many workers were laid off and most companies stopped operating and went bankrupt when the order lasted for 2 years.

1.2 Background Research

This is a news article taken from AstroAwani.com about this crisis, PANDEMIK COVID-19 that hit the whole world including Malaysia is a health crisis that threatens the survival and well-being of society. The International Labor Organization (ILO) expects the COVID-19 crisis to increase the unemployment rate especially in the services sector. The informal sector in developing countries is the most at risk. According to the ILO, of the 3.3 billion workforce globally, four out of five workers are affected by the closure of premises either partially or completely. On 9 April 2020, the Department of Statistics Malaysia released the findings of the Special Survey "Impact of COVID-19 on the Economy and Individuals"-the first round of which was conducted on 23-31 March 2020. Of the 168,182 respondents involved, 52.6% reported being highly affected by the COVID-19 pandemic which has so far claimed over 60 lives. Workers in the services sector, particularly food and beverage services recorded the highest percentage of job losses (35.4%), followed by the agriculture sector (21.9%) and the construction sector (11.8%). In February 2020, the Malaysian Employers Federation (MEF) estimated that 100,000 workers would be laid off if the

COVID-19 virus spread until the end of 2020. This news was published on : April 16, 2020 @ 10:44 AM .

1.3 Problem Statement

There are some problems faced by a person while saving that is the difficulty in calculating the money that has been saved, especially when the savings in a relatively large amount will certainly take time to calculate the money. Next , the commitment in saving to achieve the set target .Of course it is difficult for some people to keep saving every day even though the value of saving varies every day. Lastly, emergency withdrawals that cause savers to stop saving after taking all the money saved. It also causes savers to not be able to reach their savings targets

From these problems, this project can help savers in terms of counting and recording money each time it is entered. In turn, a direct connection to the phone will make savers more sensitive and at the same time be able to maintain their commitment to continue saving until they reach the desired target. Having a withdrawal percentage system can help savers withdraw money in an emergency without withdrawing all the money and savers can continue saving until the target is reached.

Lastly, who will benefit from this project is anyone who wants to save and wants to stay saving. Savers of all ages can get this benefit whether they have been saving for a long time or are just starting to save

1.4 Research Objectives

The main objective of this Project is creating a technological change on the usual traditional money box

More specifically the principle objective of this research are:

1. To design Money segregation using color sensor
2. To Transmit data using wifi.
3. To develop a smart digital money box using the mcu node.

1.5 Scope of Research

1. This Project is focusing on the improvement of common traditional money box by incorporating IOT technology.
2. The emphasis is on the use of applications to facilitate savers
3. The main controller is using mcu node that connect to blynk and to MyTabung Apk

1.6 Project Significance

Project usability is the ease of users in saving and maintaining a commitment to save. This money box will keep the money until the date set through the application on the mobile phone, where the user can set the date and view the saving data. one of the special features of this money box is the emergency money withdrawal that has been set by the application for users who need emergency money before the target date is reached

1.7 Chapter Summary

In this first chapter, has been discussed the background research for the original idea for the start of this project in this first chapter. Then identified the issues that are currently occurring. also showed the project's objectives and deleted the scope of the study acquired from the objective study.