FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITI TEKNOLOGI MARA

JOHOR

FINAL REPORT :

GREEN ENERGY GENERATOR

NAQIUDDIN AJMAIN BIN YUSDI NASIR

2012823014

MUHAMMAD IKRAM BIN AHMAD ZAIDI

2012631418

SUPERVISOR

PUAN NORHALIDA BINTI OTHMAN

TABLE OF CONTENT

ACKNOWLEDGEMENT

We would like to shout out our deepest appreciation to our supervisor, Puan Norhalida binti Othman for supervising us from beginning. She is like our backbone because support us many things until the project finished. With the aid of her comments and some suggestion given ti us, we succeed to finish our project. Even though we had hard time to meet, but yet she will find time to spend even a second to identify our progress on project.

Besides, we want to say thank you to all lecturers of the Electrical Engineering Department, UiTM Pasir Gudang which given us to learn more about all of things like software simulation circuit. Because of it, we reach until this stage right now.

Moreover, we would like to thank to Mr. Yusdi Nasir where he gave us many suggestion to improvise our project. His support is mean for us. And also I would like to thank to all friends who support us from beginning until the end of the project.

In addition, a deepest thank you to our beloved parents for their support, pray and love given to us as we had to face many obstacle to finish our project. We will always recall its debt.

ABSTRACT

All of us must have at least one mobile phone. In modern world, people normally have two smartphone to deal contact with work and others. The problem is, battery of smartphone will drop faster if we frequently use it in certain time. So this project is about portable green energy charger which can least their fear about percent of battery left. The idea came from power bank which commonly used by people nowadays to constant their battery of smartphone. But, the problem is power bank have limit power to be distribute to the smartphone (i.e. 20000mAh). So, the green charger generator will solved all sorts of consequential problems. Benefit of the device is it does not need to recharge itself because it can generate energy by itself. It is not depend on any electrical source to distribute power to smartphone. The device also can support until 12 volts where user can choose either want to 5 volts, 9 volts or 12 volts. A LCD will display the voltage chose by user.

CHAPTER 1

INTRODUCTION

1.1 Background study

1.1.1 Smartphone

Theodore G. Paraskevakos is the one who introduce the concept of intelligence, data processing and visual display screens into telephones which gave rise to the "smartphone." His concept is the devices that combined telephony and computing were presented in 1971, patented in 1974 and were offered for sale beginning in 1993. A smartphone (or smart phone) is a mobile phone with an advanced operating system. Smartphones typically include the features of a phone with those of other popular mobile devices, such as personal digital assistant, media player and GPS navigation unit. Most have a touchscreen interface and can run third-party apps, and are camera phones. Later smartphones add broadband internet web browsing, Wi-Fi, motion sensors and mobile payment mechanisms. In February 2014, 93% of mobile developers were targeting smartphones first for app development.

Nowadays, Malaysia is the third highest in the Asia Pacific and beyond developed countries like the United States and Europe, according to the latest report consumer research firm Nielsen. Malaysia registered a smart phone penetration rate of 80 percent after Hong Kong and Singapore (87 percent), followed by Australia (75 percent) and China (71 percent). Number of users who have more than one cell phone is also growing in the