

UNIVERSITI TEKNOLOGI MARA

**THE DEVELOPMENT AND
INTEGRATION OF SMART
CURTAIN AND ALARM CLOCK**

ZUHAYRA NASRIN BINTI ZAINUDIN

**Thesis submitted in fulfilment of the requirements
for Bachelor of Computer Science (Hons.) Data
Communication and Networking**

DECEMBER 2018

ACKNOWLEDGEMENT

Alhamdulillah, firstly, I would like to express my gratitude to my lectures Dr Siti Arpah Ahmad and also Dr Zolidah Kasiran for guiding us to complete this proposal of our project. They had provided us much useful information in accomplishing this project. I also would like to thanks my supervisor Sir Farok Hj Azmat who also leading me in completing this project. He has taught us in writing proper report. Plus he also provide me with tips on how to writing a proper report.

Not to forget my parent who always giving me moral supports and also money to buy all things to implement this project. Last but not least, I would like to thank my friend who always provides idea and helping me in completing this project. We had shared many useful ideas to complete this project proposal.

Thank you so much.

ABSTRACT

Everyone has different sleep personality. With a proven statistic, people still having problem with waking even with the help of alarm clock. Not only that, the use of Smart Automation has been widely used as the evolution of technology is increasing. In this project, it's specifically indicates toward heavy sleepers who might have problem with waking on time; moreover, this project helps to lessen chores by using the curtain automation. With some references from previous projects of Smart Curtain automation and Digital alarm clock, many solutions has been come out to evolving this new technology, furthermore, there are new features that have been added to make a difference between this new project with the existing one. After all, consideration of technology used to create this new device still accommodate with nowadays lifestyle.

TABLE OF CONTENT

CONTENT	PAGE
SUPERVISOR APPROVAL	i
STUDENT DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE : INTRODUCTION	
1.1 Project Background	1
1.2 Problem Statement	2
1.3 Objectives	2
1.4 Significance of study	3
1.5 Scope of the project	3
CHAPTER TWO : LITERATURE REVIEW	
2.1 Introduction	4
2.2 The development and integration of alarm clock and smart curtain	4
2.3 Research gaps	10
2.4 Method of implementation	11
2.5 Comparison of related works	13
2.5.1 Technique	13
2.5.2 Features	14
2.6 Summary	15

CHAPTER ONE

INTRODUCTION

1.1 Project Background

Everyone has their own unique sleep personality. Some people are light sleepers, they will awake when there is a noise or movement that was sensed. For heavy sleepers, they can block out the sound of their alarm clock ringing out in the morning unintentionally. This will lead to a problem for students or worker. According to Lance, student or worker come late to the class or office because of overslept (Lance, 2011). Research about students or worker that is heavy sleepers has been conducted openly because this can lead to major problem such as overslept. Besides that, alarm clock has been widely used by a lot of people all over the world to help them to wake up in the morning. However, based on the study most people hit the snooze button at least once. Consequently, it will lead to overslept and will effects the performance of their work such as punctuality. In addition, punctuality is an important element in working environment. Come late to class also is an important issue that draw the attention of many researchers as good time management is essential to success for students at their courses (Sultana, 2013). As for worker, punctuality is also one of their components for good performances at their workplace. Because of that, wake up early is very important for many reasons. In other words, this project is focusing on the scope that concentrates on the integration of alarm clock and smart curtain to help user wake up in the morning.