SMART KEY USING KEYPAD

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ABSTRACT

Final project is the part of the course structure that needs to be taken by student that is in the final years. This project has been divided into two that is called Project 1 (KEU 280) and Project 2 (KEU 380). The main purpose that students have to take this course is to give them opportunity to test their skills and to gather all the knowledge that they have been studying for these few years. From this kind of course, we can learn the practical way of doing the project and figure out the best way to improve them for the purpose of using them in the future.

Nowadays, the rapid changes in quality of life require new technologies to fix with them. It is important to design new system that can make everything as simpler as possible to operate. That why we choose the project base on keypad. This equipment has been invented and is now has been use in life and become the important thing to people. We realized that this course is to train the students to be familiar with making a certain project.

A smart door using keypad is designed circuits that been created to make life easy in everyday life. From that, we design the circuit that can open and lock the door with only pressing a few codes. This circuit is connected the 'Programmable Digital Coded Lock' to the magnetic switch. Actually this circuit is normally closed. With pressing three secret code, the door will be open. The proposed of this project is to open the door using 'Programmable Digital Coded Lock' and the magnetic switch will free the latch when the pin code is pressing.

In this report, a detailed description of the components used to implement the circuit together with the explanation of how the circuit is operating.

CHAPTER 1

INTRODUCTION

Nowadays the human always thinking about how manage and make their life more easier. Besides the science and technology has now human can do anything for their life. Day by day human always busy with their job and the time was a not enough. From that we take alternative to make our project Smart key using keypad that can help the consumer to get the comfortable to control whatever devices they want which press three codes only. The purpose of this project is to produce an easy way to open and lock the door that is simple and easy to use.

By using our project " Digital Coded Lock" the customer will be save their energy and time. From this project, we also can know certain thing when the circuit operated. It also containing the function of every electronic component that use in our project.

1.1 Background

Keypads for door access control were among the early mechanical and then electronic security devices with pushbuttons first driving a door bolt, much like a combination lock. Over the years, the devices have evolved into flexible electronic and computer-controlled keypads. Today, advances center on dual technologies that bring together an electronic keypad with a proximity card, smart card or biometrics function. There are hundreds of thousands of installed keypads, even in the face of nifty card access control systems. There are four primary reasons for the continued popularity of keypads:

- They are easy to use;
- Some keypads can complement mechanical keys and keyways in a smooth transitions;
- The keypad approach can have cost advantages over card access systems; and