

# A CRITIQUE PAPER OF THE DEVELOPMENT OF MICROCONTROLLED DIGITAL TIMER SWITCH FOR ELECTRONIC DEVICE

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**Abstract:** The purpose of the study is well recommended because they include the information about how and why they did the study. Composition of the system of the prototype is also stated giving the readers so much excitement resulting them to be more interested about it. The recommendation part is well said for it is easily to understand and straight to the point.

Poor grammar, redundancy of words and not using the correct punctuations are the negative part of this section.

**Keywords:** Microcontrolled Digital Timer Switch, Electronic Device.

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## I. INTRODUCTION

In this chapter, shows the foundation, the formulated theoretical scheme of the research study, but introduction refers to state the general field of interest, they make only what the process had done.

### **a. Background of the Study**

In the background of the study they mention of the subject matters in the following chapter 2 review of the literature and the methodology in chapter 3. It contains summary of social concerns and unsolved issues to distinguish their thesis as a solution in the problem. The focus of the background of the problem is where a gap in knowledge is found in the current body of empirical literature. Some of the terms in this part are not include at definition of terms.

### **b. Objectives of the study**

General objective contains a definition of what are need to study. The researchers said that they will develop a circuit use micro controlled timer for controlling the supply of various electronic devices and appliances to avoid unnecessary excess power consumption. some of their objectives need to change some words because their have a different meaning.

### **c. Significance of the Study**

The researchers have an economical value in this device. So that any users of this device are be satisfied. Most likely in the company office to reduce their unnecessary excess power consumption.

### **d. Conceptual Framework**

Need to be specific by putting materials in input. Adding in to output "Development of"

### **e. Scope and Limitations**

The researchers gave an clear statement on their study.

## II. LITERATURE REVIEW

### *a. Conceptual Literature*

Concept of timer switches are simple after a certain period of time has elapsed the light turns off and the amount of time depends on the switch and its options appliances can also be controlled using an smartphone.

### *b. Related Literature*

## III. METHODOLOGY

### *a. Research Method*

This section provides a good self-explanatory chart that makes it easier for the future readers to understand the different types of research. It helps the reader to fully understand the path used by the researchers.

On the other hand, it was not stated which specific area on U-Belt was used for this study because some areas in U-Belt were not flooded. Some areas have adequate drainage system.

### *b. Time and Place of the Study*

This section should state when the study was conducted, starting from the preparation of the outline, data gathering, surveying to writing of manuscript.

### *c. Data Gathering Procedure/Material*

Internet sites and books were mentioned in this section but only the books that was used were specified by the researchers. They should have cited at least two of the sites used.

## IV. RESULTS AND DISCUSSIONS

### *a. Design Presentation*

The design of each materials and equipment are well explained but not well presented. Each and every materials and equipment are clarified and informative. The only thing is it is not presented well, some punctuation marks are not place properly and lastly some grammars are wrong.

### *b. Design Considerations*

They considered every aspect needed like the dimension's strengths and effectiveness of their designs, the cost effectiveness of the materials they used, the availability of the materials and equipment they will use, and the perspective of the passengers. They figured an alternative way of designing it and alternate material to use. The only wrong things are some grammars, missing units of length in their statements. Lastly, the statement of the problem should be in Chapter 1.

### *c. Test Results*

It has a complete set of trials and data that are needed but it is explain too briefly and simple.

### *d. Design Implementation*

The designs sketch are very illustrative and user-friendly. They put recommendations of how future researchers will improve their design. However, they don't have labels on their sketch design it might confuse readers.

### *e. Business Plan Model*

Since the research is also about an innovative product, a business plan should be included in this chapter. Even if the researcher provided a prototype, they should put an actual cost of their design. There must be an estimated cost per square unit area or per unit distance of the pathway.

## V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

### *a. Summary*

In their second sentence, 'the design and calculations' must be included because part of the totality of their study is the application of machine design calculations.

**b. Conclusion**

In the first paragraph, the statement is elaborate enough to let the reader know what are included in the thesis. However, it is better to state that the researchers provided an automatic pathway by the use of engineering solution.

In the last paragraph, their statement “*the load that the system can withstand is limited to one to two persons in one area at the same time*” is insufficient to describe the estimated value of area that can support a maximum of two persons. The actual number of person per square unit of pathway must be stated; otherwise, the hydraulic pathway’s price and specifications can be put in a catalog.

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