Polytechnic University of the Philippines

College of Engineering

Computer Engineering Department

CMPE 30121

Introduction to Hardware Description Language (HDL)

**Concept Paper**

**Automated Emergency Light using LED**

Submitted by:

Name: Section:

CARREON, Roland Matthews O. BSCPE 3-5

MALFETRIA, Jasper A. BSCPE 3-5

TABLICO, Jan Jeric B. BSCPE 3-5

VILLAFRANCA, Jhan Vincent S. BSCPE 3-5

**Submitted to:**

Dr. Arvin R. Dela Cruz

Professor

Oct. 26, 2020

CONCEPT PAPER

**Introduction**

Today’s recent events, society is facing a huge challenge brought by the pandemic, COVID 19. Philippines being a tropical country, natural disasters like Vulcanic eruptions, especially Typhoons that causes floods and power interruptions.

**Automated Emergency Light using LED** is design to activate whenever there is minimal lighting around an area, or there is a power shortage.

**Objectives:**

* To help illuminated dark places during emergencies.
* To lessen the expenses used in lights.

**Statement of the Problem:**

This study intends to help producing lights in times of emergencies.

**Scope and Limitations:**

The scope of this study is to provide an emergency light with low electric consumption that will help the user during emergencies like power outage. The researchers considered the needed components for this project that is attainable in today’s problem, which is the quarantine. The researchers will be limited to the access of components and thus we will focus on reusing and recycling components and objects to be used on our project. Testing and simulations will be done individually and online due to the current situation of the country.

**Significance of the Study**

Surviving not only the pandemic and the natural disasters (earthquakes, power outage, typhoons, etc.), this study will assist and support those who are in said natural disasters and emergencies. This study will be significant and be relevant to the following:

* People affected by the natural disasters and are currently in an emergency state.
* Locations with sudden power outage and needs emergency lights to be used for productivity.
* Targeting people with poor vicinity as they are in much need of these types of technology than the others.

**Review of Related Literature**

These articles help the researchers to come up with the information stated in this paper ,..,

**Expected Output**

These are the following expected output of the study:

* ,..,

**Bibliography**

* [**https://www.circuitstoday.com/automatic-led-emergency-light**](https://www.circuitstoday.com/automatic-led-emergency-light)
* [**https://industrytoday.com/led-lighting-its-function-and-advantages/**](https://industrytoday.com/led-lighting-its-function-and-advantages/)
* [**https://www.sunledind.com/news-hidden2/the-importance-of-led-lights**](https://www.sunledind.com/news-hidden2/the-importance-of-led-lights)