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FINAL REPORT:
FLOOD DETECTOR EMERGENCY WARNING (FDEW)

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ABSTRACT

The flood will become too much strain to the affected persons. Nowadays, many floods occur not only in the rural area but also include the urban area which has a good manage drain facilities. We cannot predict the situation but we can take some precaution action on risk of life and reduce properties destruction. Just bear in mind it will happen anytime, anyplace without counter to any other else. We need some time to prepare before flood occurs. What can be done to at least reduce the negative impacts of flood? Hence, one system must be built to inform the affection person about the situation. So this system has been built to solve the problem that haunted them with a cheap and easy way to encounter the situation. Flood Detector Emergency Warning is the system that being used to detect the rising water level in the house. The main purpose of flood detection system is to avert or minimize loss of life. This system used microcontroller PIC16F877A to send the data from the water sensor to the control center. At the same time, the Liquid Crystal Display (LCD), Light Emitter Diode (LED) and buzzer alarm will produce the output as program.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Malaysia is situated in the equator territory. All countries in this area will receive sun and rain every year. So Malaysia will face rains every year. In Malaysia, there are four types of monsoon. The worst monsoon is northeast monsoon. It will accompany with heavy rain. The monsoon occurs on October till December and will cause flood in the low lands. The usual affected areas are Pahang, Kelantan and Terengganu [1]. The flood will become too much strain to the affected persons.

Economy activities will halt and it also affecting the tourism sector. People cannot go to work because need to move to safety place such as emergency center that provided by the government. Sometimes they do not have time to safe their properties like electrical things that can cause damage by the water because of the rising water increase slightly. So, the flood detection system is built to resolve the existing problem that occurs from flood [2].

Flood detection is a system used to detect the rising water level in the house. When the water rises, circuit will send signal to the system [3]. The system will indicate the rising of water level to the house owner by light up the four different colours of Light Emitting Diode (LED) [4] such as green, yellow, blue and red to show the stage of water level. If the red colour is show, the emergency alarm will trigger to warn that the conditon is in the critical stage. The water level also will be displayed using Liquid Crystal Display (LCD) [5]. The main purpose of flood detection system is to avert or minimize loss of life and also to save the valuable property. The purpose of the flood detection system as a means of establishing public safety, reduce damage to property and to relieve public anxiety.