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FINAL PROJECT OF DIPLOMA PROJECT

INTELLIGENT WATER LEVEL SENSOR

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ABSTRACT

Why we need to sensor water? Water is some important thing which is useful especially for human in the world. Some of country has fewer water supplies give their citizen problem. They may get some disease like cholera because some of them don't have better and clean water supply. It is so different compare with us, live in the country which have better and clean water supply. But it's so sad because there still have some of use the water on the useless way. Some water is waste under our estimated.

For exampled the wasted water is by leaking of supplying pipe. Sometimes water was wasted where there have some in whatever types of water tank like failure of the tank's buoy can make the water over flow. Some of water tank was put in outside with seldom the house owner passed by some water tank by especially in flat house. The tank is high at top of building roof. So they cannot handle quickly if something had happen with tank for example over flowing water. We don't know how much the water wasted before the owner realized his water tank was over flowing.

As the result, to make sure we use the water more better, we got an idea in creating the water tank or bath tab with adding sensor to detect the over flowing water. The type of detector that we use is performing by siren. It is because we think the siren is fast way to use for detect the over flowing water. To make it more better we add the timer for automatically block the water flow into the tank. It is because the water tank is put at top of building roof so it is very difficult and dangerous for us to make it manually and it also save our time.

ACKNOWLEDGEMENT

In the name of ALLAH, the Beneficent, the Merciful. The most excellent names belong to ALLAH: so call Him by them; and shun the company (and the blasphemies) of those who use profanity in His names. They will be requited what they do.

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CHAPTER ONE

INTRODUCTION

1.1. Background

The intelligent water level sensor is containing two stage circuits, stage 1 and stage 2. The main function of these intelligent water level sensor circuit is detect the overflowing water so that easy for user to handle.

At stage 1 it has condition which HIGH (upper HIGH water level sensor) and LOW (below LOW water level sensor) condition. At below LOW water level sensor condition its mean no water that flow into the tank. So the operation of these condition is to give the signal for the motor to give the water flow into the tank. The second is upper HIGH water level sensor condition. While the water flowing into the tank until that part the circuit will operate to give the signal for the motor to block the water into the tank.

Stage 2 is containing the timer and motor as the main devices. The 555 timer is using to close (high condition) and open (low condition) the motor automatically. So the water will flow into the tank while the motor is open and vise versa.

Although this circuit look easily too built but it so useful. The main use of this circuit actually to detect the failure of the water tank from over flowing water if someone want to use this circuit in other way, they can but it is refer to the water. It's up to their creativity.

This overall circuit will be discussing deeply stage by stage in the next chapter.