SMART ANTI GAS-LEAKAGE SYSTEM

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Final Year Project Report is submitted in partial fulfilment of the
requirements for the degree of
Bachelor of Engineering (Hons) Electrical Engineering

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ACKNOWLEDGEMENT

Firstly, I would like to say Alhamdulillah and all praises to the Most Merciful Allah S.W.T. for giving me the strength, patience, health, opportunities and knowledge in conducting and mostly completing this project within the given time. It would be impossible for me to finish this project without the grace of Allah S.W.T.

Furthermore, I would like to dedicate my sincere appreciation to my project supervisor Dr. Suzi Seroja Samin, Universiti Teknologi MARA (UiTM), Shah Alam whom without a doubt the most influence person for me in finishing this project. The full supervision and support that was given to me by her is the main factor that inspired my work.

Besides that, my classmates from EE242D8A plays a big role in the process of finishing this project. Thank you for being so helpful to me by providing the support and information needed for this project either directly or indirectly to fulfil this project.

Other than that, I would like to express my appreciation to my beloved parents, Wan Kozil Bin Wan Ahmad and   for their untiring and endless loves, prayers and supports in term of time and financial, hence motivate me to complete my degree. Not forgotten, a thankful wish to my siblings whom always showed their support and believe in me.

Lastly, I would like to thank everyone who involved in this project for being very supportive and helpful. The path in accomplishing this Final Year Project was not easy without the aid and help from those mentioned above. So, I manage to make it through and finish my project hence, give contribution from this thesis to the society.

ABSTRACT

Smart anti gas leakage with notification using Wi-Fi is designed to help to make it much easier to place the safety in the first place. A gas leak translates to a spillage out of a gas tank or any other reprocessing of natural gas or other gaseous product toward any area whereby the gas would not the available. Because of small leak, it could still slowly but surely produce a flammable gasses concentration, leakage is very dangerous.

This project recognizes gas leakage through the use of sensor that really only works in a controlled environment. There are several situation referring to gas leakage in the present system that can caused innocent human to live and loss of property. It could be beneficial for manufacturer, houses which can save people live by implementing this application. In addition, causing fire and explosion hazards, and can release influential atmospheric greenhouses gasses. This project using Arduino ESP 8266 acts as the entire microcontroller.

This system concentrate is on the reading the gas leakage at the gas tank. Inside the system, there is a gas sensor built to measure the gas leakage to evaluate whether or not the system should continually stop the gas leakage. Once the gas sensor indicates the high-reading gas at the area, the buzzer will trigger and red color led will turn on. Then, the 5V fan will blow up the leakage gas to avoid the gas gather at the one point. This system comes with mobile application that can only monitoring the reading of gas on the gas tank. At the end of the whole project, the project is expected the sensor could read the gas leaked and the fan will work perfectly to blowing up the leaking gas.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

A gas leakage outcome in numerous accident leads of loss of value and infection to human being. The reaction of explosion, suffocation, firing place such as toxic effects, flammability on their molecule structure. In recent times, the number of death by explosion of gas cylinder has expanded. The cause for this explosion is directly attributable to old valves, and unawareness in handling gas cylinder. LPG is a combustible mixture of hydrocarbon gases for use as fuel in many implementations such as home, automobiles, industries vehicle owing to the desirable properties as well as for high calorific value, less soot and modest environmental pollution. Both gasses vaporize to generate alternative energy, however the leakage poses a real problem. These gasses will not be easily dissipated since they are heavier than air. When inhaled, it might just result to suffocation and could even result in initial blast.

The death toll in recent year has expanded in the specific instance of the leakage gas. In order to keep away this problem, a system required to detect gas leakage. Gas leak detection is the process whereby multiple sensors recognise potentially harmful gas leaks. The theology has suggested a few design elements for only the detection of gas leakage and the alert system. This paper describes a gas protection and monitoring system leakage to prohibit fire incident and to ensure property protection.