

UNIVERSITI TEKNOLOGI MARA

Gas Leakage Notification And Monitoring System

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ABSTRACT

Monitoring gas system is important in preventing a worst case caused by gas leakage, fire and explosion accidents. The current gas system that is being used does not have any safety measures. The technician would not know if there is any gas leakage in the labs since all of this while, he manage the current gas system manually. For an example, if there is any gas leakage happen, the technician did not alert or prepared to face the flammable gas leakage, fire and explosion accidents. Technician also should have do a reporting for presence of gas in every labs by monitor current temperature in every lab. To solve this problem, a monitoring system is developed to simplify the technician's tasks by using the Stamp Plot software. It has a message that displays the information about gas leakage such as the time and date when gas leakage occurred. This information is very useful to do a reporting. For monitoring, the product used is from Parallax that includes basic stamp software. The software name is Stamp Plot Software Graphing Utility by Selmaware. The end result of this project will be beneficial to the technician that manages the gas system in the Faculty of Dentistry and to all dentistry students that use the labs every day.

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CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

In this topic, all the issues confronted by the staff especially technicians and students of Dentist Faculty will be covered. All the contents in this topic such as research question, objective and problem statement will be covered also. The technician and student in Faculty of Dentistry will receive many advantages from this project.

1.1 BACKGROUND OF STUDY

Monitoring system is the necessary system in every project. This monitoring system module acts as a monitoring device that can monitor the current temperature in the Dentist Lab. If the temperature exceeds the maximum level, then it will alert the user or technician that a dangerous situation will occur because when the temperature reaches the maximum level, it can cause a fire. Besides that, when fire mixed with gas, it can cause an explosion. Basically, we use another microcontroller in this monitoring module that is attached to a computer in order for us to observe the current temperature in the Dentist Lab and the gas status that display on LCD.

In this project, Stamp Plot Pro will be used as a PC based monitoring and control interface for many of the projects. It provides both single interfaces as in virtual tools to show data. It also can use the data strings from the BASIC Stamp language to transmit analog and digital data. Stamp Plot also provides user to plotting of analog and digital graphs. Stamp Plot also prepares the tools to log data, messages and images to file for review and reporting use. Technician can apply this stamp plot software to do a