

CHAPTER 1

INTRODUCTION

1.1 Background

In this era technology is growing fast, by its growth the mobility of people also increase, where people find it difficult to monitor and control the business place, and also worry to travel far. The business owner couldn't control the lamp in business place and also afraid to travel far, in case something happen in the business place like caught in fire or dangerous gas leak, because they couldn't monitor the business place.

To overcome this anxiety, then created a system where we can monitoring and controlling the electronic device based on web. This system can control the lamps in every business place rooms, and detect dangerous gas that could cause poisoning, because of high level of CO gas or even gas that can caused fire. To run the system use ARDUINO device that connected to mosquito broker through WLAN, and connected to Node-red as control manager device on microcontroller, so the owner can monitor business place condition in every moment.

This monitoring system have facility to control lamps in the rooms and monitoring gas level in the kitchen using smartphone, activity become easier, without trouble to monitoring the condition of business place.

1.2 Scope

The writer formulates the problem as follows:

1. How to know that the lamp turns on normally?
2. How to know and handle if there's a dangerous gas?

For the research to be more focus and not out of from relevant discussion, in this project the writer limits the section of research as follows:

1. Program only runs on one network.
2. Program only make lamp controlling and monitoring gas levels.
3. Program only shows turning off lamps information.

1.3 Objective

The purpose of this project is to monitor our place easier, because it can be seen and controlled by smartphone even from different place. Also lessen the anxiety if there's a fire when leaving the business place.

