Universiti Teknologi MARA

Smart Clothesline Using Arduino

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ABSTRACT

People need something to wear every day and having clean and dry clothes is essential for an individual in their daily lives. By hanging the clothes on the clothesline and had pick it up when it dry or the weather are getting unpleasant manually, it is a bit of cumbersome for some of people. The project called Smart Clothesline using Arduino reduce the chances of the clothes that are hang on the clothesline from the rain and also ease the user by retracting the clothesline when the rain occurs by using Rain Sensor module. The clothesline also retracts itself into the house shade when the weather turns cloudy or it's a night time by using Light Dependent Resistor module. The clothesline detracts itself outside of the house when the weather is bright and good. In addition, Smart Clothesline using Arduino sends a SMS notification to the user through their mobile phone by using GSM technology when it is start to retracting and detracting inside and outside of the house respectively. When the weather's getting bad, this helps busy people and housewives with their laundry that is hanging on the clothesline while they are not at home and busy doing something else.

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CHAPTER 1

INTRODUCTION

This chapter provides the background of this project and its rationale. It also gives details of the significance, the issues and also the problems that led to this research for this project.

1.1 Project Background

Throughout the century, clothes are one of the fundamental human desires in their daily lives. Hence, they are needed to dry perfectly after being washed and cleaned. As we can see, the weather is unpredictable here in Malaysia which eventually can cause rain to happen at any time and any moment. Rain can occur when people are going busy to work and are currently not in the house.

This project is called Smart Clothesline using Arduino. It is an integrated circuit for rain alarm system using Arduino which uses rain sensor module to detect the rain droplets and also light dependent resistor which can detect light. In this case, when the weather turns cloudy and eventually can cause the rain to happen. Besides, there is no source of sunlight to dry the clothes during the night time. This will make the clothesline to retract into the house.