

**UNIVERSITI TEKNOLOGI MARA**

**CLOTHES HANGER SYSTEM**

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## **ABSTRACT**

Malaysia is known for its rainy climate. Moonson Season (rainy season) is also here, and it lasts for months. Furthermore, the present COVID-19 pandemic is causing housewives to work more normally. Working, cooking for the kids, and cleaning the house are all tasks that the woman may have to handle at the same time. This phenomenal may produce anxiety in the wife, reducing the efficiency of their task. We presented a new technology in this study that can let users relocate their clothes hanging automatically when it rains. A few pieces of hardware will be used in our project, including a NodeMCU, a raindrop sensor, and a servo motor. The system will link the microcontroller to the Telegram app, which will function as a cloud-based instant messaging service. While it is not raining and when it is raining, the user can manually turn on or off the system. Furthermore, the system will turn on automatically to assist the user in making decisions. According to the research, the system has been of significant assistance to the user. Further study is needed to reduce the system's cost and to try to connect it to other well-known media, such as the Whatsapp application, to make it more user-friendly.

**Keywords:** Clothes Hanger, Cloud based Instant Messaging (IM), Telegram

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# CHAPTER 1

## INTRODUCTION

The first chapter of the project will be established. This project begins with the project backdrop, defining the problem statement, assembling objectives, project scope, and project significance.

### 1.1 Project Background

The level of invention or technology is continuously expanding in tandem with the increase of economic and infrastructure development. Because individuals nowadays are preoccupied with household management, this situation is aided by the advent of new technologies and pandemic covid-19. As a result, they don't have enough time to do all of their household chores, such as picking up their clothes from the clothes hanger. This is where the Clothes Hanger System, which will leverage Internet of Things (IoT) technology, was brought up as a solution to the problem. The method is utilised in this project to prevent the clothes from becoming wet by rainfall when it rains. A NodeMCU microcontroller, a raindrop sensor, and a servo motor form up the system. When it rains, the rain sensor detects the presence of water, and the servo motor moves the clothes hanger to the predetermined spot. When it rains, this IoT-based technology sends a notification to the user's smartphone automatically. Apparently, this project will help clients in their daily lives.

As can be seen, social media usage continues to grow year after year. According to statistics, the number of social media users has increased by an average of 1.4 million each day during the last 12 months. People are now merging IoT with the use of social media platforms such as Telegram, Twitter, Whatsapp and Facebook. This is where the idea begins. MIMOS Bhd (National R&D Centre in ICT) Chief Executive Officer Datuk Abdul Wahab Abdullah states, "Malaysia is well-positioned to become a regional centre for IoT, given the country's firm roots in the electronics and semiconductors manufacturing industries." He also believes that the Internet of Things can help the country become more competitive in terms of innovation.

### 1.2 Problem Statement