

UNIVERSITI TEKNOLOGI MARA

EMOTIONAL POT MADE FROM ARDUINO

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ABSTRACT

Emotional Pot made From Arduino (E.P.A) is a new system that enhanced the old emotional pot with several technologies from various field. Monitoring and controlling in planting system was imperative to human in order to enhance the way for keep plant to become better, fresh and fertile. As such, nowadays people being always forget about their plant as they go out to somewhere else, thus make the condition of the plant become unknown or maybe become worse. An enhanced approach is developed according to the existing smart planting system, the existing project is being enhanced using Internet of Things (IOT) to make the easier for users to monitors their plant at home from their smartphones using Blynk app and also an expression being added to this project for fun among the kids and was especially for learning about IOT in school. Based on the how emotional pot works, the soil moisture sensor will detect the level of moist of the soil of the plant and sent the information gathered to the Blynk app. Then the emotion will appear on LED matrix to show emotion based on the soil moisture values. In addition, it can also water the plant with water pump using their smartphone as the project is connected to the Blynk app with the help of Internet of Things (IoT).Plus, the emotional pot was equipped with touch sensor which can let users manually turn off or turn on the led matrix and water pump in order to avoid wasting the electrical energy if there was no needed to use the emotional pot for a time. Other than that, the connection of Emotional Pot made from Arduino with relevant technologies has been presented.

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

Malaysia has decided to introduce the Internet of Things (IoT) to people hence it can bring many benefits in people daily life. For this project, IoT was crucial thing that was needed in order to make this project succeed, such as watering the plant can be wirelessly, fast and can save much time thanks to IoT system. For fact that's the plant's vital role in oxygen production requires daily watering [1]. Traditional plant containers are simplistic and require manual watering by humans, making it difficult to maintain. Humans, being sophisticated and evolved, may find it dull, resulting in inefficient plant care. An emotional pot is developed using IoT technology to improve plant care [2]. The plant pot features an intelligent sensor-based system that communicates with other devices and systems via the internet [3]. The sensor detects plant feelings and allows users to water the plant pot using their fingertips, enhancing the overall experience [4]. The Emotional Pot prototype, developed using Arduino Wifi as a microcontroller, aims to enhance plant watering and appearance. The project aims to analyze its effectiveness and make it attractive to kids and teenagers [2]. The Blynk app, integrated with IOT, will enable easy monitoring of plant condition and provide emotional expressions for easy watering [4],[8].