Universiti Teknologi MARA

BI-DIRECTIONAL PARTICIPANT COUNTER IN CONFERENCE HALL

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ABSTRACT

There is a constant need in today's world for appliances that are automatic. With the rise in living standard and new norm that must be follow, there is an urgent need for circuit to be built that will transforming the complexity of life into simplicity. This Bi-Directional Participant Counter in Conference Hall is designed and presented in order to count the participant of the conference hall. The counter is a reliable circuit that takes over the task of controlling the number of participants and beeps a warning alarm when the number of participants exceed the capacity limit. The total number of participants will be displayed in the LCD outside of the room. The circuit also included with an interface using Blynk app that will give access to admin to set the limit number of participants can enter conference hall. Arduino Uno is used for detecting and entry or exit action and do the addition and subtraction of the participant. It receives signal from sensor, and this signal is operated under the control of embedded programming code which stored in ROM of the microcontroller.

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CHAPTER 1

INTRODUCTION

This chapter describes the introduction of the project, cover the topics of the background of study, problem statement, objectives, scope and significance of the project.

1.1 BACKGROUND STUDY

On 10th of July 2020, Senior Minister Datuk Seri Ismail Sabri Yaakob had announced the maximum number of participants for any religious, social and official function will be depend on the size of the event space in order to implement social distancing in every place or any event starting from 15th of July 2020 (Malay Mail, 2020). Social distancing regulations was proposed by the government to flatten the curve of the coronavirus cases. In every building now required to control the number of participants can entering the building. Usually, participant counter is used where there are a lot of people such as shopping complex and one of the places that really need a participant counter is the conference hall. Bidirectional participant counter is a circuit that were builds to display on the screen the number of participants entering or leaving a room. Some places count the number of participants manually by putting one person at the entrance to count participant that enter or exit the building. Not all conference hall uses participant counter, but in order to follow the new norm where everyone should implement social distancing, so there should be a limited amount of participant can enter the hall at one time.