SMART OFFICE FOR INDOOR BASED SYSTEM

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SCHOOL OF MICROELECTRONIC ENGINEERING
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by

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APPROVAL AND DECLARATION SHEET

This project report titled Smart Office For Indoor Based System was prepared and submitted by Chua Yong Cher (Matrix Number: 071030139) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering (Electronic Engineering) in University Malaysia Perlis (UniMAP).

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ABSTRAK

Projek office pintar ini lebih menumpu terhadap sistem dalaman office. Dalam projek ini, terdapat pengawal masa, pintu magnetik, pengawal pembilang manusia dan penderia inframerah. Projek ini menggunakan 8051 mikropengawal untuk mengawal peranti–peranti electronik.Pengawal masa digunakan untuk menggawal lampu luar. Katalaluan diperlukan dengan tujuan untuk memasuki pejabat.Pintu magnetik digunakan untuk sistem penguncian pintu. Pengawal pembilang manusia digunakan untuk mengawal kuasa elektrik dalam pejabat. Penderia inframerah digunakan untuk mengesan manusia yang cuba untuk menceroboh pejabat tanpa kata laluan. Kesimpulanya, the projek office pintar telah berjaya dihasilkan dengan menggunakan kos yang minimal.

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ABSTRACT

The smart office project emphasize on the design of indoor system of an office. For this project, the system implies the timer controller, magnetic door, person counter controller and infrared sensor. A microcontroller 8051 is used as the main heart of the project. The timer controller is used to control the outdoor light switch. The password is required in this project in order to enter the office. Magnetic door is used for door locking system. Person Counter Controller is used to control the power system inside the office. Infrared sensor is used to detect if there is person force to enter the office without password. As the conclusion, the indoor smart office system has been successfully designed with a minimal cost.

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