

# BABY MONITORING SYSTEM IN NURSERY

by

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Report submitted in partial fulfillment  
of the requirements for the degree  
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## **APPROVAL AND DECLARATION SHEET**

This project report titled Baby Monitoring System in Nursery was prepared and submitted by Shamsul Khairi Bin Saharudin (Matrix Number: 031080451) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering ( Communication Engineering ) in Universiti Malaysia Perlis ( UniMAP )

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## ABSTRACT

The widespread use of monitoring system allows development of PC-based low cost baby monitoring system. Recently, most of the place including residence is provided by the security system that will ensure the owners and the properties are secure. This system will help the baby sitter to keep an extra eye on the babies at the nursery. The system consists of detector circuit and computer display unit. The detector circuit used the Infra Red diode as a sensor to detect the babies at the nursery. The display unit is used to monitor the nursery situation by using the parallel port connector to interface between the detector circuit and the display unit. The software that used to accomplish the system is the Visual Basic 6.0. This software is an event driven programming language and associated development environment from Microsoft for programming model. The Baby Monitoring System in Nursery will alert the baby sitter by an alarm at the display unit when the sensors detect the baby who out of safety area. The sensor is placed on the door. When the baby pass by the sensor, then it will detect the baby. The baby sitter then will take an immediate action based on the information displayed by computer's screen.

## ABSTRAK

Penggunaan sistem pengawasan yang meluas membolehkan pembangunan sistem pengawasan bayi kos rendah berasaskan sebuah komputer. Pada masa kini, kebanyakan tempat termasuklah di rumah kediaman di bekalkan dengan sistem keselamatan yang akan memastikan pemilik dan harta benda dalam keadaan selamat. Sistem ini akan membantu penjaga bayi untuk memberi perhatian yang lebih kepada bayi di pusat jagaan kanak-kanak. Sistem ini terdiri daripada litar pengesan dan unit paparan komputer. Litar pengesan ini menggunakan diod Infra Merah sebagai penderia untuk mengesan bayi di pusat jagaan kanak-kanak. Unit paparan digunakan untuk mengawasi keadaan pusat jagaan kanak-kanak dengan menggunakan penyambung selari untuk menghubungkan di antara litar pengesan dan unit paparan. Perisian yang digunakan untuk menyempurnakan sistem ini adalah *Visual Basic 6.0*. Perisian ini adalah bahasa pengaturcaraan pembawa dan merupakan pembangunan persekitaran bersekutu daripada *Microsoft* untuk model pengaturcaraan. Sistem Pengawasan Bayi di Pusat Jagaan Kanak-Kanak ini akan memberitahu penjaga bayi dengan mengeluarkan bunyi di unit paparan apabila penderia mengesan bayi di luar kawasan yang selamat. Penderia ini diletakkan di pintu. Apabila bayi melalui penderia, kemudian ia akan mengesan bayi. Penjaga bayi kemudiannya akan mengambil tindakan segera berdasarkan maklumat yang dipaparkan di unit paparan komputer.