## INGENIOUS ROOM SYSTEM

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### APPROVAL SHEET

This project report attached here to, entitle "Ingenious Room System" by Nur Insyirah Hanani Binti Mohd Lok Pi, No.ID: 2013232016 and Nurul Nasriah Binti Rodzali, No ID: 2013465066 in partial fulfillment of the requirements for the Diploma of Electrical Engineering is hereby accepted.

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Knowledge is power and unity is strength.

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#### **ABSTRACT**

This project will present the design, construction, development, control and evaluation of an ingenious room. This further step of an ingenious room than before that using an "intelligent technology" such as sensing the movement of people, sensing the absent or present of people and functioning by using analog circuit relay. The automatic smart room system presented in this project is required to fulfil the requirement of technologies "In the long term, economic sustainability will depends on ecological sustainability". The smart room will functions automatically when there is present of people. This ingenious room system contains combination of sensor, controller, and motor with integration of embedded controlled programming which means in this case using Arduino (UNO) as the main controller. This project also presents the expected performance of the ingenious room system, construction of hardware and software development to gather the performance data. Finally, this system performance will be evaluated by comparing performance data to the theoretical.

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