DE

LAMPIRAN J

POLITEKNIK MALAYSIA

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	DIPLOMA ELEKTRONIK PERHUBUNGAN
Jabatan *Department*	JABATAN KEJURUTERAAN ELEKTRIK
Semester/ Tahun *Semester/ Year*	SEMESTER 5 (JUN 2018)
Tajuk Projek *Project Title*	HOME AUTOMATION SYSTEM Using Wi-Fi
Jenis Projek *Type of Project*	Inovasi
Kategori Kluster Penyelidikan *Category/ research Cluster*	Tanda " / " pada yang berkenaan: *Please tick " / " where applicable:* ( ) Sains tulen (*Pure Science*) ( ) Sains gunaan (*Applied Science*) (/) Teknologi dan kejuruteraan (*Technology and Engineering*) ( ) Sains kesihatan dan klinikal (*Clinical and Health Sciences*) ( ) Sains sosial (*Social Sciences*) ( ) Sastera dan sastera ikhtisas (*Arts and Applied Arts*) ( ) Warisan alam dan budaya (*Natural Sciences and National Heritage*) (/) Teknologi maklumat dan komunikasi (*Information and Communication Technology*)
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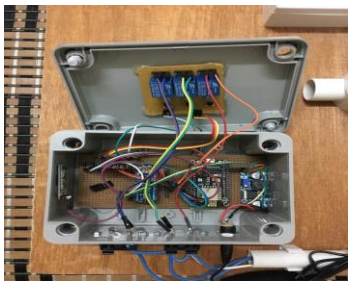
Penyelia *Supervisor*	Name: Pn. Rodzah Binti Hj Yahya No. Identification card:
Penyelia Bersama *Co-Supervisor*	1. Name: En. Mohd Jamhari Ismail Bin Md Tokit No. Identification card: 721110-10-5437
Abstrak *Abstract*	Traditionally electrical appliances in a home are controlled via switches that regulate the electricity so the devices. As the world gets more and more technologically advanced, we find new technology coming in deeper and deeper into our personal lives even at home. Home automation is becoming more and more popular around the world and is becoming a common practice. The process of home automation works by making everything in the house automatically controlled using technology to control and do the jobs that we would normally do manually. Home automation takes care of a lot of different activities in the house. This project we propose a unique System for Home automation utilizing Node MCU for Wi-fi that is paired with a wireless module to provide seamless wireless control over many devices in a house. This user console has many keys, each corresponding to the devices that reads to be activated. The encoder encodes the user choice and sends via Wi-Fi transmitter. The Wi-Fi receiver receives the modulated signal and

	demodulates it and the user choice is determined by the Wi-Fi decoder. Base upon this the required appliance is triggered.
Keyword *Keyword* (max 5 word)	"SMARTPHONE WI-FI EASY TO USE"
Objektif Projek *Project Objectives*	▶ Produce remote control switch using Wi-fi signal as transmission medium. ▶ Manually it takes a long time to turn on and off the switch
Skop Projek *Project scope*	▶ Arduino Nano : using Atmega 328 microcontroller for Arduino Nano ▶ NodeMCU : GPIO Pin-13, Power Input:5Vdc, Ukuran Module:57x30 mm ▶ Step down : Step-down converter is a DC-to-DC power converter which steps down voltage (while stepping up current) from its input (supply) to its output (load). ▶ HC-06 : Mood data,voltage operating : 4v to 6v(usually +5V) ▶ Spdt-relay ▶ Transistor ▶ LED ▶ Resistor 1k ▶ Jumper wire
IP No	
Dapatan *Finding* (*500 words max*)	'HOME AUTOMATION SYSTEM USING WI-FI' adalah satu sistem kawalan secara automatik untuk 'on/off' peralataan elektrik seperti lampu dan juga soket alur keluar.

Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	Menambah baik projek dengan membolehkan pengluaran seperti lampu atau kipas lebih banyak. Penambahbaikkan seperti menggantikan penggunaan 'hotspot' kepada 'modem & router' supaya jarak kawalan lebih jauh yang sedia ada. Menambah sistem kecemasan seperti, jika berlakunya kebakaran, atau pun kerosakan pada mana mana lampu, akan dihantar satu notifikasi yg menyatakan ada berlakunya kerosakkan.	
Gambar berkaitan projek *Picture related to project* (700kb)	 *Figure 1*	 *Figure 2*
Rating/Level	Jabatan *Departments*	

***** *Borang ini perlu diisi oleh pelajar dan dihantar kepada penyelia/ penyelaras projek dalam bentuk hardcopy dan softcopy (borang LAMPIRAN J dan gambar hasil projek dalam format jpeg/bitmap) bersama laporan akhir dan hasil projek.*