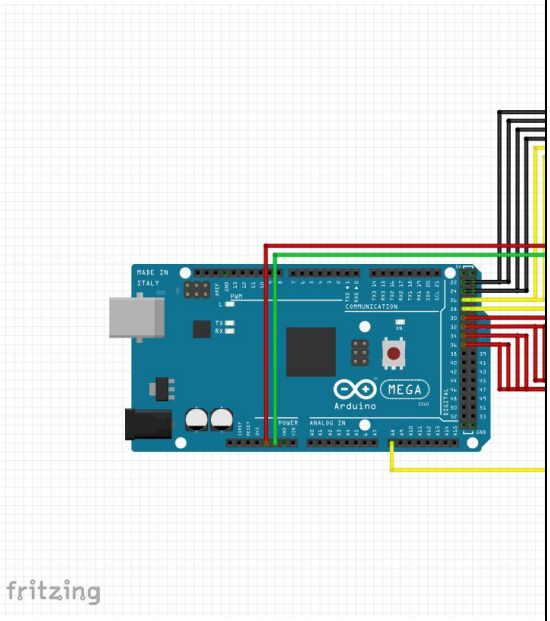
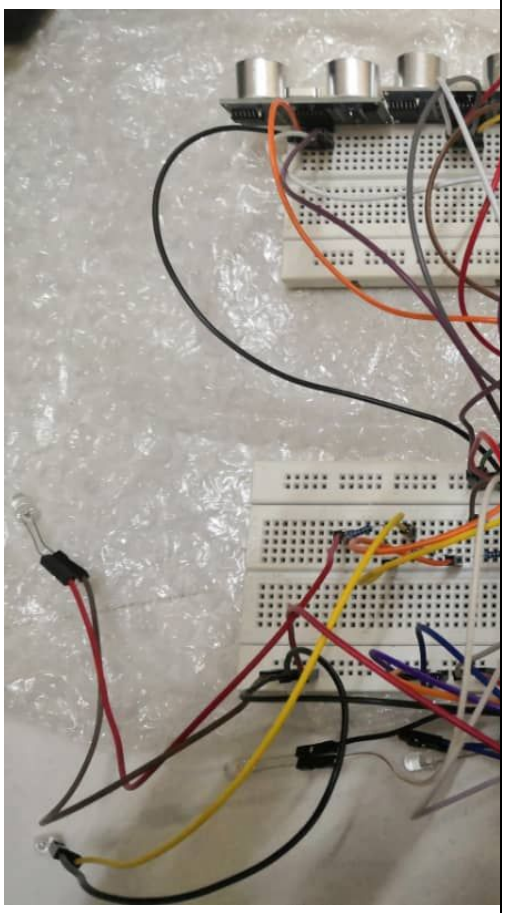
LAMPIRAN J

POLITEKNIK MALAYSIA

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	DTK
Jabatan *Department*	KEJURUTERAAN ELEKTRIK
Semester/ Tahun *Semester/ Year*	LIMA
Tajuk Projek *Project Title*	LED STREET LIGHT SYSTEM USING ULTRASONIC SENSOR
Jenis Projek *Type of Project*	INOVASI
Kategori Kluster Penyelidikan *Category/ research Cluster*	TEKNOLOGI DAN KEJURUTERAAN
Ahli Kumpulan *Group member*	1. THARVINRAJ A/L JEYAGOPI 990828-05-5083 2. THEVAPRASAN A/L S SARVANAN 991206-01-6201 3. 4. 5.
Penyelia *Supervisor*	PN.HAFIDAH BINTI MAHAT 810103-01-5438
Penyelia Bersama *Co-Supervisor*	
Abstrak *Abstract*	A street light, light pole, lamppost, street lamp, light standard, or lamp standard is a raised source of light on the edge of a road or path. Our project is about LED street light system which is an integrated light-emitting diode. The research for this project was carried out using some internet tools and people's knowledge. ESSL (Energy-save Street Light system) organization held a survey about LED street light system and that results were used for our project in order to prove our idea has the strongest advantage to bring an effective street light system. Second tool of research was contacted to JKR (Jabatan Kerja Raya) to enquiry about the lamp pole measurements. This research were done to acknowledge our ultrasonic sensor placement at street lights. This project brings an impactful tool to street

	light system. Moreover, this LED street light system decreases the power consumption which directly says that save electricity. Not only that, this street light system makes maintenance job easier since LED has long life span. As conclusion, this project helps government and of course the people by providing a greater positive impacts.
Keyword *Keyword* (max 5 word)	Street Light System
Objektif Projek *Project Objectives*	-To provide a new street light system which will have a longer lifespan because LED lights have longer lifespan than any other lighting solution. This makes it depreciate at a slower pace than other lights. As compared to traditional bulbs, LED bulbs last long; therefore there replacement/maintenance cost is almost nil. -To reduce the rate of power consume by street lights because LED bulbs are highly energy efficient. This property makes LED lights to save high amount of energy. LEDs are able to achieve equivalent or improved light output while consuming 50% to 70% less power compared to HPS streetlights. -To increase the Luminous efficacy of street lights because LED lighting is now more efficacious than any of the conventional lighting technologies with room to still improve.
Skop Projek *Project scope*	This street light system uses dimmable LED lights and ultrasonic sensor that are connected to an Arduino board. This street light uses Ultrasonic sensor to detect incoming vehicles and brighten up the light whenever the sensor detect any vehicle and dims when no vehicle passing by. The ultrasonic sensor that we are using have a maximum range of 20 meters.

IP No	
Dapatan *Finding* (*500 words max*)	Street Light that can save current by controlling the brightness of the LED.
Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	Attachment of a solar panel that can provide renewable energy and reduce the power consumption even more.
Gambar berkaitan projek *Picture related to project* (700kb)	 
Rating/Level	JABATAN

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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.