LAMPIRAN J

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	**DIPLOMA KEJURUTERAAN ELEKTRIK (DET)**
Jabatan *Department*	**JKE**
Semester/ Tahun *Semester/ Year*	**5**
Tajuk Projek *Project Title*	**CLEANING MOP**
Jenis Projek *Type of Project*	
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*)
Ahli Kumpulan *Group member*	1. Name: Nurul Syafiqah Binti Sabri No. Identification card: 980629-01-5450 2. Name: Khausar Binti Tajul Ariffin No. Identification card: 980317-05-5656
Penyelia *Supervisor*	Name: Encik Yusuf Bin Ismail No. Identification card:
Penyelia Bersama *Co-Supervisor*	1. Name: No. Identification card:
Abstrak *Abstract*	Today's development has a learning system that is growing in times of circulation. Practical learning is one of the effective ways teachers have applied to students. This method is effective and easy to understand by students as they can see the work in front of their eyes and they can handle the work activity by "HANDS ON". In this project, ultrasonic sensors have been used. Ultrasonic sensors are sensors that measure the distance by using ultrasonic waves. The sensor generates ultrasonic waves and receives reflected waves from the target. Ultrasonic sensors measure the distance to the target by measuring the time between release and receipt. Optical sensors

	have transmitters and receivers, while ultrasonic sensors use a single ultrasonic element for both emissions and receipts. In a reflective reflector ultrasonic model, one oscillator emits and receives ultrasonic waves alternately. This enables the programming of the sensor head**.**
Keyword *Keyword* (max 5 word)	Ultrasonic sensor, arduinno uno
Objektif Projek *Project Objectives*	Produce one floor cleaning model to facility with a small robot which will be used as a floor cleaner and not reduce the human energy.
Skop Projek *Project scope*	In general, the scope of this project is moving on a flat floor. The budget range for ultrasonic sensors works within 400 to 500cm
IP No	NIL
Dapatan *Finding* (*500 words max*)	1. From the research, needed to know about arduinno uno for the project. It contains everything needed to support the microcontroller. Simply connect it to a computer with a USB cable or battery to get started. 2. Beside that, the project have to use the ultrasonic sensor to measure the distance to an object. 3. The finding from the project, the project can facilitate human work with the arduinno uno and ultrasonic sensor.

Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	There are some improvements need to be done to get a more attractive and compact design:- 1) Use the rechargeable battery 12V. 2) Update existing casing.	
Gambar berkaitan projek *Picture related to project* (700kb)	 CLEANING MOP *Figure 1*	*Figure 2*
Rating/Level	Jabatan/ Politeknik/ Kebangsaan/ Antarabangsa *Departments / Institutes / National / International*	

***** *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.*