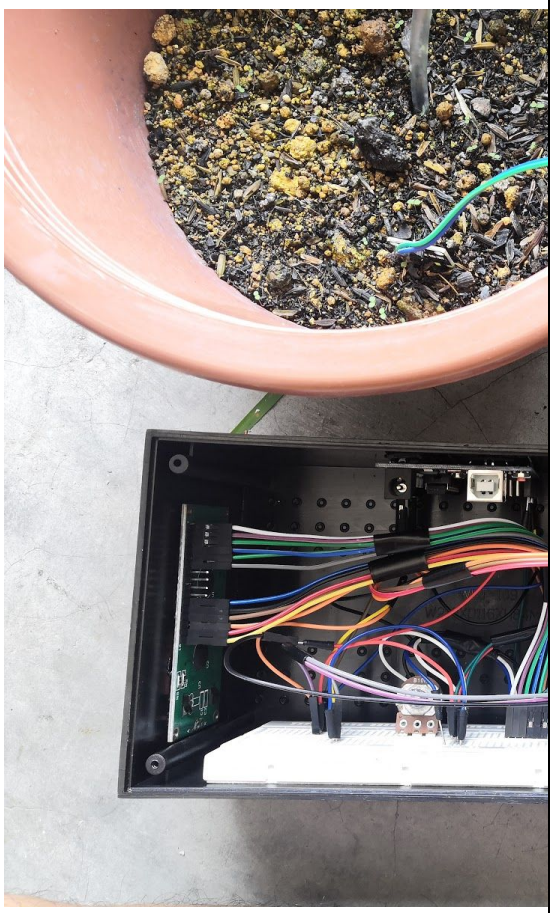
LAMPIRAN J

POLITEKNIK MALAYSIA

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT *INFORMATION*
Program *Program*	DTK
Jabatan *Department*	KEJURUTERAAN ELEKTRIK
Semester/ Tahun *Semester/ Year*	ENAM
Tajuk Projek *Project Title*	SMART WATERING PLANT BY USING ARDUINO UNO WITH GSM900
Jenis Projek *Type of Project*	INOVASI
Kategori Kluster Penyelidikan *Category/ research Cluster*	TEKNOLOGI DAN KEJURUTERAAN
Ahli Kumpulan *Group member*	1. ABDUL ARIFF BIN JAMALUDDIN 990205106737 2. MUHAMMAD SOLIHIN BIN ROSLAINI 990626015841 3. 4. 5.
Penyelia *Supervisor*	ZAHRIM BIN ABD RAHMAN 680101018587
Penyelia Bersama *Co-Supervisor*	
Abstrak *Abstract*	Current global technology plays an important role in the field of agriculture. Automation is the technology with which a procedure or process is executed without human assistance. The main objective of this work is to determine how a person can use the automatic irrigation system of his own moderately economical facilities in a few hours to connect some electronic components and other materials. An automatic irrigation system based on sensor-based systems has been designed and implemented as one of the most widely used and advantageous automatic systems. This will help people in their daily activities, thus saving them time and hard work. This system uses sensor technology with the microcontroller, relay, DC motor and battery. Behave as an intelligent switching system that

	detects the soil moisture level and irrigates the plant if necessary. The ON / OFF motor will automatically be based on the dryness level of the soil. Sensor readings are transmitted to a computer to generate graphs for analysis. This type of irrigation system is easily controlled and controlled using a computer. In general, this system applies automatically for small and large gardens, nurseries, greenhouses and green roofs. This will also save time and energy, as well as minimize water loss. It will also help the farmer to benefit from the plantation without solving irrigation planning problems.
Keyword *Keyword* (max 5 word)	smart watering plant
Objektif Projek *Project Objectives*	1. To identify the suitable components needed for supporting auto watering system. 2. To know the age of the plant and average to get enough water. 3. To develop an auto watering system that facilitates human in the watering task.
Skop Projek *Project scope*	In this system, soil moisture sensor senses the moisture level of the soil. If soil will get dry then sensor senses low moisture level and automatically switches on the water pump to supply water to the plant. As plant get sufficient water and soil get wet then sensor senses enough moisture in soil. After which the water pump will automatically get stopped. All will be used by Arduino UNO. User will get notifications about their plant begin and stop watering by their phone that will be perform by GSM900.

IP No		
Dapatan *Finding* (*500 words max*)	1. Some people always forget to water the plants due to tight schedule. 2. People are not able to predict the essential amount of water needed by plant to restore the soil moisture needed by plants. 3. For those who possess a tight daily schedule and always travelled, they cause to forget the desire to have indoor planting for fear bound by watering schedule and thought it was a tiring and burdensome task.	
Cadangan untuk kerja-kerja akan datang *Suggestion for future work* (*500words*)	Add automation fertilize system.	
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.