

## BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT INFORMATION		
Program	DEP		
Program			
Jabatan	KEJURUTERAAN ELEKTRIK		
Department			
Semester/ Tahun	LIMA		
Semester/ Year			
Tajuk Projek	AUTOMATIC ACCIDENT DETECTOR WITH HELMET		
Project Title			
Jenis Projek	INOVASI		
Type of Project			
Kategori Kluster Penyelidikan	TEKNOLOGI MAKLUMAT DAN KOMUNIKASI		
Category/			
research Cluster			
Ahli Kumpulan	1. NAZEERA BINTI RADUAN		
Group member	990518-04-5250		
	2. GARY LOVEN A/L SELVARAJOO		
	980430045433		
	3.		
	4.		
	5.		
Penyelia	SUZEYHAREDA BINTI ABD HAMID		
Supervisor	810607045390		
Penyelia Bersama Co-Supervisor			
Abstrak Abstract	The project will be an automatic accident detector and warning system relying on GPS module and GSM module. Everyday people lose their lives because of accidents and poor emergency responses. These lives could have been saved if medical responses are provided immediately. This project implies a system which is a solution to this drawback. When a motorcycle had an accident, the accelerometer will detect the impact, and send it to the Arduino UNO microcontroller. The signal will send to another Arduino UNO in the Main Module by using RF transmitters. Then, the GSM module will send SOS		
	emergency messages and immediately trace the location by using GPS coordinates. This design is a system which can detect motorcycle accident in		

	significantly less time and send the information to first aid center nearby within a few minutes.		
Keyword <i>Keyword</i> (max 5 word)	Automatic Accident Detector, Helmet, Microcontroller, Accelerometer, GPS module, GSM module		
Objektif Projek Project Objectives	1. To design a circuit that send SOS emergency message response to inform the victim's relatives in under 3 minutes		
	2. To implement a system using GPS which can detect geographical coordinates when motorcycle accident had occurred.		
	3. To develop the system that give early response from the victim's relative and rescue team will reduce the rate of death.		
Skop Projek Project scope	<ol> <li>To determine the accelerometer used as an impact sensor by I2C.</li> <li>Communicating two Arduino's by UART and RF Transmitter.</li> </ol>		
	<ol> <li>Binpoint exact location by GPS Module coordinates.</li> </ol>		
	4. Creating SOS message and transfer to device by GSM SMS.		
	5. Calculating the power needed for both modules to be powered by a portable battery.		

IP No		
Dapatan Finding (500 words max)	1. Internet 2. Artikel	
Cadangan untuk kerja-kerja akan datang Suggestion for future work (500words)	Further this system can be implemented by using sound sensor, in order to make it more accurate and efficient to detect an accident. This is extended with alcoholic detection also. If the person who is driving took alcohol then the motorcycle will be stopped immediately by giving alarm. This can also be developed by interconnecting camera to the controller module that takes the photograph of the accident spot makes tracking easier. We found the location of the accident but there may be chance that the traffic jam will be high in that path. So, we need to come up with some algorithm which gets the nearby hospitals with minimal distance and traffic. We may add some modules which will also let the system know about the traffic details and then find out which node will take loss time to reach from the accident spot	
Gambar berkaitan projek <i>Picture related to</i> <i>project</i> (700kb)	find out which node will take less time to reach from the accident spot.	

Rating/Level	JABATAN	

\*\*

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.