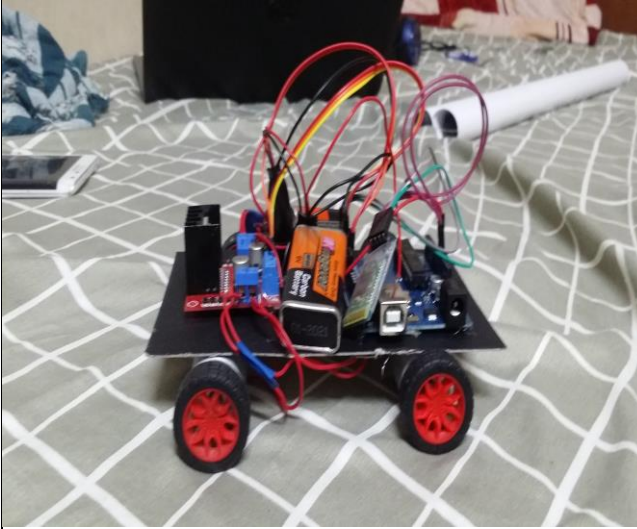
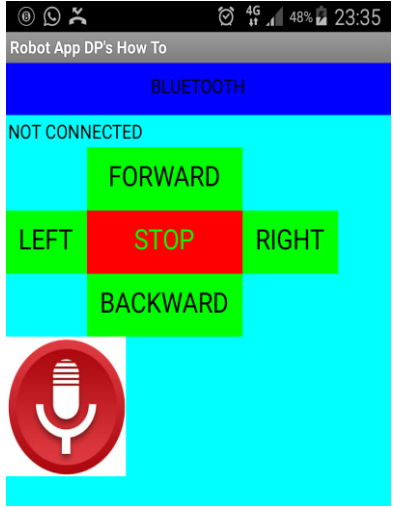


BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT INFORMATION																
Program <i>Program</i>	DIPLOMA KEJURUTERAAN ELEKTRONIK (DEP)																
Jabatan <i>Department</i>	JKE																
Semester/ Tahun <i>Semester/ Year</i>	5																
Tajuk Projek <i>Project Title</i>	VOICE CONTROLLED WHEELCHAIR																
Jenis Projek <i>Type of Project</i>																	
Kategori Kluster Penyelidikan <i>Category/ research Cluster</i>	<p>Tanda “ / ” pada yang berkenaan: <i>Please tick “ / ” where applicable:</i></p> <table border="1"> <tbody> <tr> <td><input type="checkbox"/></td><td>Sains tulen (<i>Pure Science</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>Sains gunaan (<i>Applied Science</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>/ Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>Sains sosial (<i>Social Sciences</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)</td></tr> <tr> <td><input type="checkbox"/></td><td>/ Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)</td></tr> </tbody> </table>	<input type="checkbox"/>	Sains tulen (<i>Pure Science</i>)	<input type="checkbox"/>	Sains gunaan (<i>Applied Science</i>)	<input type="checkbox"/>	/ Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)	<input type="checkbox"/>	Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)	<input type="checkbox"/>	Sains sosial (<i>Social Sciences</i>)	<input type="checkbox"/>	Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)	<input type="checkbox"/>	Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)	<input type="checkbox"/>	/ Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)
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Ahli Kumpulan <i>Group member</i>	1. Name: SUTHAKAR SUBRAMANIAM No. Identification card: 14DEP16F1055 2. Name: SIVANRAAJ RAJENDRAN No. Identification card: 14DEP16F1009 3. Name: DENASVARAN KANASAN No. Identification card: 14DEP16F1041																
Penyelia <i>Supervisor</i>	Name: PN. RODZAH BINTI YAHYA EMAIL : rodzah@pmm.edu.my																
Penyelia Bersama <i>Co-Supervisor</i>	1. Name: No. Identification card:																

Abstrak <i>Abstract</i>	<p>Abstract:</p> <p>”World report on disability” (2011) jointly presented by World Health Organization (WHO) and World Bank says that there are 70 million people are handicapped in the world. Unfortunately, day by day the number of handicapped people is going on increasing due to road accidents as well as the disease which leading paralysis. Among people with disabilities, percentage of physically handicapped person is most. If a person is handicapped, he is dependent on other person for his day to day work like transport, food, orientation etc. So a voice operated wheel chair is developed which will operate automatically on the commands from the handicapped user for movement purpose. Use of electrical wheelchair leads to a large amount of independence for persons with a physical disability who can neither walk nor operate a mechanical wheelchair alone.</p>
Keyword <i>Keyword</i> (max 5 word)	Android voice command to control wheelchair
Objektif Projek <i>Project Objectives</i>	<p>I To apply voice controlled system in wheelchair using Arduino Uno.</p> <p>II To ensure that the system only recognize voice of user to avoid interference.</p> <p>III To make disable people move their wheelchair independently.</p>

Skop Projek Project scope	<div><div><div>1. This system will be a Real-Time Voice controlled Wheelchair for the physically disabled person.</div><div>2. This system will be designed to operate the wheelchair based on the voice of the user and control the movement according to the command given by the operating person.</div><div>3. The voice would be given through an Android and would be converted into binary format. Thus this binary format would be checked with the binary code fed to the microcontroller, if true the command will be performed.</div><div>4. More specifically, this system is designed to allow an admin and users to give the voice command to the wheelchair. These command would be performed within seconds. On the whole its basic operation would be left, right, stop, go, back. Basically it's a wheelchair controlled by voice.</div></div></div>																																	
IP No																																		
Dapatan Finding (500 words max)	<div><div><div>i. From the experiment done the prototype able to move in four direction such as forward, backward, right and left.</div><div>ii. From Table 1, we can conclude that how efficient wheelchair prototype responds to the given command.</div></div><table><tr><th rowspan="2">COMMAND GIVEN</th><th colspan="3">OBSERVED MOTION</th><th rowspan="2">ACCURACY OF RESPONSE</th></tr><tr><th>SPEAKER1</th><th>SPEAKER2</th><th>SPEAKER3</th></tr><tr><td>FORWARD</td><td>FORWARD</td><td>FORWARD</td><td>FORWARD</td><td>100%</td></tr><tr><td>BACKWARD</td><td>BACKWARD</td><td>BACKWARD</td><td>BACKWARD</td><td>100</td></tr><tr><td>RIGHT</td><td>RIGHT</td><td>NO MOTION</td><td>RIGHT</td><td>66.66%</td></tr><tr><td>LEFT</td><td>FORWARD</td><td>LEFT</td><td>LEFT</td><td>66.66%</td></tr><tr><td>STOP</td><td>STOP</td><td>STOP</td><td>STOP</td><td>100%</td></tr></table><div><div>iii. The finding shows how efficient this wheelchair prototype to enhance the conduct installation works by moving around as command given from android.</div></div></div>	COMMAND GIVEN	OBSERVED MOTION			ACCURACY OF RESPONSE	SPEAKER1	SPEAKER2	SPEAKER3	FORWARD	FORWARD	FORWARD	FORWARD	100%	BACKWARD	BACKWARD	BACKWARD	BACKWARD	100	RIGHT	RIGHT	NO MOTION	RIGHT	66.66%	LEFT	FORWARD	LEFT	LEFT	66.66%	STOP	STOP	STOP	STOP	100%
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STOP	STOP	STOP	STOP	100%																														
Cadangan untuk kerja-kerja akan datang Suggestion for future work (500words)	<div><div>There are some improvements need to be done to get a more attractive and compact design:-</div><div><div>1. Use chargeable battery in project so that we can stick the battery on it and there is no need to change battery regularly.</div><div>2. Use high power motor and high voltage batteries if there is a need to withstand more weight on the project.</div><div>3. Can add programming on the project so that we can reduce and increase speed of the project.</div></div></div>																																	

<p>Gambar berkaitan projek</p> <p><i>Picture related to project (700kb)</i></p>	 <p><i>Figure 1</i></p>	 <p><i>Figure 2</i></p>
Rating/Level	Jabatan/ Politeknik/ Kebangsaan/ Antarabangsa <i>Departments / Institutes / National / International</i>	

** 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.*

