

BORANG INVENTORI PROJEK PELAJAR

PERKARA	MAKLUMAT INFORMATION																
Program <i>Program</i>	DEP5A																
Jabatan <i>Department</i>	Jabatan Kejuruteraan Elektrik																
Semester/ Tahun <i>Semester/ Year</i>	5																
Tajuk Projek <i>Project Title</i>	Point Of Sale Using Raspberry Pi																
Jenis Projek <i>Type of Project</i>	Hardware & Software																
Kategori Kluster Penyelidikan <i>Category/ research Cluster</i>	Tanda “ / ” pada yang berkenaan: <i>Please tick “ / ” where applicable:</i> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30px;"></td><td>Sains tulen (<i>Pure Science</i>)</td></tr> <tr><td></td><td>Sains gunaan (<i>Applied Science</i>)</td></tr> <tr><td>/</td><td>Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)</td></tr> <tr><td></td><td>Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)</td></tr> <tr><td></td><td>Sains sosial (<i>Social Sciences</i>)</td></tr> <tr><td></td><td>Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)</td></tr> <tr><td></td><td>Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)</td></tr> <tr><td></td><td>Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)</td></tr> </table>		Sains tulen (<i>Pure Science</i>)		Sains gunaan (<i>Applied Science</i>)	/	Teknologi dan kejuruteraan (<i>Technology and Engineering</i>)		Sains kesihatan dan klinikal (<i>Clinical and Health Sciences</i>)		Sains sosial (<i>Social Sciences</i>)		Sastera dan sastera ikhtisas (<i>Arts and Applied Arts</i>)		Warisan alam dan budaya (<i>Natural Sciences and National Heritage</i>)		Teknologi maklumat dan komunikasi (<i>Information and Communication Technology</i>)
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Ahli Kumpulan <i>Group member</i>	1. Name: Mohamad Amirul Harraz Bin Mohd Khairi No. Identification card: 14DEP16F1021 2. Name: Muhammad Fauzan Bin Zainalarifin No. Identification card: 14DEP16F1023 3. Name: Muhammad Nursyafiq Bin Norhanizam No. Identification card: 14DEP16F1067																
Penyelia <i>Supervisor</i>	Name: En. Shahidzwan Bin A. Rahim No. Identification card: 801216-10-5769																
Penyelia Bersama <i>Co-Supervisor</i>	1. Name: No. Identification card:																
Abstrak <i>Abstract</i>	A supermarket is a form where wide variety of product items is available. These product items can be food, beverages or any household product. The main purpose of supermarkets is to save the time of the customers but sometimes customer gets frustrated while waiting in the queue at billing counter and sometimes they get confused while comparing the total price of all the products with the budget in the pocket before billing. To overcome these problems, we have designed a smart trolley using a Raspberry Pi with Point Of Sale software. With this system, there is no need for customer to wait in the queue for the scanning for the product items.																

Keyword <i>Keyword</i> (max 5 word)	Point Of Sale
Objektif Projek <i>Project Objectives</i>	The smart shopping cart is built to enhance the overall shopping experience for shopping. The main objective is: • To design shopping cart which have LCD that display item price • To create shopping cart which equipped with barcode scanner • To design a software that act as Point of Sale.
Skop Projek <i>Project scope</i>	This project aim at designing a smart shopping cart that can scan item price . This project have limitation which :- • The project focused on Rasberry Pi 3 • It will be having a mobile phone as additional devices for customer • The project limit for super market uses
IP No	nil
Dapatan <i>Finding</i> (500 words max)	Based on our project, The raspberry Pi 3 is working perfectly. We added some power supply using a power bank it last about 1 hour. We also need to put the list/category of shopping item at the software. We need a manual step to open the software. The Raspberry pi is compatible with the barcode scanner and scan the product. It run on the smartphone using VNC viewer.
Cadangan untuk kerja-kerja akan datang <i>Suggestion for future work</i> (500words)	We have to update the details of the product items in the memory unit of trolley time to time. We take the help of Internet of Things and some software with the help of which all information will be updated regularly. Also, with the help of optical sensor, motors, and motor drivers, we will make trolley in such a way that it will follow the customer which purchasing items and it maintains the safe distance between customer and itself.
Gambar berkaitan projek <i>Picture related to project</i> (700kb)	 <i>Figure 1</i>  <i>Figure 2</i>
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.

