



## BORANG INVENTORI PROJEK PELAJAR

| PERKARA                                   | MAKLUMAT<br>INFORMATION  |  |
|---|--|--|
| Program<br>Program                        | Diploma Kejuruteraan Elektronik Komunikasi (DEP)   |  |
| Jabatan<br>Department                     | Jabatan Kejuruteraan Elektrik  |  |
| Semester/ Tahun<br>Semester/ Year         | Sem 5 (Sesi Jun18)   |  |
| Tajuk Projek<br>Project Title             | Safety Lock Motorcycles using Blynk Applications   |  |
| Jenis Projek<br>Type of Project           | IoT ( Internet of Things )   |  |
| Kategori Kluster<br>Penyelidikan          | Tanda "/" pada yang berkenaan:<br><i>Please tick "/" where applicable:</i>   |  |
| Category/<br>research Cluster             | Sains tulen (Pure Science)         Sains gunaan (Applied Science)  |  |
|   | / Teknologi dan kejuruteraan ( <i>Technology and Engineering</i> )<br>Sains kesihatan dan klinikal ( <i>Clinical and Health Sciences</i> )   |  |
|   | 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<br>Communication Technology)  |  |
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| Abstrak<br>Abstract                       | Safety Lock Motorcycles using Blynk Applications is a project created to improve the safety of motorcycles. Most users in Malaysia suffer from motorcycle loss problems. Thus, this project is held to overcome user problems and add security systems to motorcycles. Due to the widespread motorcycle theft case, Safety Lock Motorcycles using this Blynk App can have a positive impact that can solve the problem. This project proposes duplicate key support to increase safety level on motorcycles. Users can unlock and lock motorcycles using smartphones to make it easier for motorcycles to be locked. This system is implemented using Arduino and Blynk Applications programmed to control all controlled circuits. As a result, this project successfully combines the use of Safety Lock with this Blynk App based on what public users see. This project is also very helpful in strengthening the security system on every motorcycle in Malaysia. |  |
| Keyword<br><i>Keyword</i><br>(max 5 word) | Safety Lock<br>Arduino<br>Motorcycles  |  |

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|---|--|----------|--|
| Objektif Projek   | This project has several objectives which are:   |          |  |
| Project Objectives  | <ul> <li>(a) To create an application that would work from a smartphone and communicate through Wi-Fi network.</li> <li>(b) To analyze the system design in term of detectable range and delay.</li> <li>(c) Increase safety level to avoid motorcycles from being stolen and robbed</li> <li>(d) To make easier for user to lock the motorcycles by using smartphone.</li> <li>(e) To provide a safer and more secure locking system for user satisfaction</li> </ul>   |          |  |
| Project scope   | This project describes the smartphone control the unlocking system and the way to develop this system, simply install on the motorcycles and configure it to communicate with the wireless network. By using Blynk, the application software will created for smartphone to control the operation of unlock the motorcycles lock. Blynk was a designed for the internet of things. It can control hardware remotely. For example, this project used Blynk applications that connect with Arduino Mega also Relay 12V.  |          |  |
| IP No   |  |          |  |
| Dapatan<br>Finding<br>(500 words max)   | The safety lock motorcycles with the Blynk Applications is a common product that<br>provide a safety lock for motorcycles according to the accurate time and the wide<br>range of distance. Its reliability, stability and safety for the adults to used it. In this<br>project, safety lock motorcycles was made with the help of a microcontroller<br>(ARDUINO MEGA) through a software hardware interface.We will discuss about all<br>the data gathered from our projects. Either via research or testing method. All of it will<br>be discussed in this chapter. Some of it are the costs and type of materials that used to<br>make this project.Before the project is completed, we have been installing the circuit<br>according to the schematic circuit, testing the circuit whether it can read the readings,<br>test the limits and test the durability of out project. For the coding of our project, we<br>used a Blynk software which is a latest and easily available to connect between our<br>project and the phone. |          |  |
| Cadangan untuk<br>kerja-kerja akan<br>datang<br>Suggestion for<br>future work<br>(500words) | After completing the "Safety Lock Motorcycles using Blynk Application"<br>project. We become aware and begin to understand about how this project look<br>and the view in the future after finding the results. Among the following view<br>in the future are:<br>1. We can try to upgrade system Wi-Fi from the<br>smartphone to the worldwide Wi-Fi.<br>2. We also will provide a proposal to extend to any<br>motorcycles company   |          |  |
| Gambar berkaitan  | motorcycles  | scompany |  |
| Picture related to<br>project (700kb)   | <image/>   |          |  |
| Dating/Law-1  | C C  | Figure 2 |  |
| Rating/Level  | Jabatan/ Politeknik/ <del>Kebangsaan</del> / Antarabang<br>Departments / Institutes / National / Internat  | -        |  |
|   |  |          |  |

\* 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.