**LAMPIRAN J**

POLITEKNIK MALAYSIA

## BORANG INVENTORI PROJEK PELAJAR

| PERKARA | MAKLUMAT<br>*INFORMATION* |
|---|---|
| Program<br>*Program* | DET |
| Jabatan<br>*Department* | KEJURUTERAAN ELEKTRIK |
| Semester/ Tahun<br>*Semester/ Year* | LIMA |
| Tajuk Projek<br>*Project Title* | FINGERPRINT DOOR LOCK USING ARDUINO |
| Jenis Projek<br>*Type of Project* | INOVASI |
| Kategori Kluster Penyelidikan<br>*Category/ research Cluster* | TEKNOLOGI DAN KEJURUTERAAN |
| Ahli Kumpulan<br>*Group member* | 1. IZZA IZZANY BINTI MOHD IDRIS<br>991016-04-5116<br>2. SITI AISYAH BINTI MOHD YUSOF<br>990816-04-5160<br>3. -<br>-<br>4. -<br>-<br>5. -<br>- |
| Penyelia<br>*Supervisor* | SUBASHNEE A/P MARIMUTHU<br>741106-05-5244 |
| Penyelia Bersama<br>*Co-Supervisor* | -<br>- |
| Abstrak<br>*Abstract* | This project relates to fingerprint door lock system to block unauthorized access . It is all performed by the servo controlled by the microcontroller. Home security system is an emerging technology that gained much attention recently by homeowners. Outside there will be 3 buttons to access the user. Inside, there are two switches to lock or open the door and to reset the system. The servo is fitted with a lock inside the door. As lock and unlocking is possible from both sides, it allows the entry and exit of a person without help from any party. Unlike the usual system around us, this gives users the freedom. The securities currently become a very important issue and this is why a lot of security systems have been purpose using an important process such as recognition especially for building |

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| | access controls. Face recognition is one example of process that improves the security application for building access control. Today people are facing more problems about security in all over world, nowadays security is the most essential issue everywhere in the world, so security of everything gains higher and higher importance in recent years. Here in this paper, trying to reproduce the comprehensive literature study related to the various door locks in the fields such as home. In the proposed system, fingerprints of the authorized users are enrolled and verified to provide access to a facility that is used by multiple users. A user can also be removed and a new user can be enrolled in the system .We have implemented a centralized control system from where we can control who enter in which rooms and who cannot. This is an Arduino MEGA 2560 device to based flexible working device that provides physical security using the fingerprint sensor technology. Fingerprint is one of many forms of biometrics, used to identify individuals and verify their identity. This high security system based on fingerprint which can be organized in homes. This paper show a better solution for authorized and unauthorized access people and can solve security related problems in human life. |
| Keyword<br>*Keyword*<br>(max 5 word) | FINGERPRINT DOOR LOCK |
| Objektif Projek<br>*Project Objectives* | The main objective of this project is to design Fingerprint Door Lock Using Arduino. More specifically the principle objective of this research are:<br><br>i. To develop a door lock system using Arduino to facilitate consumers.<br>ii. To improve the use of home technology and home security.<br>iii. To improve the use of the mechanical door to the electronic system using button. |
| Skop Projek<br>*Project scope* | For this project prototype:<br><br>i. The project is focusing to use Arduino for the door locking system.<br>ii. The emphasis is to use fingerprint for security.<br>iii. The main controlled is using servo system for the door. |

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| IP No | | |
| Dapatan<br>*Finding*<br>(*500 words max*) | RESEARCH<br>JOURNAL<br>ARTICLE (GOOGLE SCHOLAR)<br>INTERNET | |
| Cadangan untuk kerja-kerja akan datang<br>*Suggestion for future work*<br>(*500words*) | QUALITY PRODUCT | |
| Gambar berkaitan projek<br><br>*Picture related to project* (700kb) |  |  |

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| 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.*