

Security Door Lock for Mains Supply and Safety of Electrical Engineer

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Abstract: *The main motive of this work is to provide safety to the electrical field engineer who works on the site of main distribution line feeder box. To provide safety to the engineer, the feeder box is equipped with RFID sensor and RFID readers which plays an important role. The engineer will be provided authorized glows and shoes with RFID tags. The reader mounted on the box will check whether the glows are authorized or not. If it gets authorized, then only the main door of the box will open and engineer will do his work. When the door gets opened it will share the details to the main server of the electrical distribution office in the form of message "The door is open". We have made the provision that it will help engineer to solve the issue after door opens. There will be one-way communication from distribution office to electrical field engineer regarding guidelines for the issues. We have also made an application to record the history of the problems in the data base which would help to identify problems in the future.*

Objective: *The objective of this project is to take safety precautions deeply, as well as access to registered authorised users by only allowing them to access and control the electricity box with proper safety equipment. The electrical engineer's convenience is also taken into account through a mobile application and with real-time one-way communication.*

Keywords: Security Door

REFERENCES

- [1]. Nayana R, Shashidhar R, "Smart Door Lock System", International Journal for Modern Trends in Science and Technology, ISSN: 2455-3778: Volume: 05, Issue No: 02, February 2019.
- [2]. Rahul Satoskar, Akarsh Mishra, "Smart Door Lock and Lighting System Using Internet of Things", International Journal of Computer Science and Information Technologies, Vol. 9 (5) , 2018, 132-135, ISSN: 0975-9646.
- [3]. Dr. Manish Kumar, Dr. M Hanumanthappa, Dr. T V Suresh Kumar, Mr. Amit Kumar Ojha, "Android Based smart Door Locking System with Multi User and Multi Level Functionalities", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 5, Special Issue 2, October 2016, ISSN (online): 2278-
- [4]. <https://nodemcu.readthedocs.io/en/release/>
- [5]. <https://www.takigen.com/products/list/L002#:~:text=The%20solenoid%20lock/>
- [6]. <https://randomnerdtutorials.com/security-access-using-mfrc522-rfid-reader-with-arduino/>
- [7]. <https://randomnerdtutorials.com/guide-for-oled-display-with-arduino/>
- [8]. <https://developer.android.com/studio/>
- [9]. <https://firebase.google.com/firebase/mobile-platform/>