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Smart Door Lock System by using Mobile via SMS

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Abstract: The concept Door locking and unlocking system uses GPRS to open and close the door. In addition to this the security will be provided using GSM in case of any unauthorized access. The main aim of this project is to provide security at homes, offices etc. The system automatically locks the door as soon as it receives predefined message from the user. The user will have to first register. His information will be stored in database. Whenever the message will be received for the registered number, the controller will accordingly give instruction to DC motor. DC motor will then perform action on door either locking or unlocking. In case of unauthorized access, the IR sensor will sense the action and send the alert message to the registered user using GSM.An OTP-based door lock system is a modern security mechanism that utilizes unique One-Time Passwordsfor secure access. It comprises a microcontroller, GSM module, LCD display, keypad, and solenoid lock. The user enters their mobile number, receives an OTP, and upon successful verification, the door is unlocked. The system is cost-effective, easy to use, and can be installed in various applications for high-security levels. Overall, the OTP-based door lock system provides an efficient alternative to traditional lock-and-key mechanisms for securing access to restricted areas.

Keywords: OTP, authentication, smart home, security, encryption

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