

Design of a smart door lock for apartment buildings using fingerprint and OTP code.

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Abstract: In the context of increasing security concerns in apartment buildings, this project aims to design a smart door lock system combining fingerprint and OTP code usage to enhance security. Through theoretical research on fingerprint recognition technology and OTP encryption, along with experimental deployment in a sample apartment, this project seeks to provide a modern solution for access management systems. Expected results will reflect the performance and convenience of the solution, while also identifying sustainable development directions in the field of home security.

Keywords: Smart door lock, fingerprint, OTP code, access management system, home security