



ACCESS CONTROLLING SOLUTION USING MOBILE PHONE SECURITY FEATURES

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In the modern world, people carry all kinds of gadgets including house keys, office keys, smart cards (plastic cards with built-in microprocessor), and smartphones. Those bulks are inconvenient to carry around easily forgetful. Near Field Communication (NFC) which allows short range wireless communication (Wi-Fi, Bluetooth, infrared, iBeacon, etc.) among electronic devices, can be used to solve the above issue by introducing a smart key system that use one smartphone. Contemporary systems such as biometric systems are expensive while others use separate devices or smart cards as keys. In this research, the authors describe a system which uses the NFC (13.56 MHz bandwidth) peer-to-peer feature which is inbuilt in smartphones. Therefore, the proposed system is highly extensible because smartphone features such as fingerprint, iris scanning, or face detection can be integrated to the existing system.

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