

**Master 2017**

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**Card Security Using Finger Print and GSM.**

***ABSTRACT - Masterthesis***

In the real world seen today there are lots of fraudulent measures that take place with the help of present cards (debit/credit or any other card). The main misuse of the card comes when someone else apart from the prescribed user uses the card. This happens when close associates of the person or various thieves who steal the card uses the card. As we all know the card has magnetic stripe, and there are electromagnetic radiation comes out when the card is operating, and thus there are also possibility to duplicate the card by stealing the card data coming out from the electromagnetic radiation.

This thesis aims for overcoming these flaws of the system. In this thesis the aim is to use any of the biometric features for accessing the card functionalities. The card shall be made accessible only if there is a perfect biometric match. The thesis also aims to add support for the family members to access the card if the biometric feature of family member is linked with customer card. Further to increase security of card, a monitoring solution using GSM (for remote communication) and RF based (for local communication) system is proposed.

**Existing System**

- It does not possess unique identification code for accessing card.
- The total security of the system is based on card and card password.
- In the existing system, apart from the prescribed user anyone can access the card if they know the card password.

**Proposed System**

- In the proposed system biometric feature shall be used to access the card.
- The card shall be made access to their family members.
- For a small distance monitoring solution ZigBee based technology is used.
- For long distance monitoring solution GSM based technology is used.