

## Credit card processing system

### Problem statement:

Develop a ~~cred~~ system to process credit cards, authenticate the user and perform transactions.

### Functional requirements

- \* Should identify the card through the chip and verify the validity of the card by accessing the database of the credit card provider.
- \* Authenticate the user through the PIN.
- \* Perform transactions and transfer credit from the account of the user to that of the vendor.
- \* Invalidate the transaction ~~and~~ in case of invalid PIN.
- \* The system should signal the credit card provider to block the card in case of multiple wrong entries.
- \* In case of invalid card, the police should be informed about an attempt at a scam.
- \* Suitable credit card discounts be applied during transactions.
- \* The database of the credit card provider should be accessed and the credit limit and the credit spent should be displayed.

### Non-functional requirements

- \* An easy to understand user interface.
- \* Requires less power to function
- \* In case of system failure mid-transaction,



The databases must be reverted back to their previous state. card

- \* Faster transactions and validations.
- \* Secure and encrypted transactions.
- \* Audio responses to assist visually impaired individuals.
- \* Lights to help see the
- \* E-receipt generation by entering email (To save paper)

### Domain requirements

- \* Can perform transactions with multiple credit card providers and banks.
- \* The software can be installed on a multitude of card readers.
- \* Conform to local financial rules and regulations.

### Design constraints

- \* Must have state of the art security in transactions.
- \* Must protect user information and be able to connect with databases of popular banks.

### Preliminary schedule and budget

- \* The project is estimated to take 4 months to complete.
- \* Estimated budget: ₹ 6,00,000
  - S.R.S: ₹ 60,000
  - Development: ₹ 3,40,000
  - Testing & validation: ₹ 1,00,000
  - Licensing: ₹ 50,000
  - Deployment & maintenance: ₹ 50,000