

Credit Card Processing System.

Credit Card
Cardholder name
Expire date
Card number
CVV number
balance
validate card()
charge()
add payment()
get details()

Validity
Expire-date
Renewal()

Payment Gateway
gateway-name
transaction-fee
authorize-transaction()
charge-transaction()
refund-transaction()

Customer Account
account-id
customer-name
email
phone
credit-cards
add-credit-card()
remove-credit-card()
get-account-details()
view-credit-cards()

Administrator user
Name
phone no

Processed by
Customer Name
Phone
Address
update details

Admin
Phone
Address

Inventory management completed

related agent

Authorization-Transaction
authorization-id
transaction-id
auth-status
associate()
get-associate()

Authorization
auth-id
auth-code
Status
authorize-transaction()
get-authorization-status()

Processes

Transaction (Interfaces, Abstract class)
transaction-id
amount
date
process()
get-details()

Purchase Transaction	Refund Transaction	Transfer Transaction
merchant-name	original-trans	sender-account
card-used	-action-id	recipient-account
process()	refund-reason	process()
apply-discount()	process()	confirm-transfer()
get-details()	validate-refund()	get-details()