CREDIT CARD PROCESSING

correctness of the diagrams depends on the problem statement she gives so copy mindfully!

Termwork 1:

Functional Requirements:

Payment Gateway Integration: The system should integrate with a payment gateway to process credit card payments. **Credit Card Verification:** The system should verify the credit card information, including the card number, expiration date, and security code.

Authorization: The system should obtain authorization from the credit card company before processing the payment. **Transaction Processing**: The system should process the credit card transaction and transfer the funds to the merchant account.

Refund Processing: The system should allow for refunds or chargebacks in case of a disputed transaction or cancellation. **Reporting:** The system should generate reports on credit card transactions, including details such as transaction amount, date, and status.

Non-Functional Requirements:

Security: The system should provide secure credit card processing to prevent fraud and protect users' personal information.

Performance: The system should be able to handle a large volume of credit card transactions without any performance issues.

Availability: The system should be available 24/7 to process credit card transactions at any time.

Reliability: The system should be reliable and accurate, with no errors or system crashes during credit card processing. **Compliance**: The system should comply with all relevant regulations and standards, such as PCI DSS (Payment Card Industry Data Security Standard).

Usability: The system should be easy to use and navigate, with clear instructions and guidance for credit card processing.

Ambiguities:

- ->The authorization process for credit card processing can be ambiguous, with different providers and systems offering different requirements and protocols.
- ->The chargeback process can be ambiguous, with different card issuers and networks offering different procedures and timelines.
- ->Cardholder agreements can be incomplete or difficult to understand, leading to confusion for customers and merchants.
- ->Refund policies can be ambiguous, with different providers offering different policies and procedures for processing refunds.

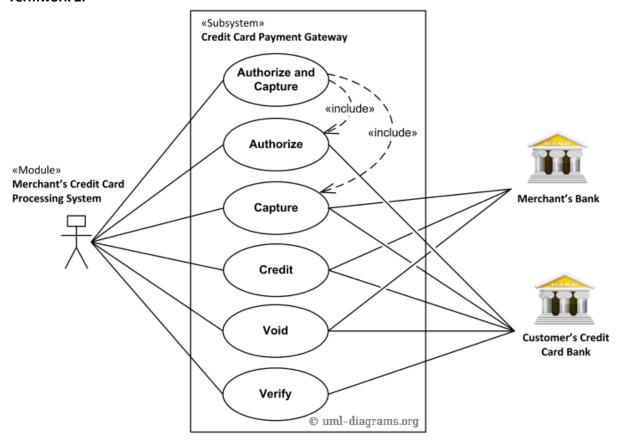
Inconsistencies:

- ->Fraud detection systems are not always consistent across providers and can sometimes fail to detect fraudulent transactions.
- ->Dispute resolution can be inconsistent across providers and can result in delays or errors in processing refunds or chargebacks.
- ->Payment processing fees can be ambiguous, with different providers charging different fees for different types of transactions
- ->Payment gateway integration can be inconsistent across providers and can result in errors or delays in processing transactions.

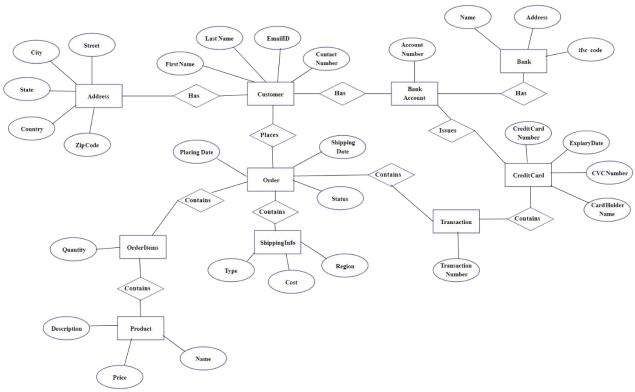
Incompleteness:

- ->Incomplete or inaccurate transaction data can cause errors in credit card processing.
- ->Incomplete or inaccurate payment information can cause delays or errors in processing payments.
- ->Missing information such as the cardholder's name, billing address, or expiration date can result in a transaction being declined or charged incorrectly.
- ->Incomplete or inaccurate cardholder agreements can lead to disputes over charges or misunderstandings about the terms of the agreement.

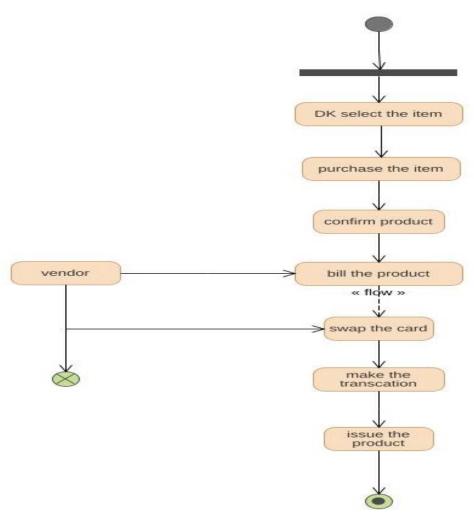
Termwork 2:



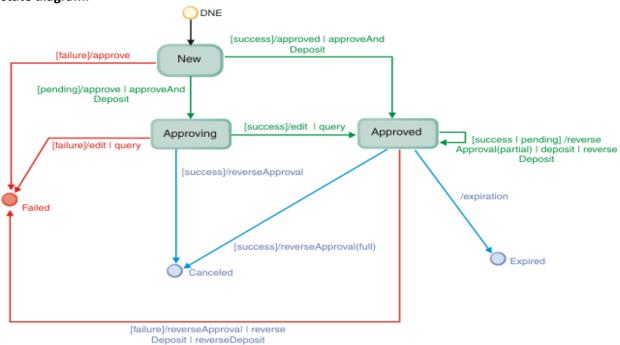
Termwork 3:



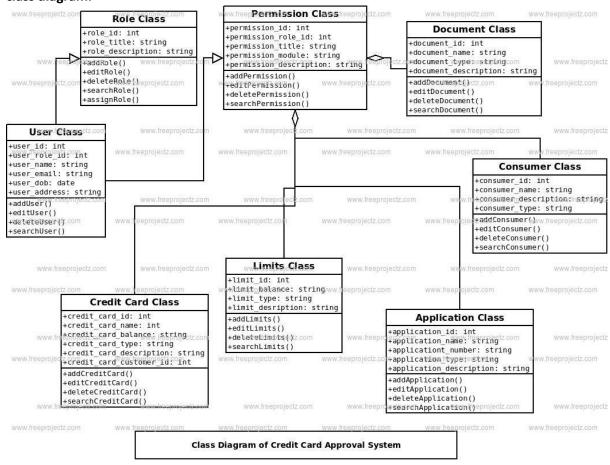
Temwork 5: activity diagram:



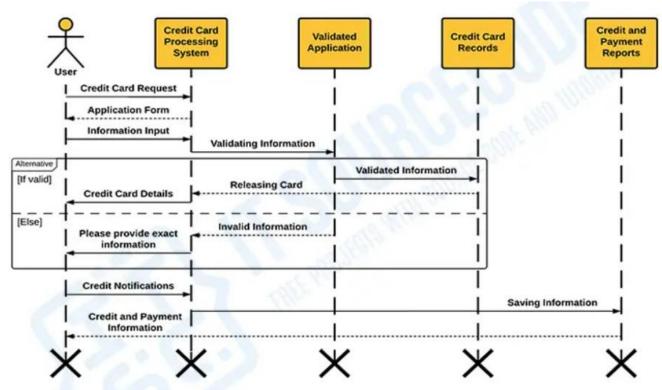
state diagram:



Termwork 6: class diagram:



sequence diagram:



Termwork 7:

