

# Hyperledger Fabric

## Loan Management System.

→ Register Loan - register new Loan details

- Generate Loan ID \*
- Borrower name (user input)
- Amount (user input)
- Interest rate (pre-defined)

→ Creation of Loan Agreement.  
i.e, creation of Loan agreement  
by storing relevant details

- Automates agreement creation process
- Saves it in ledger.

→ Query Loan details

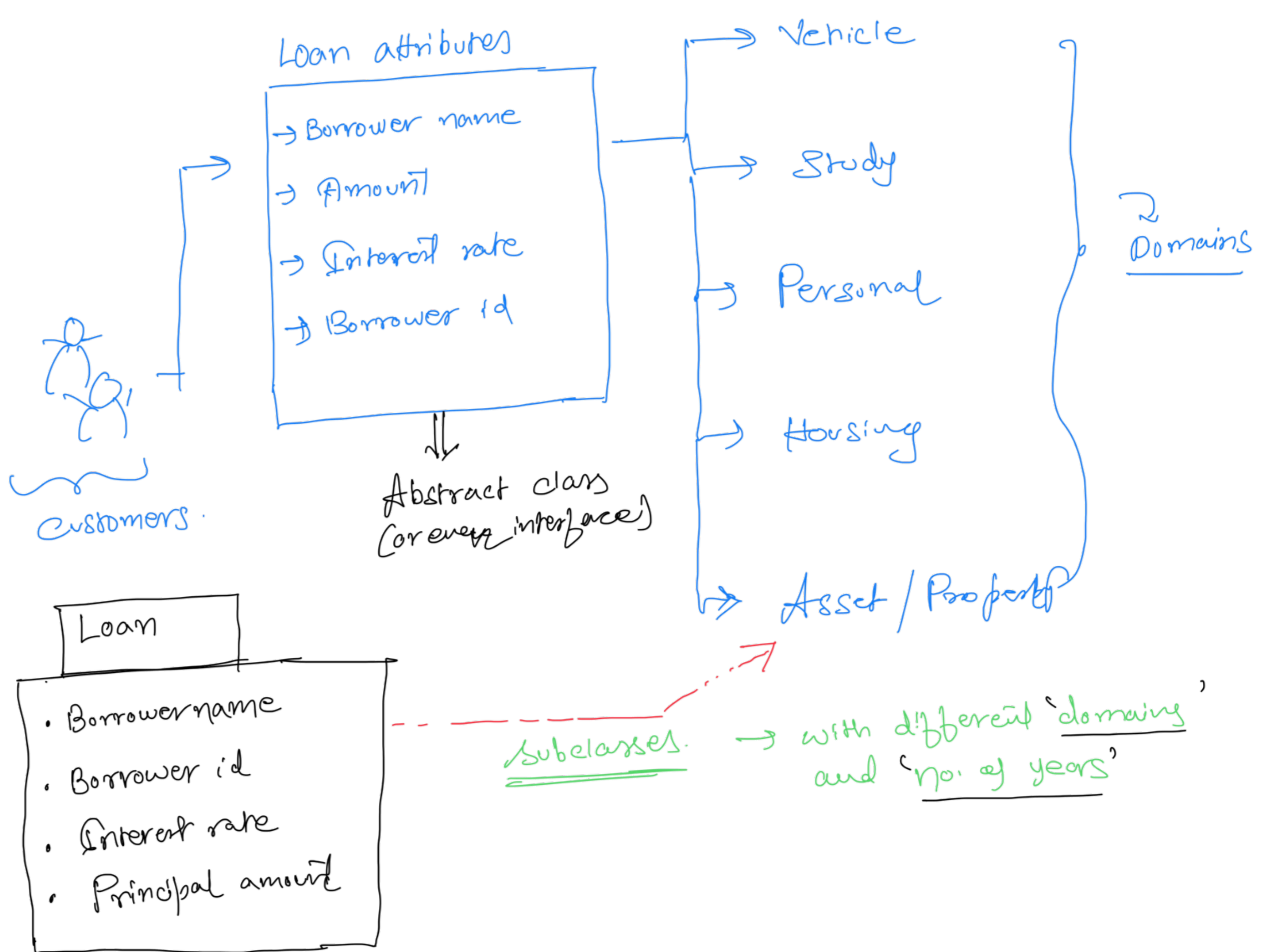
- Retrieves the details using Loan ID.

→ Update Loan Amount

- Principal amount updation
- Ensures updates are reflected in blockchain

→ Update Loan interest rate

- Permits adjustments to the interest rate of a loan.
- Update blockchain record to reflect the new interest rate.



## Chaincode

- RegisterLoan()
- LoanAgreement()
- QueryLoanDetails()
- UpdateLoanAmount()
- UpdateLoanInterest()

Functions in  
Chaincode utilising  
Loan[] class and  
its subclasses.

## Loan\_Management\_System

Loan Management System developed on Hyperledger fabric with basic loan features in JAVA. The Loan Management System can address these challenges by leveraging blockchain technology to provide a secure, transparent, and efficient solution. Using Hyperledger Fabric the system can automate loan agreements, track repayments, ensure data integrity, and enhance transparency and security throughout the loan lifecycle.

## Tools used

- Chaincode Development: Java
- IDE Tool: Eclipse
- Blockchain: Hyperledger Fabric
- Build Automation Tool: Gradle
- Tested by: Mockito and JUnit

