**Indian Institute of Information Technology, Allahabad**

**Object Oriented Methodology (OOM)**

**Mini Project-12**

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**OOM Mini Project # 12: Bank Management System**

**Abstract:**

Develop an application to help a bank manager manage customer accounts. The bank offer several

bank accounts types. Each customer can have one or more accounts. The customer can go the

operations permitted by the account type, such as deposit, withdraw, or balance enquire. The bank

manages the account by debiting the fees, or crediting the profits. Both the bank employees and the

Customers can print reports about the current account details.

**Design**:

**Basic Classes**: Account, CheckingAccount, SavingAccount, Loan, Customer:

A. The Account is a general account class that contains balance as instance variable, deposit,

withdraw, and balanceEnquiry as instance methods.

B. CheckingAccount is a subclass from the Account class that allows overdraft while

withdrawing (making the balance go below zero up to the specified credit limit), by debiting

the account balance with an overdraft fee . It has a creditlimit as an instance variable.

C. The Saving Account is a subclass from the Account class that has an interest rate as an

instance variable. The system credit the balance with monthly interest based on the account

balance and the interest rate.

D. The loan account is a subclass from the Account class that has principal amount, interest rate,

loan duration in months as instance variables. The loan balance is debited by monthly interest

each month based on the interest rate and the loan balance.

E. Each customer can have any number of accounts of any type.

F. The banking system provide the customer with an interface to access all banking operations

described above and review reports about transactions and current balance.

G. A banking administrator can print a report about all customers and their current balances.

**Specific Technology**Java, Applet

**Project Tasks**Use case analysis, Design, Implementation, and User Interface

### Submission

### The project presentation has to be done by each member to show periodically the progress and the complete project submission should contain the following:

* UML diagrams:-Use Case diagram, Class diagram, CRC diagram(s), illustrating the design of your program.

### All the Java source code should necessary to compile and execute.