**Java Project : Bank Functionalities using OOPS Concept**

Introduction: our project focuses on the development of a straightforward banking application that incorporates essential features such as user authorization and transaction functionalities. To ensure a robust and organized structure, we have employed the principles of object-oriented programming. Within the same package, distinct classes, namely bank, department, and project, play integral roles in the application's functionality.

The application is built upon fundamental programming concepts, including if-else conditions, methods with return types, and the utilization of the Scanner class. Object creation is a key aspect, involving both the transaction class and user class. Additionally, we have leveraged various data types such as Boolean, int, and string to enhance the application's flexibility and versatility. Through the thoughtful integration of these concepts, our banking application emerges as a cohesive and effective solution for managing user authorization and transactions.

**Code used for the implementation**

Project class

package BankTransaction;

import java.util.Scanner;

public class bank

{

public static void main(String[] args)

{

Scanner reader = new Scanner(System.in);

int passwd, amount;

String accName, transaction;

System.out.println("Enter your User Name: ");

accName = reader.nextLine();

reader.reset();

System.out.println("Enter your Password: ");

passwd = reader.nextInt();

reader.nextLine();

System.out.println("Enter your mode of transaction: ");

transaction = reader.nextLine();

System.out.println("Enter your the amount: ");

amount = reader.nextInt();

user us = new user();

transactionMode tm=new transactionMode();

boolean result = us.userValidation(accName, passwd, transaction, amount);

if (result == true)

{

tm.mode(transaction, amount);

}

else

System.out.println("Invalid user name and password");

}

}

User class

package BankTransaction;

public class user

{

public Boolean userValidation(String accName, int passwd, String transaction, int amount)

{

Boolean condition;

if(accName.equals("Bheema") && passwd == 12345)

condition=true;

else if (accName.equals("Rekha") && passwd == 12245)

condition=true;

else if (accName.equals("Siddu") && passwd == 54321)

condition=true;

else

condition=false;

return condition;

}

}

Banktransaction Class

ackage BankTransaction;

public class transactionMode

{

int total=10000; //initial balance

public void mode(String transaction, int amount)

{

if(transaction.equals("deposit"))

{

total=total+amount;

System.out.println("Your account cridited by "+amount+" and total balance is "+total);

}

else if(transaction.equals("withdrawal"))

{

if(total>=amount)

{

total=total-amount;

System.out.println("Your account debited by "+amount+" and total balance is "+total);

}

else

System.out.println("Your account have insufficient balance");

}

else if(transaction.equals("balance"))

{

System.out.println("Your balance amount is: "+total);

}

else

System.out.println("Invalid transaction mode, please enter correct mode of transaction");

}

}