MINI-PROJECT REPORT

JAVA (OOPM)

TITLE:

BANK SERVICES AND SYSTEMS

Made By: SE Comp.S/ B

Mandar M. Prabhu (14)

Jayesh R. Patil (03)

Saurav V. Waghade (35)

Vaibhav D. Patil (10)

BANK SERVICES AND SYSTEMS

INTRODUCTION:

Bank is an essential place to keep our money safe. Also, it provides us with various services like loans and keeping the money in safe lockers, deposits etc. This makes bank and humans interconnected. Money which is an essential property nowadays needs to be protected from many peoples who have an eye on it. So,the management of it should also be done conveniently.This is why we took this project.

PROBLEM DEFINATION

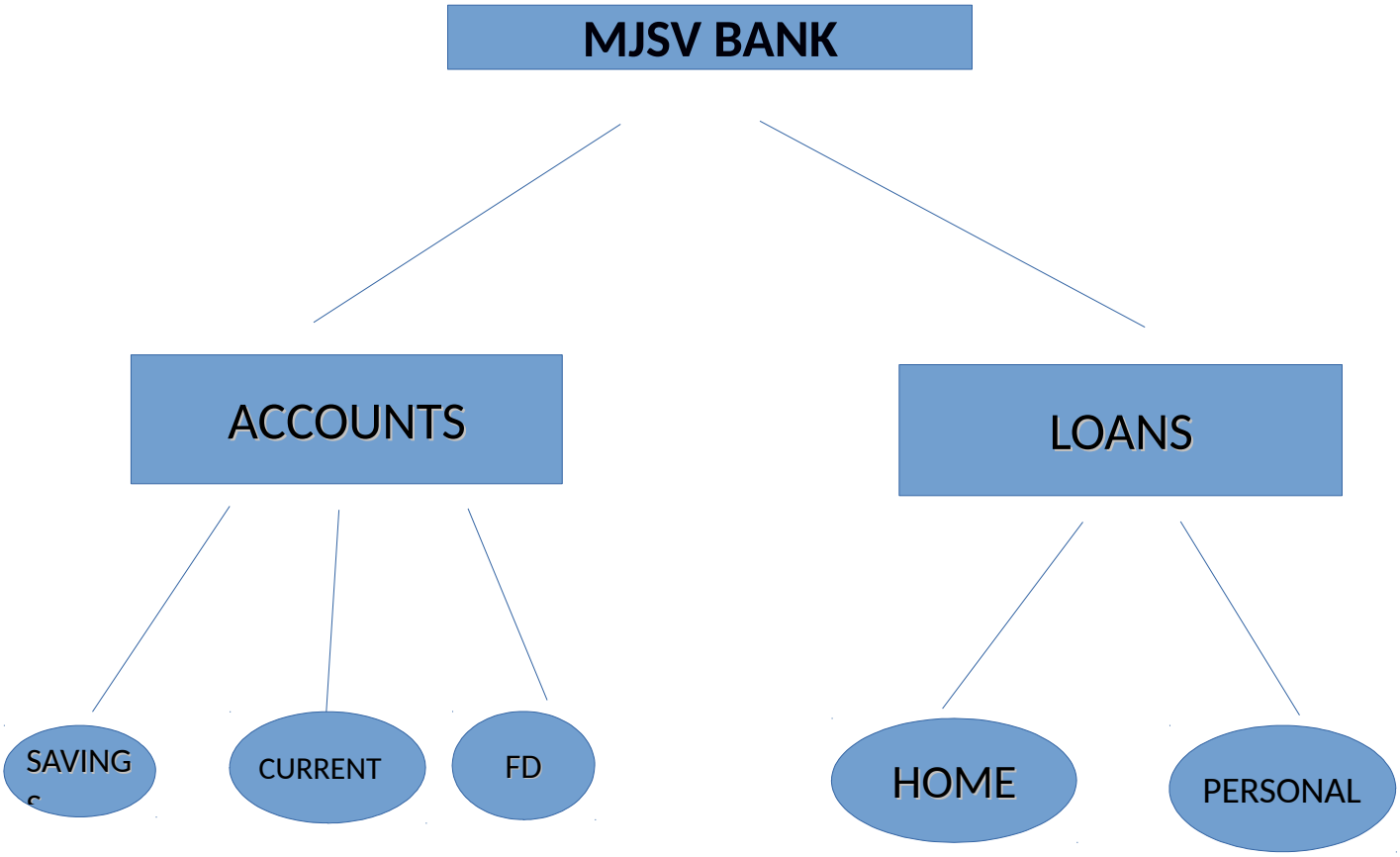
Bank need to handle everything in case of user details ,his transactions and all.Our project basically focuses on the Loans given to the user with the amount of years he wants to get the loan for, the amount of money he wants and the amount he has to pay after the given years with interest.

Also, we have taken the Accounts with the owners name from the user along with his initial balance and then giving him the option to keep the money in Fixed Deposit ,Savings or Current .

MODULES:

- Entry of Account Details
- Initial Balance
- Final Amount after Fixed Deposit, Current or Savings
- Loans in case of Personal, Home Loan

IMPLEMENTATION:



PROGRAM:

```
import java.io.*;
import java.util.*;

class account
{
	long acc_no;
	String acc_name;
	double balance;

	account(long a, String n, double b)
	{
		acc_no=a;
		acc_name=n;
		balance=b;
	}

	void display()
	{
		 System.out.println("\nAcc_no:\t"+acc_no);
		 System.out.println("Name:\t"+acc_name);
		 System.out.println("Initial balance:\t"+balance);
	}
}

class savings extends account
{
	double amt,amtw,savings_bal1,savings_bal;
	savings(long a, String n, double b, double am,double amw)
	{
		super(a,n,b);
		amt=am;
		amtw=amw;
		savings_bal=(amt+balance);
```

```
            savings_bal1=(balance-amtw);
        }

        void displayd()
        {
            super.display();
            System.out.println("\nSavings amount:\t"+amt);
            System.out.println("Final balance:\t"+savings_bal);

        }
        void displayw()
        {
            System.out.println("\nWithdraw balance:\t"+amtw);
            System.out.println("Final balance:\t"+savings_bal1);
        }
}

class current extends account
{
        double amtc,amtcw,amcw,current_bal1,current_bal;
        current(long a, String n, double b, double amc)
        {
            super(a,n,b);
            amtc=amc;
            amtcw=amcw;
            current_bal=(amtc+balance);
            current_bal1=(balance-amtcw);
        }
        void displayd()
        {
            super.display();
            System.out.println("\nCurrent Acc amount:\t"+amtc);
            System.out.println("Final balance:\t"+current_bal);

        }
        void displayw()
```

```
	{
		System.out.println("\nWithdraw balance:\t"+amtcw);
		System.out.println("Final balance:\t"+current_bal1);
	}

}

class fd extends account
{
	int year;
	double fd_interset,fd_amt,fd_bal,fd_in,tot;
	fd(long a, String n, double b, int y,double fd_am)
	{
		super(a,n,b);

		fd_amt=fd_am;
		year=y;
		if(year==3)
		{
			fd_in=0.05;
		}
		else if(year==5)
		{
			fd_in=0.08;
		}
		else if(year==10)
		{
			fd_in=0.1;
		}
		fd_bal=(fd_in*fd_amt+fd_amt);
		tot=(fd_bal+balance);
	}

	void display()
	{
		super.display();
```

```
                System.out.println("\nFD amount:\t"+fd_amt);
                System.out.println("FD balance after "+year        +" years
is:\t"+fd_bal);
                System.out.println("Total balance:"+tot);


        }
}

class loan
{
        long acc_no1;
        String acc_name1;

        loan(long a1, String n1)
        {
                acc_no1=a1;
                acc_name1=n1;
        }

        void display1()
        {
                 System.out.println("\nAcc_no:\t"+acc_no1);
                 System.out.println("Name:\t"+acc_name1);
        }
}

class perloan extends loan
{
        int year1;
        double pl_interest, pl_amt, pl_in, tot1;
        perloan(long a, String n, int y1, double pl_am)
        {
                super(a,n);
                pl_amt=pl_am;
                year1=y1;
```

```
            if(year1==3)
            {
                  pl_in=0.015;
            }
            else if(year1==5)
            {
                  pl_in=0.086;
            }
            else if(year1==10)
            {
                  pl_in=0.150;
            }
            tot1=(pl_in*pl_amt+pl_amt);

      }

      void display1()
      {
            super.display1();
            System.out.println("\nPersonal Loan amount");
            System.out.println("Personal Loan amount after"+year1+"
years is:\t"+tot1);
      }
}

class homeloan extends loan
{
      int year2;
      double hl_interest, hl_amt, hl_in, tot2;
      homeloan(long a, String n, int y2, double hl_am)
      {
            super(a,n);
            hl_amt=hl_am;
            year2=y2;

            if(year2==3)
```

```
		{
			hl_in=0.045;
		}
		else if(year2==5)
		{
			hl_in=0.086;
		}
		else if(year2==10)
		{
			hl_in=0.120;
		}
		tot2=(hl_in*hl_amt+hl_amt);

	}

	void display1()
	{
		super.display1();
		System.out.println("\nHome Loan amount");
		System.out.println("Home Loan amount after"+year2+"
years is:\t"+tot2);
	}
}


class bank
{


 static int n=100;
	static
{

System.out.println("\n=========================================
==================================\n");
```

```
        System.out.println("..........Welcome To MJSV
Bank..........\n");

System.out.println("==========================================
==================================\n");
}

        public static void main(String args[])throws IOException
        {
                Scanner s=new Scanner(System.in);

        while(n!=0)
                {

        System.out.println("\n1.Accounts\n2.Loan\n3.Exit\n\nEnter
your choice\n");
                        int choice=s.nextInt();
                        switch(choice)
                        {
                                case 1:
                                Scanner s1=new Scanner(System.in);
                                long  acc_no;
                                String acc_name;
                                double balance;

                                System.out.println("\nEnter   Account
name\n\tAccount Number\n\tBalance\n");

                                acc_name=s1.nextLine();
                                acc_no=s1.nextInt();
                                balance=s1.nextDouble();

                                System.out.println("\nEnter \n1. Savings\n2.
FD\n3. Current\n");
                                int choicea=s1.nextInt();

                                        switch(choicea)
                                        {
```

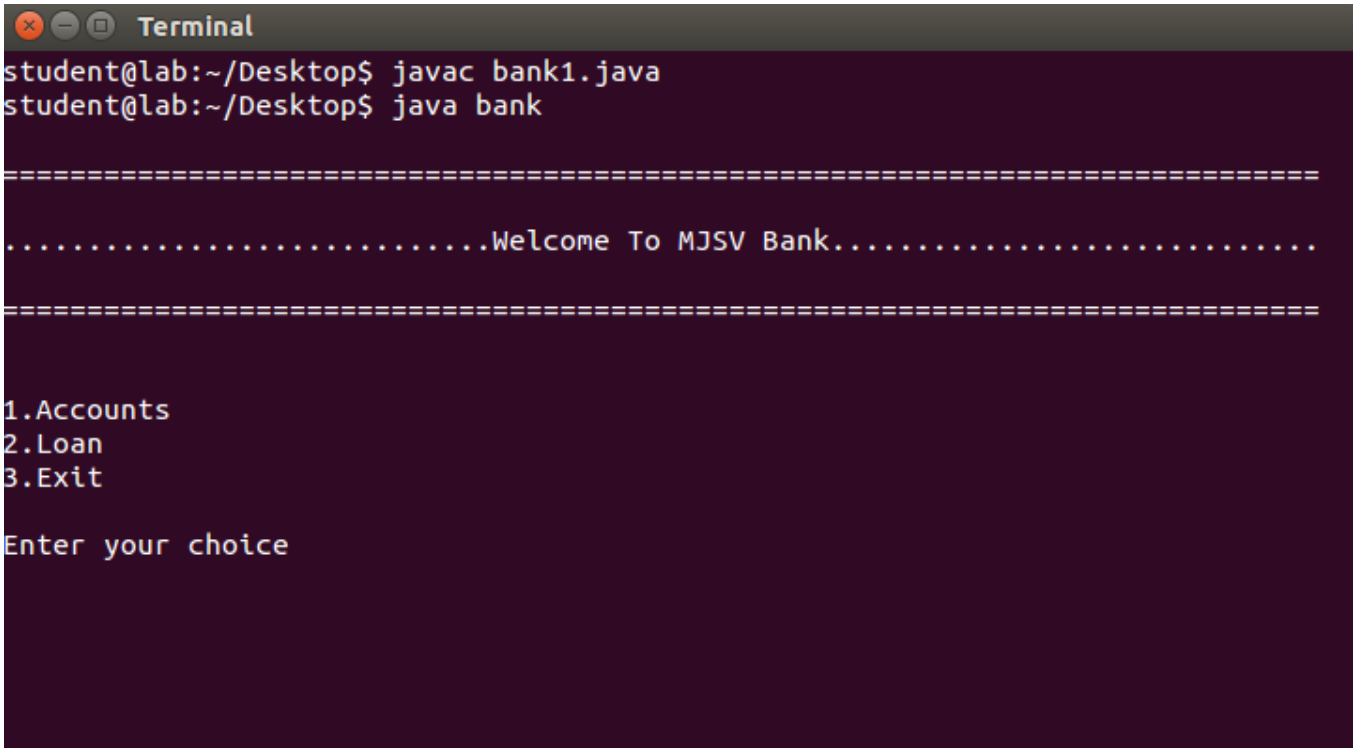
```
                                        case
1:System.out.println("\n1.Deposit\n2.Withdraw\n");
                                                int num=s1.nextInt();
                                                switch(num)
                                                {
                                                        case 1:

System.out.println("\nEnter amount to deposit in savings Acc");
                                                  double am=s1.nextDouble();
                                                  double amw=0;
                                                  savings  s5=new
savings(acc_no,acc_name,balance,am,amw);
                                                  s5.displayd();
                                                  break;
                                                       case
2:System.out.println("\nEnter amount to Withdraw in savings Acc");
                                                   amw=s1.nextDouble();
                                                   am=0;
                                                  savings  s6=new
savings(acc_no,acc_name,balance,am,amw);
                                                  s6.displayw();

                                                  break;
                                                }
                                                break;
                                        case 2:System.out.println("\nEnter
amount of Fixed deposit\n");
                                                double
fd_am=s1.nextDouble();
                                                System.out.println("\nEnter
number of years 3, 5 or 10");
                                                int y=s1.nextInt();
                                                fd f=new
fd(acc_no,acc_name,balance,y,fd_am);
                                                f.display();
                                                break;
```

```
                                        case
3:System.out.println("\n1.Deposit\n2.Withdraw\n");
                                            num=s1.nextInt();
                                           switch(num)
                                           {
                                                 case 1:

System.out.println("\nEnter amount to deposit in Current Acc");
                                            double amc=s1.nextDouble();
                                            double amcw=0;
                                            savings  s5=new
savings(acc_no,acc_name,balance,amc,amcw);
                                            s5.displayd();
                                            break;
                                                 case
2:System.out.println("\nEnter amount to Withdraw in Current Acc");
                                             amcw=s1.nextDouble();
                                             amc=0;
                                            savings  s6=new
savings(acc_no,acc_name,balance,amc,amcw);
                                            s6.displayw();

                                            break;
                                           }
                                           break;
                                    }
                                 break;
                          case 2:
                                 Scanner s3=new Scanner(System.in);
                                 long  acc_no1;
                                 String acc_name1;

                                 System.out.println("\nEnter   Account
name\n\tAccount Number\n");

                                 acc_name1=s3.nextLine();
```

```
                    acc_no1=s3.nextInt();

                    System.out.println("\nEnter \n1.Personal
Loan\n2.Home Loan\n");
                    int choicel=s3.nextInt();


                        switch(choicel)
                        {
                            case 1:BufferedReader
br=new BufferedReader(new InputStreamReader(System.in));

      System.out.println("\nReason for applying Loan");
                                        String
reason=br.readLine();

      System.out.println("Enter your amount for Personal loan\n");
                                        double
pl_am=s3.nextDouble();

      System.out.println("\nEnter number of years 3, 5 or 10");
                                            int
y1=s3.nextInt();
                                            perloan pl=new
perloan(acc_no1,acc_name1,y1,pl_am);
                                            pl.display1();
                                            break;
                                    case
2:System.out.println("Enter your amount for Home loan\n");
                                        double
hl_am=s3.nextDouble();

      System.out.println("\nEnter number of years 3, 5 or 10");
                                            int
y2=s3.nextInt();
                                            homeloan hl=new
homeloan(acc_no1,acc_name1,y2,hl_am);
```

```
                                                    hl.display1();
                                                    break;

                                        }
                                    break;
                                case 3:n=0;
                                break;
                            }
                        }
                    }
                }
```

SNAPSHOT:



OUTPUT:

```
student@lab:~/Desktop$ javac bank1.java
```

```
student@lab:~/Desktop$ java bank

============================================================

          .....Welcome To MJSV Bank.....

============================================================


1.Accounts
2.Loan
3.Exit

Enter your choice
1
Enter   Account name
        Account Number
        Balance
mandar
35756
6000

Enter
1. Savings
2. FD
3. Current

1

1.Deposit
2.Withdraw
1
Enter amount to deposit in savings Acc
500
Acc_no:     35756
Name:       mandar
```

Initial balance: 6000.0

Savings amount: 500.0
Final balance: 6500.0

1.Accounts
2.Loan
3.Exit
Enter your choice
1
Enter Account name
       Account Number
       Balance
saurav
3587
10000

Enter
1. Savings
2. FD
3. Current
3

1.Deposit
2.Withdraw
2
Enter amount to Withdraw in Current Acc
500

Withdraw balance: 500.0
Final balance: 9500.0

1.Accounts
2.Loan
3.Exit

```
Enter your choice
1
Enter   Account name
        Account Number
        Balance
vaibhav
456677
50000

Enter
1. Savings
2. FD
3. Current
2
Enter amount of Fixed deposit
5000
Enter number of years 3, 5 or 10
10
Acc_no:     456677
Name:       vaibhav
Initial balance:   50000.0

FD amount:        5000.0
FD balance after 10 years is:       5500.0
Total balance:55500.0

1.Accounts
2.Loan
3.Exit
Enter your choice
2

Enter   Account name
        Account Number
jayesh
46688
```

```
Enter
1.Personal Loan
2.Home Loan
1

Reason for applying Loan
Party deni hai
Enter your amount for Personal loan
10000
Enter number of years 3, 5 or 10
3
Acc_no:     46688
Name:       jayesh

Personal Loan amount
Personal Loan amount after3 years is:  10150.0

1.Accounts
2.Loan
3.Exit
Enter your choice
3
student@lab:~/Desktop$
*/
```