**Loan Main Method**

package week7assignment;

import java.io.File;

import java.io.FileNotFoundException;

import java.text.DecimalFormat;

import java.util.NoSuchElementException;

import java.util.Scanner;

/\*\*

\*

\* @author

\*/

public class Loan {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

//setting format for money

DecimalFormat money = new DecimalFormat("$#,##0.00");

//instatiating new CarLoan object

CarLoan newLoan = new CarLoan(18875.0);

System.out.println(newLoan);

try {

int numb = 0;//variable for number of payments

double totPaid = 0;//variable for total amount paid

Scanner pay = new Scanner(new File("Payments.txt"));//reading in file

while (pay.hasNext()) {

numb++;

double payment = pay.nextInt();//reading each line

totPaid += payment;

newLoan.payment(payment);//passing information to payment method

System.out.println("\n Payment " + numb + " is " + money.format(payment)

+ ". Remaining balance is: " + newLoan);

System.out.println("\t Total of payments made is : " + money.format(totPaid));

}

pay.close();

} catch (FileNotFoundException fnfe) {

System.out.println("File not found");

} catch (NoSuchElementException nsee) {

System.out.println("File not found");

} catch (IllegalStateException ise) {

System.out.println("File not found");

}

}

}

**Bank Account Class**

/\*

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\*/

package week7assignment;

import java.text.DecimalFormat;

/\*\*

\*

\* @author

\*/

public class BankAccount {

public final DecimalFormat money = new DecimalFormat("$#,##0.00");

protected double balance;

public BankAccount() {

balance = 0.0;

}

public BankAccount(double startBalance) {

deposit(startBalance);

}

public double getBalance() {

return balance;

}

public void deposit(double amount) {

if (amount >= 0.0) {

balance += amount;

} else {

System.err.println("Loan Balance must be positive!");

}

}

public void payment(double amount) {

if (amount >= 0.0 && amount <= balance) {

balance = balance - amount;

} else {

System.err.println("Payment amount must be positive, and "

+ "cannot be grater than balace!");

}

}

@Override

public String toString() {

return ("Balance on car loan is " + money.format(balance));

}

}

**Car Loan Class**

/\*

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\*/

package week7assignment;

/\*\*

\*

\* @author

\*/

public class CarLoan extends BankAccount {

public CarLoan() {

super();

}

public CarLoan(double startBalance) {

super(startBalance);

}

}