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Computer Science II

Module 1: Assignment 2

**My Code:**

**package** Assingment2;

**public** **class** Account {

**private** **int** id = 0;

**private** **double** balance;

**private** **double** annualInterestRate = 4.5;

// set balance to zero

**public** Account() {

balance = 20000.0;

}

// deposit

**public** **void** deposit(**double** amount) {

balance = balance + amount;

}

//withdraw

**public** **void** withdraw(**double** amount) {

balance = balance - amount;

}

//get balance

**public** **double** getBalance() {

**return** balance;

}

**public** Account(**int** id, **double** balance) {

**this**();

**this**.id = id;

**this**.balance = balance;

}

**public** **int** getId() {

**return** **this**.id;

}

//returns the preset interest rate

**public** **double** getAnnualInterestRate() {

**return** annualInterestRate;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** **void** setBalance(**double** balance) {

**this**.balance = balance;

}

**public** **void** setAnnualInterestRate(**double** annualInterestRate) {

**this**.annualInterestRate = annualInterestRate;

}

//converts interest rate to a percent and divides it by 12 to find the monthly rate

**public** **double** getMonthlyInterestRate() {

**return** (annualInterestRate / 100) / 12;

}

//multiplies the monthly rate by the balance to determine the amount of interest

**public** **double** getMonthlyInterest() {

**return** balance \* getMonthlyInterestRate();

}

}

**package** Assingment2;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

//create account

Account customer1 = **new** Account();

System.***out***.println("Your starting balance was: " + customer1.getBalance());

customer1.deposit(3000);

customer1.withdraw(2500);

System.***out***.println("This is your balance after your transactions: " + customer1.getBalance());

System.***out***.println("Your monthly interest is: " + customer1.getMonthlyInterest());

System.***out***.println("Your annual interest rate is: " + customer1.getAnnualInterestRate() + "%");

}

}

**My Code Output:**

Your starting balance was: 20000.0

This is your balance after your transactions: 20500.0

Your monthly interest is: 76.875

Your annual interest rate is: 4.5%

For this assignment I originally got help from GitHub, however there were a bunch of errors and so only a little bit of that original code was even usable, I didn’t really understand everything too well until I watched a YouTube video over it. I only watched a portion of the video and was able to complete the rest of the assignment on my own, however I couldn’t get the Date to work.

Here are the links for the resources I used.

<https://www.youtube.com/watch?v=mp1_F7lfmNE>

<https://github.com/mlnorman/Intro-To-Java-Programming/blob/master/Chp9/Exercise_09_07.java>