Marist College

# Object Oriented Programming in Java

**Assignment_8**

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1.

| GeometricClass |
|---|
| **-**color : String<br>**-**filled : boolean |
| GeometricClass()<br>GeometricClass (color : String, filled : boolean)<br>+ getColor ():String<br>+ setColor ()<br>+ isFilled () : boolean<br>+ setFilled () |

| Triangle |
|---|
| **-**side1: double<br>**-**side2: double<br>**-**side3: double |
| Triangle ()<br>Triangle (double : side1, double : side2, double:side3)<br>Triangle (double : side1, double : side2, double:side3, color: String , filled : boolean)<br>+ getFirstSide ():double<br>+ getSecondSide ():double<br>+ getThirdSide():double<br>+getArea():double<br>+getPerimeter():double<br>+ toString () : String |

2.

| Accounts |
|---|
| **-**id : int<br>**-**balance: double<br>**-**annualInterestRate: double<br>**-**dateCreated:Date |
| Accounts()<br>Accounts (id : int, balance:double, annualInterestRate:double)<br>+ getId ():int<br>+ setId (i:int):String<br>+ getbalance ():double<br>+ setbalance (bal : double):double<br>+ getannualInterestRate ():double<br>+ setannualInterestRate (rate : double):double<br>+ getdateCreated ():Date<br>+ getMonthlyInterestRate ():double |

| + getMonthlyInterest ():double |
| --- |
| + toString ():String |
| + deposit (amt:double) |
| + withdraw (amt:double) |

| SavingsAccount |
| --- |
| **-**savingsId: int<br>**-**savingsBalance: double<br>**-**dateCreated:Date |
| SavingsAccount ()<br>SavingsAccount (id : int, savingsBalance:double)<br>+ getSavingsId ():int<br>+ setSavingsId (i:int):String<br>+ getSavingsbalance ():double<br>+ setSavingsbalance (bal : double):double<br>+ getannualInterestRate ():double<br>+ setannualInterestRate (rate : double):double<br>+ getdateCreated ():Date<br>+ toString ():String<br>+ deposit (amt:double)<br>+ withdraw (amt:double) |

| CheckingAccount |
| --- |
| **-**checkingId: int<br>**-**checkingBalance: double<br>**-**dateCreated:Date |
| CheckingAccount ()<br>CheckingAccount (id : int, checkingBalance:double)<br>+ getCheckingId ():int<br>+ setCheckingId (i:int):String<br>+ getCheckingbalance ():double<br>+ setCheckingbalance (bal : double):double<br>+ getdateCreated ():double<br>+ setannualInterestRate (rate : double):double<br>+ getdateCreated ():Date<br>+ toString ():String<br>+ deposit (amt:double)<br>+ withdraw (amt:double) |

3.

| Course |
| --- |
| **-**students: ArrayList‹String›<br>**-**courseName: String |
| + Course (courseName:String)<br>+addStudent (student : String)<br>+getStudent ()<br>+getNumberOfStudents ():int<br>+CourseName ():String<br>+ dropStudent () |

4.

| IntergerSorted |
| --- |
|  |
| IntergerSorted ()<br>+sort (list : ArrayList‹Integer›)<br>+printArray (list : ArrayList‹Integer›) |