

Greg Cernera

// Lab 8 UML Diagrams //

Problem 11.1

Triangle (extends GeometricObject)
<ul style="list-style-type: none">- side1 : double- side2 : double- side3 : double
<ul style="list-style-type: none">+ Triangle()+ Triangle(side1 : double, side2 : double, side3: double)+ getSide1()+ getSide2()+ getSide3()+ setSide1(side : double)+ setSide2(side : double)+ setSide3(side : double)+ getArea()+ getPerimeter()+ toString()

GeometricObject
<ul style="list-style-type: none">- color : String- filled : boolean- dateCreated : java.util.Date
<ul style="list-style-type: none">+ GeometricObject()+ GeometricObject(color : String, filled : boolean)+ getColor()+ setColor(color : String)+ isFilled()+ setFilled(filled : boolean)+ getDateCreated()+ toString()

Problem 11.3

Account
<ul style="list-style-type: none">- id : int- balance : double- <u>annualInterestRate : double</u>

<ul style="list-style-type: none"> + Account() + Account(newID : int, newBalance : double) + getId() + setID(newID : int) + getBalance() + setBalance(newBalance : double) + getDateCreated() + setInterestRate(newInterestRate : double) + getMonthlyInterestRate() + getMonthlyInterest() + withdraw(amount : double) + deposit(amount : double) + toString()
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SavingsAccount (extends Account)

- overdraft : double

<ul style="list-style-type: none"> + SavingsAccount(id : int, balance : double) + withdraw(amount : double) + toString()

CheckingAccount (extends Account)

- overdraft : double

<ul style="list-style-type: none"> + CheckingAccount(id : int, balance : double) + withdraw(amount : double) + toString()
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Problem 11.5

Course

<ul style="list-style-type: none"> - courseName : String + students : ArrayList<String>

<ul style="list-style-type: none"> + Course(courseName : String) + addStudent(student : String) + getStudents() + getNumberOfStudents() + getCourseName() + dropStudent(student : String)

+ clear()