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Software Development I
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Lab 8 UML Diagrams

Problem 11.1 GeometricObject Class UML Diagram:

GeometricObject
-color: String -filled: boolean -dateCreated: java.util.Date
+GeometricObject() +GeometricObject(color: String, filled: boolean) +getColor(): String +setColor(): String +isFilled(): boolean +setFilled(filled: boolean): void +getDateCreated(): java.util.Date +toString(): String

Problem 11.1 Triangle Class UML Diagram:

Triangle
-side1: double -side2: double -side3: double +Triangle() +Triangle(side1: double, side2: double, side3: double) +getSide1(): double +getSide2(): double +getSide3(): double +getArea(): double +getPerimeter(): double +toString(): String

Problem 11.3 Account Class UML Diagram:

Account
-id: int -balance: double -annualInterestRate: double
-dateCreated: String +Account() +Account(newid: int, newBalance: double) +setId(newId: int) +setBalance(newBalance: double) +setAnnualInterestRate(newAnnualInterestRate: double) +getId(): int +getBalance(): double +getAnnualInterestRate(): double +getDateCreated(): String +getMonthlyInterestRate(): double +getMonthlyInterest(): double +withdraw(amount: double) +deposit(amount: double)

Problem 11.3 SavingsAccount Class UML Diagram:

SavingsAccount
+SavingsAccount() +withdraw(amount: double): boolean

Problem 11.3 CheckingAccount Class UML Diagram:

CheckingAccount
-overdraftLimit: double +CheckingAccount() +CheckingAccount(newId: int, newBalance: double, overdraftLimit: double) +setOverdraftLimit(overdraftLimit: double): void +getOverdraftLimit(): double +withdraw(amount: double): boolean +toString(): String

Problem 11.5 Course Class UML Diagram:

Course
-courseName: String -students: ArrayList<String> -numberOfStudents: int +Course(courseName: String) +getCourseName(): String +addStudent(student: String): void +dropStudent(student: String): void +getStudents(): String[] +getNumberOfStudents(): int