

## Exercise 11.1

Triangle
-side1: double -side2: double -side3: double
+Triangle() +Triangle(side1: double, side2: double, side3: double) +Triangle(side1: double, side2: double, side3: double, color: String, filled: boolean) +getSide1(): double +setSide1(side1: double): void +getSide2(): double +setSide2(side2: double): void +getSide3(): double +setSide3(side3: double): void +getArea(): double +getPerimeter(): double +toString(): String

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

### Exercise 11.3

Account
-id: int -balance : double -annualInterestRate: double -dateCreated : Date
+Account() +Account (id, balance) +getId (): int +updateId( id: int ): void +getBalance (): double +updateBalance ( balance: double): void +getAnnualInterestRate (): double +updateAnnualInterestRate ( annualInterestRate: double) : void +getDate(): Date +getMonthlyInterestRate() : double +getMonthlyInterest() : double +withdraw(withdrawAmount: double ): void +deposit (depositAmount: double ): void +toString(): String +getDateCreated(): Date



SavingsAccount	CheckingAccount
-id: int -balance : double -annualInterestRate: double	-id: int -balance : double -annualInterestRate: double -overdraftLimit: double
+SavingsAccount() +SavingsAccount (b: double, interest:double) +SavingsAccount(idnumber: int, b: double, interest: double){ +getId(): int +setId (newId: int): void +getBalance(): double +setBalance(newBalance: double): void +withdraw(w: double): double +deposit(d: double): double +getAnnualInterestRate(): double +setAnnualInterestRate (newAnnualInterestRate: double): void +getMonthlyInterestRate(): double +getMonthlyInterest(): double +toString (): String	+CheckingAccount() +CheckingAccount (b: double, interest:double, overdraft:double) +CheckingAccount(idnumber: int, b: double, interest: double, overdraft:double){ +getId(): int +setId (newId: int): void +getBalance(): double +setBalance(newBalance: double): void +withdraw(w: double): double +deposit(d: double): double +getAnnualInterestRate(): double +setAnnualInterestRate (newAnnualInterestRate: double): void +getMonthlyInterestRate(): double +getMonthlyInterest(): double +toString (): String

## Exercise 11.5

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



