Nicholas Judson Professor Arias CMPT 220L 30 March 2018

# **UML** Diagrams

# Programming Exercise 11.1:

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

### Geometric Object

-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

# Programming Exercise 11.3:

#### Account

-id: int

-balance: double

-annualInterestRate: double

-dateCreated: Date

+Account()

+Account(id: int, balance: double)

+getId(): int +setId(id: int): void +getBalance(): double

+setBalance(balance: double): double +getAnnualInterestRate():double

+setAnnualInterestRate(annualInterestRate: double): void

+getDateCreated():String

+getMonthlyInterestRate(): double +getMonthlyInterest(): double +withdraw(amount: double): void +deposit(amount: double): void

+toString(): String

# Savings Account

+SavingsAccount()

+SavingsAccount(id: int, balance: double) +withdraw(withdrawal: double): void

+toString(): String

### **Checking Account**

-OverdraftLimit: double

+CheckingAccount()

+CheckingAccount(id: int, balance: double, OverdraftLimit: double)

+setOverdraftLimit(): void +getOverdraftLimit(): double

+withdraw(withdrawal: double): void

+toString(): String

### Programming Exercise 11.5:

#### Course

-courseName: String

-students: ArrayList<String>

+Course(courseName: String)

+addStudent(student: String): void

+getStudents(): String[]
+getNumberOfStudents: int
+getCourseName: String