### Lab 10 UML Diagrams

### 13.7

# GeometricObject

-color: String-filled: boolean

-dateCreated: java.util.Date

+GeometricObject()

+GeometricObject(String: color, boolean: filled)

+getColor(): String
+setColor(String: color)
+isFilled(): boolean
+setFilled(boolean: filled)

+getDateCreated(): java.util.Date

+toString(): String
+getArea(): double
+getPerimeter(): double

### Circle

# -radius: double

+Circle()

+Circle(double: radius)

+Circle(double radius, String color, boolean filled)

+getRadius(): double +setRadius(double: radius)

+getArea(): double +getDiameter(): double +getPerimeter(): double

+printCircle()

### Rectangle

-width: double -height: double

+Rectangle()

+Rectangle(double width, double height)

+Rectangle(double width, double height, String color, boolean filled)

+getWidth(): double +setWidth(double width) +getHeight(): double +setHeight(double height)

+getArea(): double

+getPerimeter(): double

Square				
side: double				
Square()				
Square(double side)				
getSide()				
setSide(double side)				
getArea(): double				
getPerimeter(): double				
howToColor(): String				

# Colorable +howToColor(): String

# 13.9

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

```
Circle

-radius: double

+Circle()

+Circle(double: radius)

+Circle(double radius, String color, boolean filled)

+getRadius(): double

+setRadius(double: radius)

+getArea(): double

+getDiameter(): double

+getPerimeter(): double

+printCircle()
```

+equals(Object obj)		
+compareTo(Object o)		

### 13.11

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

```
-side: double

+Octagon()
+Octagon(double side)
+getSide(): double
+setSide(double side)
+getArea(): double
+getPerimeter(): double
+compareTo(Octagon o): int
+clone()
+equals(Object o): boolean
```