\*\*\*\*NOTE: my Visual Paradigm free trial ran out, so I have to type out the UML diagrams until I find a way to get a second trial or find another program that does the same thing.\*\*\*\*\*

CalcWithException
-length of args
+Main()
CalcWithoutException
-result: int
-testDigit: object
+testDigit(String str)
+Switch()
IllegalTriangleException
-s1: double
-s2: double
-s3: double
+IllegalTriangleException(double s1, double s2, double s3)
+getS1()
+getS2()
+getS3()

## -color: String -filled: boolean -dateCreated: java.util.Date +GeometricObject() +GeometricObject(color: String,filled: boolean) +getColor(): String +setColor(color: Stirng): void +isFilled(): boolean +setFilled(filled: boolean): void +getDateCreated(): java.util.Date +toString(): String Objects triangle: color: from user input

color: from user input side 1: user input side 2: user input side 3: user input

area: (side1 \* side2 \* side3) / 2 isFilled: boolean based on user input perimeter side1 + side2 + side3

```
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
                      Objects
triangle:
color: from user input
side 1: user input
side 2: user input
side 3: user input
area: (side1 * side2 * side3) / 2
isFilled: boolean based on user input
perimeter side1+ side2 + side3
```

<sup>\*\*\*\*\*</sup>I had these from the old labs It's a repeated class\*\*\*