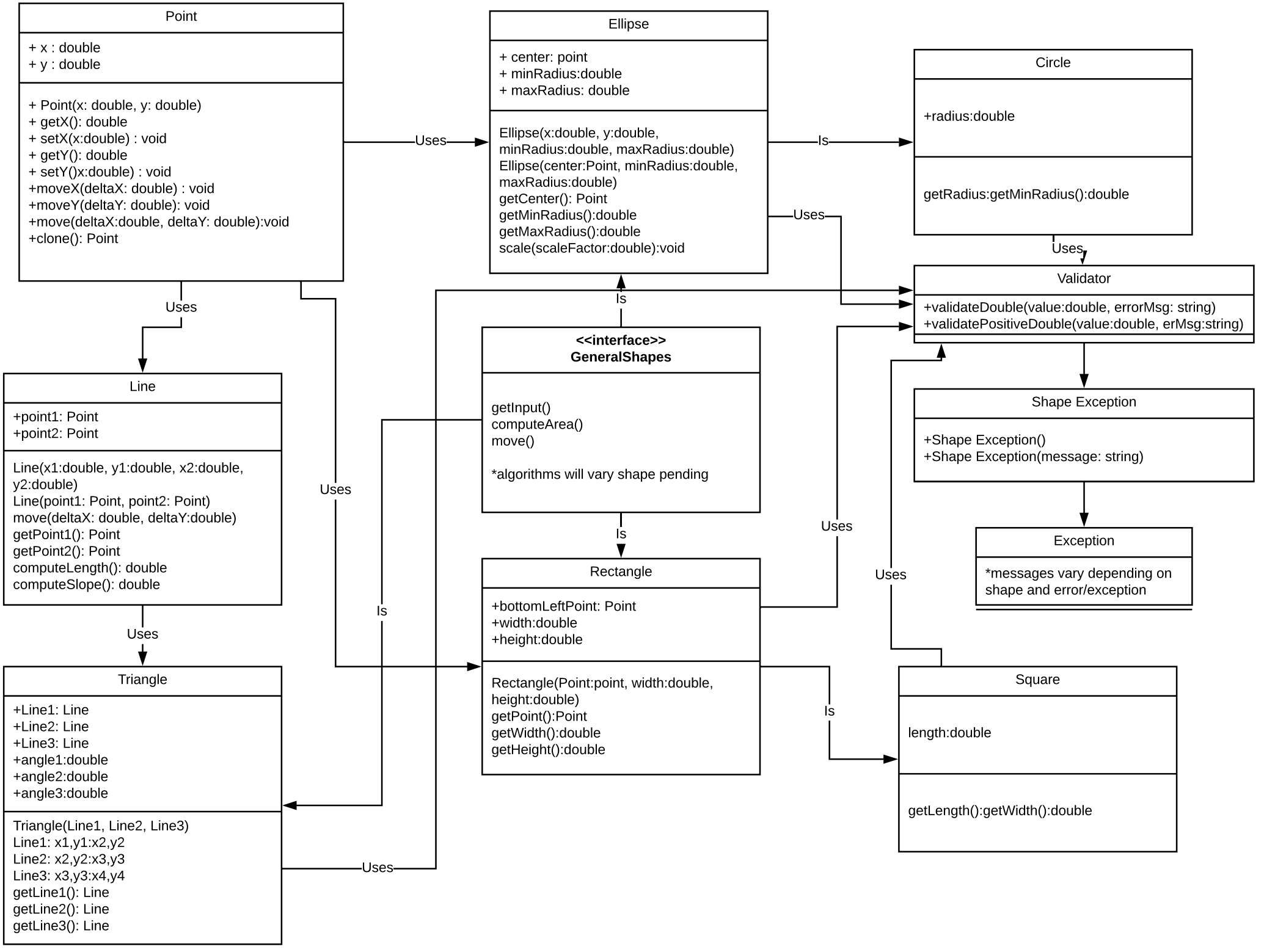
Point
+ x : double
+ y : double
+ Point(x: double, y: double)
+ getX(): double
+ setX(x:double) : void
+ getY(): double
+ setY()x:double) : void
+moveX(deltaX: double) : void
+moveY(deltaY: double): void
+move(deltaX:double, deltaY: double):void
+clone(): Point
Uses
Ellipse
+ center: point
+ minRadius:double
+ maxRadius: double
Ellipse(x:double, y:double, minRadius:double, maxRadius:double)
Ellipse(center:Point, minRadius:double, maxRadius:double)
getCenter(): Point
getMinRadius():double
getMaxRadius():double
scale(scaleFactor:double):void
Is
Circle
+radius:double
getRadius:getMinRadius():double
Uses
Uses
Uses
Validator
+validateDouble(value:double, errorMsg: string)
+validatePositiveDouble(value:double, erMsg:string)
Is
<<interface>>
GeneralShapes
getInput()
computeArea()
move()
*algorithms will vary shape pending
Shape Exception
+Shape Exception()
+Shape Exception(message: string)
Exception
*messages vary depending on shape and error/exception
Line
+point1: Point
+point2: Point
Line(x1:double, y1:double, x2:double, y2:double)
Line(point1: Point, point2: Point)
move(deltaX: double, deltaY:double)
getPoint1(): Point
getPoint2(): Point
computeLength(): double
computeSlope(): double
Uses
Uses
Is
Is
Uses
Uses
Uses
Rectangle
+bottomLeftPoint: Point
+width:double
+height:double
Rectangle(Point:point, width:double, height:double)
getPoint():Point
getWidth():double
getHeight():double
Is
Triangle
+Line1: Line
+Line2: Line
+Line3: Line
+angle1:double
+angle2:double
+angle3:double
Triangle(Line1, Line2, Line3)
Line1: x1,y1:x2,y2
Line2: x2,y2:x3,y3
Line3: x3,y3:x4,y4
getLine1(): Line
getLine2(): Line
getLine3(): Line
Uses
Square
length:double
getLength():getWidth():double