```
<<abstract>> Shape
                 #color:String = "red"
                                                           # denotes protected access
                 #filled:Boolean = true
                 +Shape()
                 +Shape(color:String,filled:boolean)
                 +getColor():String
                 +setColor(color:String):void
                 +isFilled():boolean
                 +setFilled(filled:boolean):void
                 +abstract getArea():double
                 +abstract getPerimeter():double
                                                           "Shape[color=?,filled=?]"
                 +toString():String .
                                      extends
             Circle
                                                     Rectangle
#radius:double = 1.0
                                     #width:double = 1.0
                                     #length:double = 1.0
+Circle(radius:double)
                                     +Rectangle()
+Circle(radius:double,
                                     +Rectangle(width:double,length:double)
   color:String,filled:boolean)
                                     +Rectangle(width:double,length:double,
+getRadius():double
                                         color:String,filled:boolean)
+setRadius(radius:double):void
                                     +getWidth():double
+getArea():double
                                     +setWidth(width:double):void
+getPerimeter():double
                                     +getLength():double
                                     +setLength(legnth:double):void
+toString():String .
                                     +getArea():double
                                     +getPerimeter():double
         "Circle[Shape[color=?,
                                     *+toString():String
         filled=?],radius=?]"
  "Rectangle[Shape[color=?,
                                                      Square
   filled=?],width=?,length=?]"
                                      +Square()
                                     +Square(side:double)
                                     +Square(side:double,color:String,
                                        filled:boolean)
                                     +getSide():double
                                     +setSide(side:double):void
                                     +setWidth(side:double):void
 "Square[Rectangle[Shape[color=?,
                                      +setLength(side:double):void
  filled=?],width=?,length=?]]"
                                     ++toString():String
```

+Circle()