java.awt.geom.* Rectangles

Methods declared in supertypes are hidden in subtypes

Cloneable

RectangularShape

\# RectangularShape ()

Accessors
```
        double  getCenterX ()
        double  getCenterY ()
 Rectangle2D  get / setFrame ()
        double  getHeight ()
        double  getMaxX ()
        double  getMaxY ()
        double  getMinX ()
        double  getMinY ()
        double  getWidth ()
        double  getX ()
        double  getY ()
       boolean  isEmpty ()
          void  setFrame (Point2D loc,  Dimension2D size)
          void  setFrame (double x, double y,  double w,  double h)
          void  setFrameFromCenter (Point2D center,  Point2D corner)
          void  setFrameFromCenter (double centerX, double centerY, double cornerX,
                    double cornerY)
          void  setFrameFromDiagonal (Point2D p1,  Point2D p2)
          void  setFrameFromDiagonal (double x1,  double y1,  double x2,  double y2)
```
Object
```
        Object  clone ()
```

java.awt. Shape

Accessors
```
     Rectangle  getBounds ()
  Rectangle2D  getBounds2D ()
  PathIterator  getPathIterator (AffineTransform at)
  PathIterator  getPathIterator (AffineTransform at,   double flatness)
```
Other Public Methods
```
       boolean  contains (Point2D p)
       boolean  contains (Rectangle2D r)
       boolean  contains (double x, double y)
       boolean  contains (double x, double y,  double w,  double h)
       boolean  intersects (Rectangle2D r)
       boolean  intersects (double x, double y,  double w,  double h)
```

Rectangle2D

\# **Rectangle2D** ()

Static Methods
```
          void  intersect (Rectangle2D src1,   Rectangle2D src2,   Rectangle2D dest)
          void  union (Rectangle2D src1,   Rectangle2D src2,   Rectangle2D dest)
```
Accessors
```
          void  setRect (Rectangle2D r)
          void  setRect (double x,  double y,  double w,  double h)
```
Collectors
```
          void  add (Point2D pt)
          void  add (Rectangle2D r)
          void  add (double newx,  double newy)
```
Object
```
       boolean  equals (Object obj)
           int  hashCode ()
```
Other Public Methods
```
  Rectangle2D  createIntersection (Rectangle2D r)
  Rectangle2D  createUnion (Rectangle2D r)
       boolean  intersectsLine (Line2D l)
       boolean  intersectsLine (double x1,  double y1,  double x2,  double y2)
           int  outcode (Point2D p)
           int  outcode (double x,  double y)
```

int OUT_LEFT,   OUT_TOP,   OUT_RIGHT,   OUT_BOTTOM

class **Double**
class **Float**

Serializable

java.awt. Rectangle

Rectangle ()
Rectangle (Rectangle r)
Rectangle (Point p)
Rectangle (Dimension d)
Rectangle (int width, int height)
Rectangle (Point p, Dimension d)
Rectangle (int x, int y, int width, int height)

Accessors
```
         Point  get / setLocation ()
    Dimension  get / setSize ()
          void  setBounds (int x,  int y,  int width,  int height)
          void  setLocation (int x,  int y)
          void  setSize (int width,  int height)
```
Collectors
```
          void  add (Point pt)
          void  add (Rectangle r)
          void  add (int newx,  int newy)
```
Object
```
        String  toString ()
```
Other Public Methods
```
       boolean  contains (Point p)
       boolean  contains (Rectangle r)
       boolean  contains (int x,  int y)
       boolean  contains (int X,  int Y,  int W,  int H)
          void  grow (int h,  int v)
     Rectangle  intersection (Rectangle r)
       boolean  intersects (Rectangle r)
          void  translate (int x,  int y)
     Rectangle  union (Rectangle r)
```

int x, y, width, height

Rectangle2D.Float

Float ()
Float (float x, float y, float w, float h)

Accessors
```
          void  setRect (float x,  float y,  float w,  float h)
```
Object
```
        String  toString ()
```

float x, y, width, height

Rectangle2D.Double

Double ()
Double (double x, double y, double w, double h)

String toString ()

double x, y, width, height

RoundRectangle2D.Float

Float ()
Float (float x, float y, float w, float h, float arcw, float arch)

void setRoundRect (float x, float y, float w, float h, float arcw, float arch)

float x, y, width, height, arcwidth, archeight

RoundRectangle2D

RoundRectangle2D ()

double getArcHeight ()
double getArcWidth ()
    void setRoundRect (RoundRectangle2D rr)
    void setRoundRect (double x, double y, double w, double h,
            double arcWidth, double arcHeight)

class **Double**
class **Float**

RoundRectangle2D.Double

Double ()
Double (double x, double y, double w, double h, double arcw, double arch)

double x, y, width, height, arcwidth, archeight

Ellipse2D.Double

Double ()
Double (double x, double y, double w, double h)

double x, y, width, height

Ellipse2D

Ellipse2D ()

class **Double**
class **Float**

Ellipse2D.Float

Float ()
Float (float x, float y, float w, float h)

void setFrame (float x, float y, float w, float h)

float x, y, width, height

Arc2D

Arc2D (int type)

Accessors
        double get / setAngleExtent ()
        double get / setAngleStart ()
            int get / setArcType ()
      Point2D getEndPoint ()
      Point2D getStartPoint ()
            void setAngleStart (Point2D p)
            void setAngles (Point2D p1, Point2D p2)
            void setAngles (double x1, double y1, double x2, double y2)
            void setArc (Arc2D a)
            void setArc (Rectangle2D rect, double angSt, double angExt, int closure)
            void setArc (Point2D loc, Dimension2D size, double angSt, double angExt, int closure)
            void setArc (double x, double y, double w, double h, double angSt, double angExt,
                    int closure)
            void setArcByCenter (double x, double y, double radius, double angSt, double angExt,
                    int closure)
            void setArcByTangent (Point2D p1, Point2D p2, Point2D p3, double radius)
Other Methods
      boolean containsAngle (double angle)
Rectangle2D makeBounds (double x, double y, double w, double h)

int OPEN, CHORD, PIE

class **Double**
class **Float**

Arc2D.Float

Float ()
Float (int type)
Float (Rectangle2D ellipseBounds, float start,
        float extent, int type)
Float (float x, float y, float w, float h, float start,
        float extent, int type)

float x, y, width, height, start, extent

Arc2D.Double

Double ()
Double (int type)
Double (Rectangle2D ellipseBounds, double start,
        double extent, int type)
Double (double x, double y, double w, double h,
        double start, double extent, int type)

double x, y, width, height, start, extent