Shape + static int nextTracker + static bool trackersInUse # QTreeWidgetItem * parentItem # alpha::vector< QTreeWidget > childItems # alpha::vector< QTreeWidget > pointsItems # alpha::vector< QTreeWidget Item : > penItems # alpha::vector< QTreeWidget > brushItems Item ¹ const int shapeld int trackerld string shapeType - QPen pen QBrush brush QPoint coords QPainter painter bool isSelected + Shape(int shapeId, string shapeType, QPoint coords, QPen pen, QBrush brush) + virtual ~Shape() + virtual void Draw(QWidget renderArea)=0 + virtual void Move(int x, int y) + virtual double Perimeter () const =0+ virtual double Area () const = 0+ virtual bool isPointInside (const QPoint &point) const =0 + void CreateParentItem() + void CreatePenChild() + void CreateBrushChild() and 36 more... Shape(Shape &shape) delete - Shape & operator=(Shape &object)=delete Polyline QPolygon pointsList + Polyline(string shapeType, QPoint coords, QPen pen, QBrush brush, QPolygon pointsList) oid Draw(QWidget *render Area) override + void Move(int x, int y) override + double Perimeter() const override + double Area() const override

+ bool isPointInside (const QPoint &point)

+ QPolygon getPointsList

const override

void setPointsList

() const

(const QPolygon &newPoints

List) + void setX(int newX) + void setY(int newY)