```
Shape
+ static int nextTracker
+ static bool trackersInUse
# QTreeWidgetItem * parentItem
# alpha::vector< QTreeWidget
  Item * > childItems
# alpha::vector< QTreeWidget
  Item * > pointsItems
# alpha::vector< QTreeWidget
  Item * > penItems
# alpha::vector< QTreeWidget
  Item * > brushItems

    const int shapeld

    int trackerId

    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
                 Line
 QPoint startPoint

    QPoint endPoint

+ Line(string shapeType,
   QPoint coords, QPen pen,
QBrush brush, QPoint startPoint,
   QPoint endPoint)
+ void 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)
   const override

    + QPoint getStartPoint

  () const
+ QPoint getEndPoint
  () const
+ void setStartPoint
  (const QPoint &newStartPoint)
+ void setEndPoint(const
   QPoint &newEndPoint)
+ void setX(int newX)
+ void setY(int newY)
```