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 shapeId
- 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

Rectangle

- int length
- int width

+ Rectangle(string shapeType, QPoint coords, QPen pen, QBrush brush, int length, int width)
+ void Draw(QWidget *render Area) override
+ double Perimeter() const override
+ double Area() const override
+ bool isPointInside (const QPoint &point) const override
+ int getLength() const
+ int getWidth() const
+ void setLength(int newLength)
+ void setWidth(int newWidth)
+ void setX(int newX)
+ void setY(int newY)