```
- int space
    + vector()
    + vector(int s)
    + vector(const vector
       &other)
    + vector & operator=
      (const vector &other)
    + vector(vector &&other)
       noexcept
    + vector & operator=
      (vector &&other) noexcept
    + ~vector()
    + T & operator[](int n)
    + const T & operator
      [](int n) const
    + int size() const
      and 10 more...
                   < QTreeWidgetItem * >
    alpha::vector< QTreeWidget
              Item * >
     int size_v

    QTreeWidgetItem ** elem

     int space
    + vector()
    + vector(int s)
    + vector(const vector
       &other)
    + vector(vector &&other)
       noexcept
    + vector & operator=
      (const vector &other)
    + vector & operator=
      (vector &&other) noexcept
    + ~vector()
    + QTreeWidgetItem *&
       operator[](int n)
    + const QTreeWidgetItem
       *& operator[](int n)
       const
    + int size() const
      and 10 more...
                   #brushItems
                   #childItems
                   #penItems
                   #pointsItems
               Shape
+ static int nextTracker
+ static bool trackersInUse
# QTreeWidgetItem * parentItem
 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

+ QPoint getEndPoint

+ void setStartPoint

+ void setEndPoint(const QPoint &newEndPoint)

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

(const QPoint &newStartPoint)

() const

() const

alpha::vector< T >

int size_vT * elem