```
int size_v
    - T * elem

    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 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()

x, int y)

() const =0 + virtual double Area () const =0

+ virtual void Draw(QWidget *renderArea)=0+ virtual void Move(int

virtual double Perimeter

+ virtual bool isPointInside

+ void CreateParentItem()+ void CreatePenChild()+ void CreateBrushChild()

Shape(Shape &shape)

&object)=delete

int lengthint width

QFont font

QString textString GlobalColor textColor

Shape & operator=(Shape

Text

AlignmentFlag textAlignment

 + Text(string shapeType, QPoint coords, QString textString, GlobalColor textColor, AlignmentFlag textAlignment, QFont font, int length, int width)
 + void Draw(QWidget *render

Area) override
+ double Perimeter()
const override
+ double Area() const

override

() const

() const

+ bool isPointInside (const QPoint &point) const override
+ int getLength() const
+ int getWidth() const
+ QString getTextString

GlobalColor getTextColor

+ QFont getFont() const and 10 more...

and 36 more...

=delete

(const QPoint &point) const =0

alpha::vector< T >