```
alpha::vector< T >
      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

    string shapeType

    QBrush brush
```

- int trackerld
- QPen pen
- 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
 - + bool isPointInside
 - (const QPoint &point) const override

override

- + int getLength() const + int getWidth() const
 - + void setLength(int newLength)
 - + void setWidth(int newWidth)
- + void setX(int newX) + void setY(int newY)