```
- 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...
```

alpha::vector< T >

int size v - T \* elem

< 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

#penItems #pointsItems Shape + static int nextTracker

#childItems

## + 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() + 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

## Polyline

- QPolygon pointsList + Polyline(string shapeType, QPoint coords, QPen pen, QBrush brush, QPolygon pointsList)
- + 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
- + QPolygon getPointsList () const
- + void setPointsList (const QPolygon &newPoints List)
- + void setX(int newX)

+ void setY(int newY)