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 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 =0 () const : + 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 Ellipse - int a int b + Ellipse(string shapeType, QPoint coords, QPen pen, QBrush brush, int a, int b) + void Draw(QWidget *render Area) override + double Perimeter() const override + double Area() const override + bool isPointInside (const QPoint &point) const override + int getA() const + int getB() const void setA(int newA) + void setB(int newB) + void setX(int newX) + void setY(int newY)