

+setLocation(QPoint pt):void

-width:double

-height:double

-location:QPoint

- y: int

- width: double

- height: double

- rectangle: QRectF

- location: QPoint

Class Text

+ Text(QPaintDevice \*dev, int id)

+ draw(QPaintDevice \*dev): void

+ setText(QString newText): void

+ setLocation(int x, int y): void

+ setLocation(QPoint pt): void

+ setDimensions(int w, int h): void

+ getFlag(): Qt::AlignmentFlag

+ setBoxWidth(int newBoxWidth): void

+ setBoxHeight(int newBoxHeight): void

+ setFlag(Qt::AlignmentFlag flagParam): void

+ move(int x, int y, int vertext): void

QPoint Loc)

+ area(): double

+ perimeter(): double

+ getFont(): QFont&

+ getText(): QString

flag: Qt::AlignmentFlag

text: QString

boxWidth: int boxHeight: int location: QPoint

font: QFont

+ Text(QString text, int TC, int font, int align,

int style, int weight, int boxW, int boxH,

Class Line

+ ~Line()

+ perimeter(): double

- line\_begin: QPoint

line\_end: QPoint

+ area(): double

Class Shape Parser + Shape Parser() + ~Shape\_Parser() + translate(RenderArea \*): void + parseInput(RenderArea \*): void # DIVIDER: const char - dimensions[10]: int - ShapeFileName: std::string Shapeld: int Dimensions: std::string ShapeType: std::string - PenColor: int - PenWidth: int - PenStyle: int - PenCapStyle: int - PenJoinStyle: int - BrushColor: int - BrushStyle: int TextQString: QString TextColor: int TextAlignment: int TextPointSize: int TextFontFamily: int TextFontStyle: int - TextFontWeight: int setDefaults(): void - saveInput(Shape Vector<Shape\*> &parsedInput): void - dimToQPoint(): void

class

QMainWindow

Class mainwindow

+ ~MainWindow()

+ getShapeType(): void

+ getPenCapStyle(): void

+ getPenJoinStyle(): void

+ getBrushColor(): void

+ getBrushStyle(): void

+ getTextColor(): void

+ getTextStyle(): void

+ getPenWidth(): void

+ getTextWeight(): void

+ getFontFamily(): void

- on\_polygon\_button\_clicked(): void

- on\_cancelpoly\_button\_clicked(): void

- on\_rectangle\_build\_button\_clicked(): void

- on\_ellipse\_build\_button\_clicked(): void

- on\_line\_build\_button\_clicked(): void

- on pline build button clicked(): void

- on\_text\_build\_button\_clicked(): void - on canceltext button clicked(): void - on\_select\_button\_clicked(): void

- on cancelpolyline button clicked(): void

- on\_polyline\_button\_clicked(): void

- on\_cancelellipse\_button\_clicked(): void

- on\_rectangle\_button\_clicked(): void

- on cancel button clicked(): void

- on\_ellipse\_button\_clicked(): void

- on line button clicked(): void

- on\_cancelline\_button(): void

- on text button clicked(): void

- ui: Ui::MainWindow

- renderArea: RenderArea\*

- The penWidth{4}: int

- shapeComboBox: QComboBox\* penStyleComboBox: QComboBox\* - penCapComboBox: QComboBox\* - penJoinComboBox: QComboBox\* - brushStyleComboBox: QComboBox\*

+ getAlign(): void

+ getPenColor(): void

+ getPenStyle(): void

+ MainWindow(QWidget \*parent = nullptr)

## Class Shape\_Vector + Shape\_Vector() + Shape Vector(int s) + Shape\_Vector(const Shape\_Vector&) + operator=(const Shape\_Vector&): Shape\_Vector& + Shape Vector(const Shape Vector&&) + operator=(const Shape\_Vector&&): Shape\_Vector& + ~Shape\_Vector() + operator[](int n): T& + size() const: int + capacity() const: int + resize(int newSize): void + push\_back(T val): void + reserve(int newAlloc): void + set(int index, const T& stuff): void + begin(): iterator + begin() const: const\_iterator + end(): iterator + end() const: const\_iterator + insert(iterator p, const T& v): iterator + erase(iterator p): iterator - size\_v: int

- elem: T\*

- space: int