

generateClassBox

lokale/globale Variablen und Attribute:

isAbstract,first,first2: Boolean

attrstr,opstr: stringstream

line1,line2: QGraphicsLineItem

text1,text2,text3: QGraphicsSimpleTextItem

str1,str2,str3: Text

group: QGraphicsItemGroup

rect: QGraphicsRectItem

textRect: Rect

class_: Class

Rückgabe: QGraphicsItemGroup

isAbstract ← false		
first ← false		
const Attribute attr : class_.getAttributes()		
wahr first ← first + 1 falsch		
attrstr << "\n"	∅	
attrstr << visibilityToString(attr.getVisibility()) << attr.getName() << ":" << attr.getType().umlName()		
first ← false		
const Operation op : class_.getOperations()		
wahr first ← first + 1 falsch		
opstr << "\n"	∅	
opstr << visibilityToString(op.getVisibility()) << op.getName() << "("		
not op.getArguments().empty()		
wahr	falsch	
first2 ← false		
const Argument arg : op.getArguments()		
wahr first ← first + 1 falsch		
opstr << ":"		∅
opstr << arg.getName() << ":" << arg.getType().umlName()		
opstr << ")"		
wahr op.getReturnType() falsch		
opstr << ":" << op.getReturnType().umlName()	∅	
not op.getReturnType() and op.getName() = class_.getName()		
wahr	falsch	
opstr << "«constructor»"	∅	
not op.getReturnType() and op.getName() = "-" + class_.getName()		
wahr	falsch	
opstr << "«destructor»"	∅	
wahr op.isAbstract() falsch		
isAbstract ← true	∅	
opstr << "{abstract}"		
str1 ← class_.getName()		
str2 ← attrstr.str()		
str3 ← opstr.str()		
wahr isAbstract falsch		
str1 ← str1 + "{abstract}"	∅	
group ← new QGraphicsItemGroup()		
group.setHandlesChildEvents(false)		
text1 ← new QGraphicsSimpleTextItem()		
text1.setPos(2., 2.)		
text1.setText(QString::fromStdString(str1))		
group.addToGroup(text1)		
text2 ← new QGraphicsSimpleTextItem()		
text2.setPos(text1.mapToParent(text1.boundingRect().bottomLeft()) + QPointF(0.,1.))		
wahr str2.empty() falsch		
text2.setText("\n")	text2.setText(QString::fromStdString(str2))	
text2.setFont(QFont("", 2))		
group.addToGroup(text2)		
text3 ← new QGraphicsSimpleTextItem()		
text3.setPos(text2.mapToParent(text2.boundingRect().bottomLeft()) + QPointF(0.,1.))		
wahr str3.empty() falsch		
text3.setText("\n")	text3.setText(QString::fromStdString(str3))	
text3.setFont(QFont("", 2))		
group.addToGroup(text3)		
textRect ← group.boundingRect().adjusted(-1., -1., 0., 0.)		
textRect.setWidth(std::ceil(textRect.width()))		
rect ← new QGraphicsRectItem()		
rect.setRect(textRect)		
group.addToGroup(rect)		
line1 ← new QGraphicsLineItem()		
line1.setLine(QLineF(text1.mapToParent(text1.boundingRect().bottomLeft()), QPointF(textRect.right(), text1.mapToParent(0., text1.boundingRect().bottom()).y())))		
group.addToGroup(line1)		
line2 ← new QGraphicsLineItem()		
line2.setLine(QLineF(text2.mapToParent(text2.boundingRect().bottomLeft()), QPointF(textRect.right(), text2.mapToParent(0., text2.boundingRect().bottom()).y())))		
group.addToGroup(line2)		
return group		