drawClassChart

lokale/globale Variablen und Attribute:
classChart: ClassChart
group: QGraphicsItemGroup
classBoxes: map<Class,QGraphicsItemGroup>
maxdim,radius: FKZ
counter: GZ
rect: Rect
edgeLines: map<Edge*,QGraphicsItemGroup*>
arrowhead: QGraphicsItem
polygonItem: QGraphicsPolygonItem
arrow: QGraphicsItemGroup

group ← new QGraphicsItemGroup()

const unique_ptr < Class > class_ : classChart.getClasses()

- QGraphicsItemGroup* classBox ← generateClassBox(class_.get())
- group.addToGroup(classBox)
- classBoxes[class_.get()] ← classBox

const pair < const Class*, QGraphicsItemGroup* > p : classBoxes

- rect ← p.second.boundingRect()
- maxdim < rect.width()
  - wahr: maxdim ← rect.width()
  - falsch: ∅
- maxdim < rect.height()
  - wahr: maxdim ← rect.height()
  - falsch: ∅

radius ← 2.5 * maxdim

counter ← 0

const unique_ptr < Class > class_ : classChart.getClasses()

- classBoxes[class_.get()].setPos(radius + cos(2 * 3.14159 * (counter/float(classBoxes.size()))) * radius, radius + sin(2 * 3.14159 * (counter/float(classBoxes.size()))) * radius)
- counter ← counter + 1

const unique_ptr < Edge > edge : classChart.getEdges()

- arrowhead ← nullptr
- dynamic_cast < Inheritance* > (edge.get())
  - wahr:
    - polygonItem ← new QGraphicsPolygonItem(triangleArrowhead)
    - polygonItem.setBrush(QBrush(Qt::white))
    - arrowhead ← polygonItem
  - falsch: ∅
- dynamic_cast < Association* > (edge.get())
  - wahr:
    - QPainterPath painterPath
    - painterPath.addPolygon(triangleArrowhead)
    - arrowhead ← new QGraphicsPathItem(painterPath)
  - falsch: ∅
- arrow ← drawArrow(classBoxes[edge.getTail()], classBoxes[edge.getHead()], nullptr, arrowhead)
- edgeLines[edge.get()] ← arrow
- group.addToGroup(arrow)

return group