

KLay Force

Project Overview

Responsible:

- Christoph Daniel Schulze

KLay Force is an implementation of the force-based layout approach where edges are regarded as springs pulling together the nodes they connect, while unconnected nodes are pushed apart from one another. The objective is to compute a state where this physical system reaches an equilibrium.

This page describes the available layout options as well as the general architecture of the algorithm.

Contents

- [Layout Options](#)
- [Architecture](#)
 - [Graph Model](#)
 - [Algorithm](#)

Error rendering macro 'excerpt-include'

No link could be created for 'Downloads - KIELER Layout Algorithms'.

Layout Options



ToDo

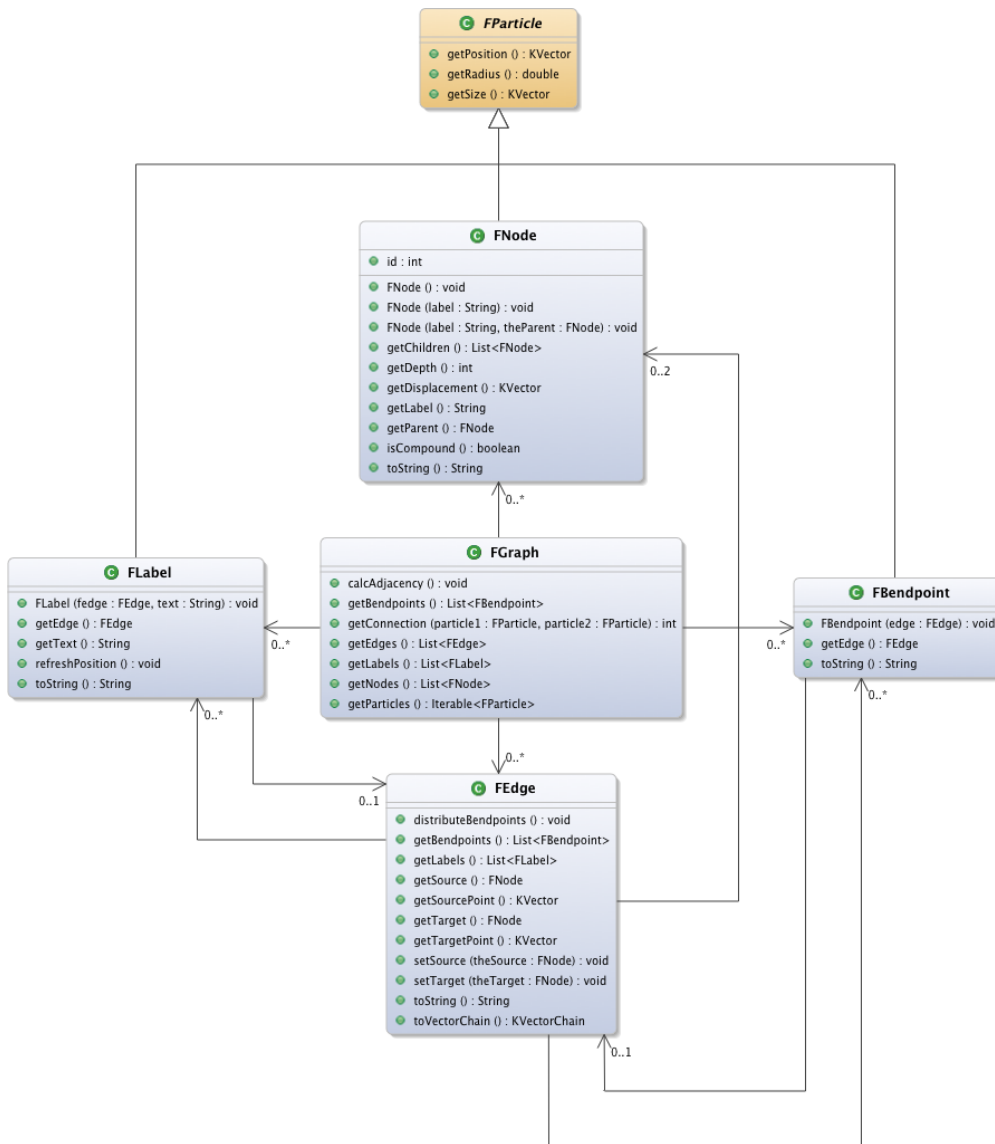
List available layout options.

Architecture

The architecture basically consists of two chunks: the graph model and the actual implementation of the algorithm.

Graph Model

KLay Force uses a custom, lightweight graph model whose root is the `FGraph` class. `FNode` instances are connected through `FEdge` instances that, to be routed properly, can have `FBendpoint` instances. Edges and nodes can have a number of `FLabel` instances. Nodes, labels, and bend points are considered `FParticles` since they exert forces on each other. The following is a class diagram of the basic graph model:



Algorithm



ToDo

Describe architecture.