MetaModel

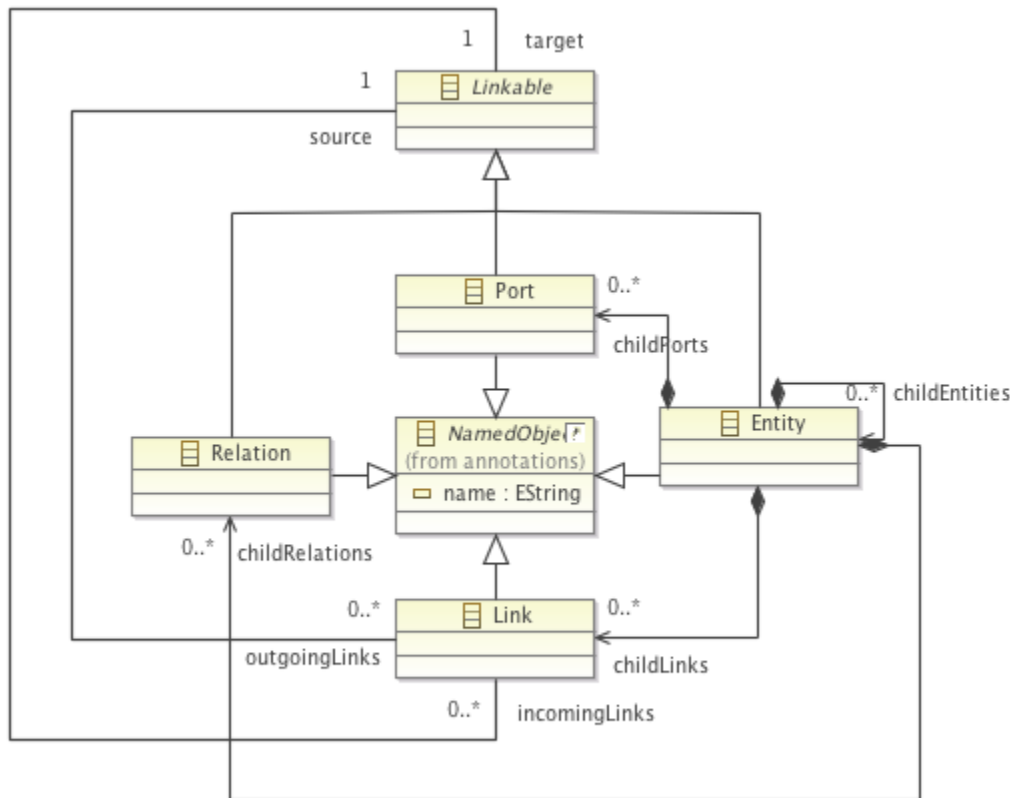> ⚠️ **Legacy Project**
>
> KAOM is not maintained anymore and hence not part of any KIELER release.

KAOM Metamodel
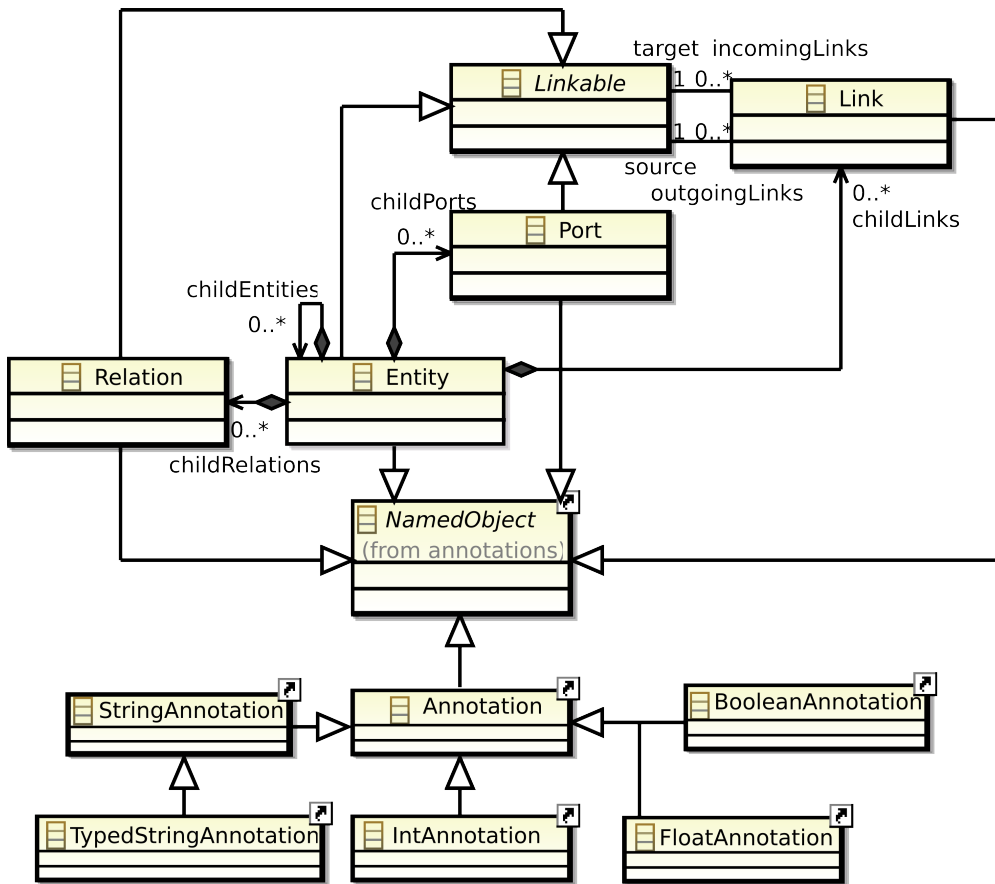

Sources: plugins/de.cau.cs.kieler.kaom/model

Explanations

- Main components are **Entitiy**, **Port**, **Relation** and **Link**
    - they have a name by the NamedObject abstract class
    - they can be annotated by arbitrary data through the **Annotatable** abstract class.
        - **Annotations** can be subclassed by anybody in order to allow arbitrary piggyback data on entities. This is similar to the *Property* resp. *Attribute* mechanism in Ptolemy II, *Annotations* in SCADE or *EAnnotations* in Ecore (the StringAnnotation is just an Example).
        - Common use cases for such attributes are
            - store layout information (layout options)
            - store semantic detail information (e.g. properties of actors)
- Entities can contain other entities to get hierarchy and contain *Port*, *Relation* and *Link* objects.
- Connections are established between **Linkables** which are mainly Ports and Relations (close to Ptolemy II)
    - **Links** are real objects in the model, corresponding to edges in the graphical representation (different to Ptolemy II)
    - **Relations** are used as in Ptolemy II to form *hyperedges* where multiple ports are interconnected. However, here a simple link between two ports does not require a Relation.
    - **State** is a special kind of an Entity which is also a *Linkable* and hence can be directly connected without a port.
    - **Actor** is not a *Linkable* and hence needs ports to be connected to something.

Generic Annotations for EMF Metamodels

annotations.ecore

Sources: plugins/de.cau.cs.kieler.core.annotations/model

- Used to attach arbitrary information to NamedObject elements.
- Use it by extending NamedObject within your own metamodel, example below in the kaom model