

The ThingML DSL

ThingML is a modeling language for embedded and distributed systems.

ThingML stands for "Thing" Modeling Language as a reference to the so called Internet of Things.

ThingML is developed as a domain-specific modeling language that includes concepts to describe both software components and communication protocols. The formalism used is a combination of architecture models, state machines and an imperative action language.

Exercise

You have to define a thing that receives random values (String values, obtained from a port) and that sends each obtained value to a screen display (another port) with alternatively the color black or red (colors will be represented with the strings “black” and “red”). The type *String* is defined in another Thingml model “*datatypes.thingml*” you will have to import to use it.

Tip:

- The behavior of the thing is controlled by a statechart.
- The screen display and the random value generator are not part of the exercise. Instead, their services are represented through ports and messages.