

Model Driven Engineering

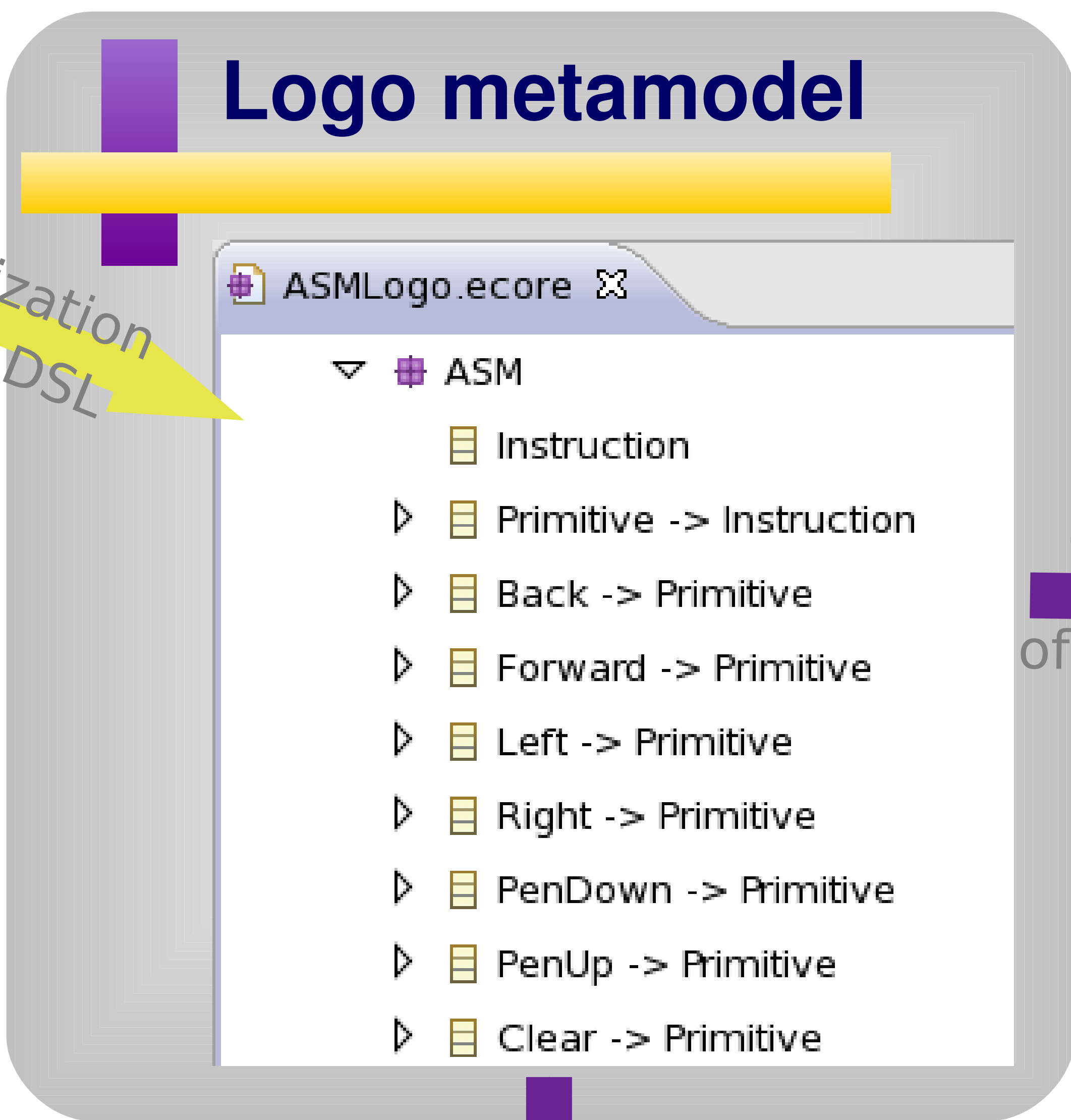
The LOGO language demo

Business world
A DSL: Logo

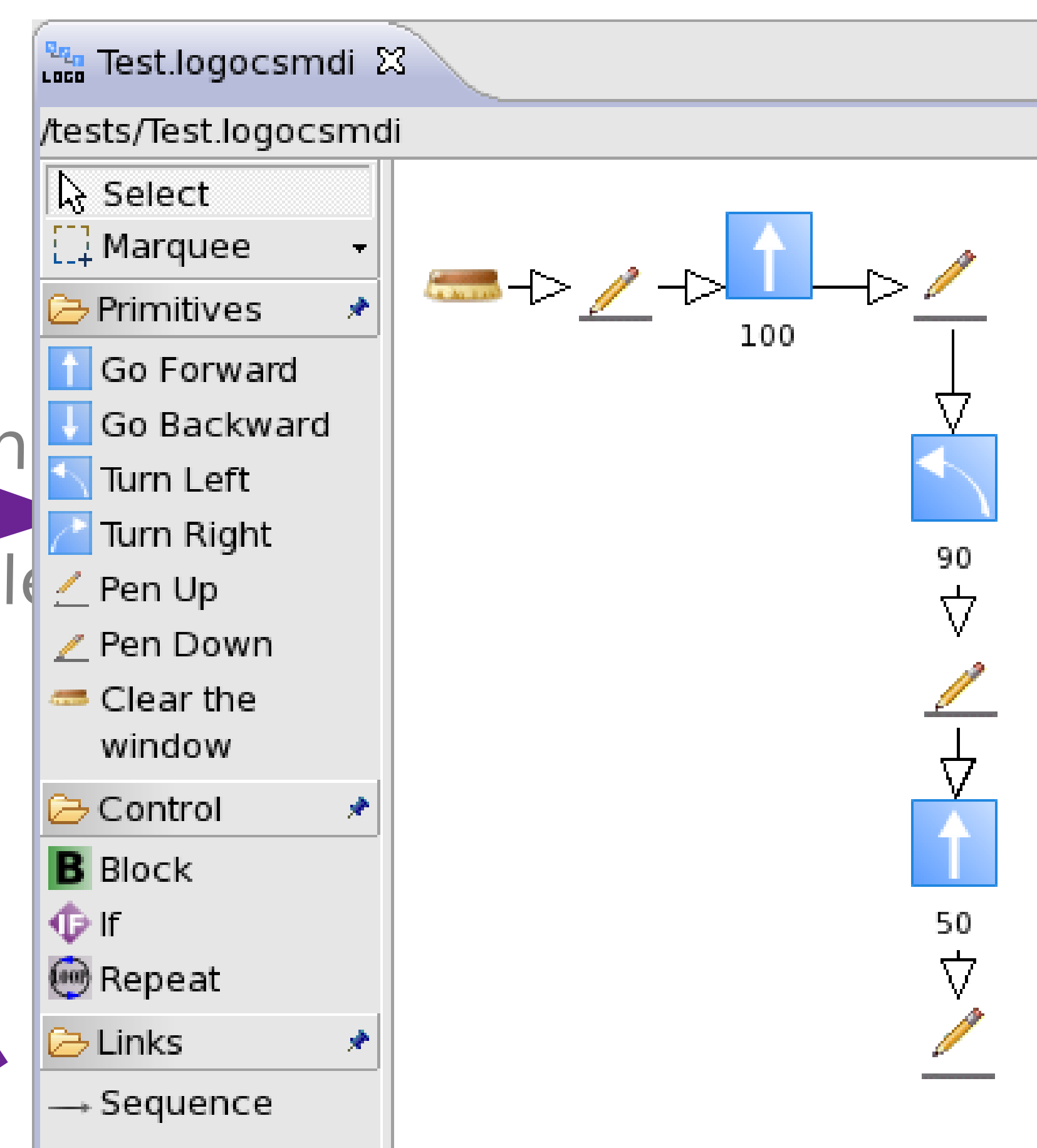
Based on your DSL, you realize the metamodel (an ASM).
 Then within the platform, you can generate the corresponding model editor (or even graphical modelers)

```
CLEAR
PENDOWN
FORWARD 100
PENUP
LEFT 90
PENDOWN
FORWARD 50
PENUP
```

Meta-ization of the DSL ①



Graphical modeler



Generation of the modeler ③

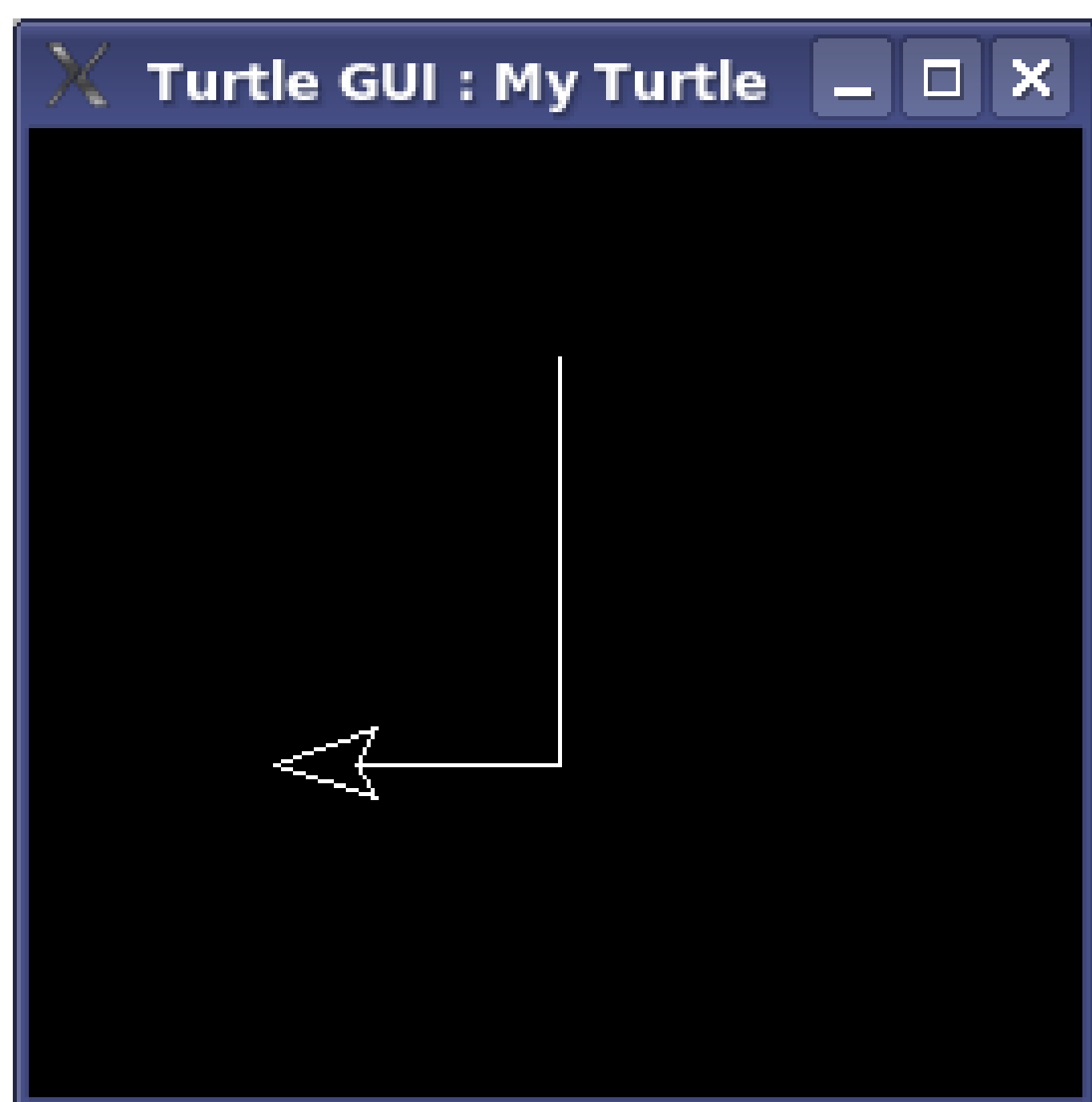
Generation of the editor ②

Models editor

Modelize your applications with the model editor or the graphical modeler.

Validate your models in an adhoc simulator

Simulation



Test the model ④



Generate code ⑤

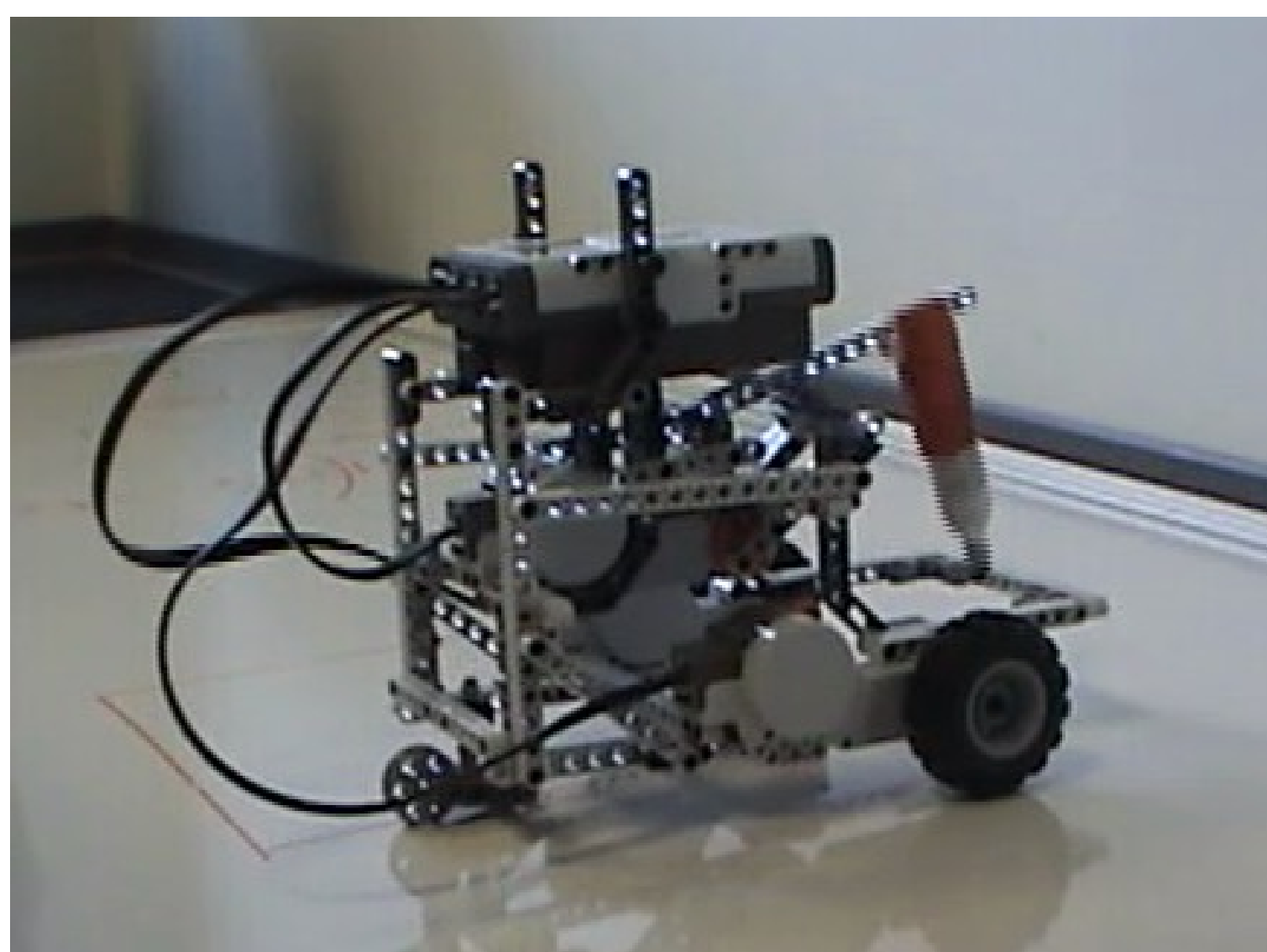
Lego Mindstorms
NXC code

```
task main()
{
  // RESET NOT IMPLEMENTED
  penDown();
  forward(100);
  penUp();
  turn(90);
  penDown();
  forward(50);
  penUp();
}
```

Compiler + export ⑥

Business world
A robotic turtle

Compile source code and use corresponding embedded code



Once validated, transform your models in source code