

Model Driven Engineering

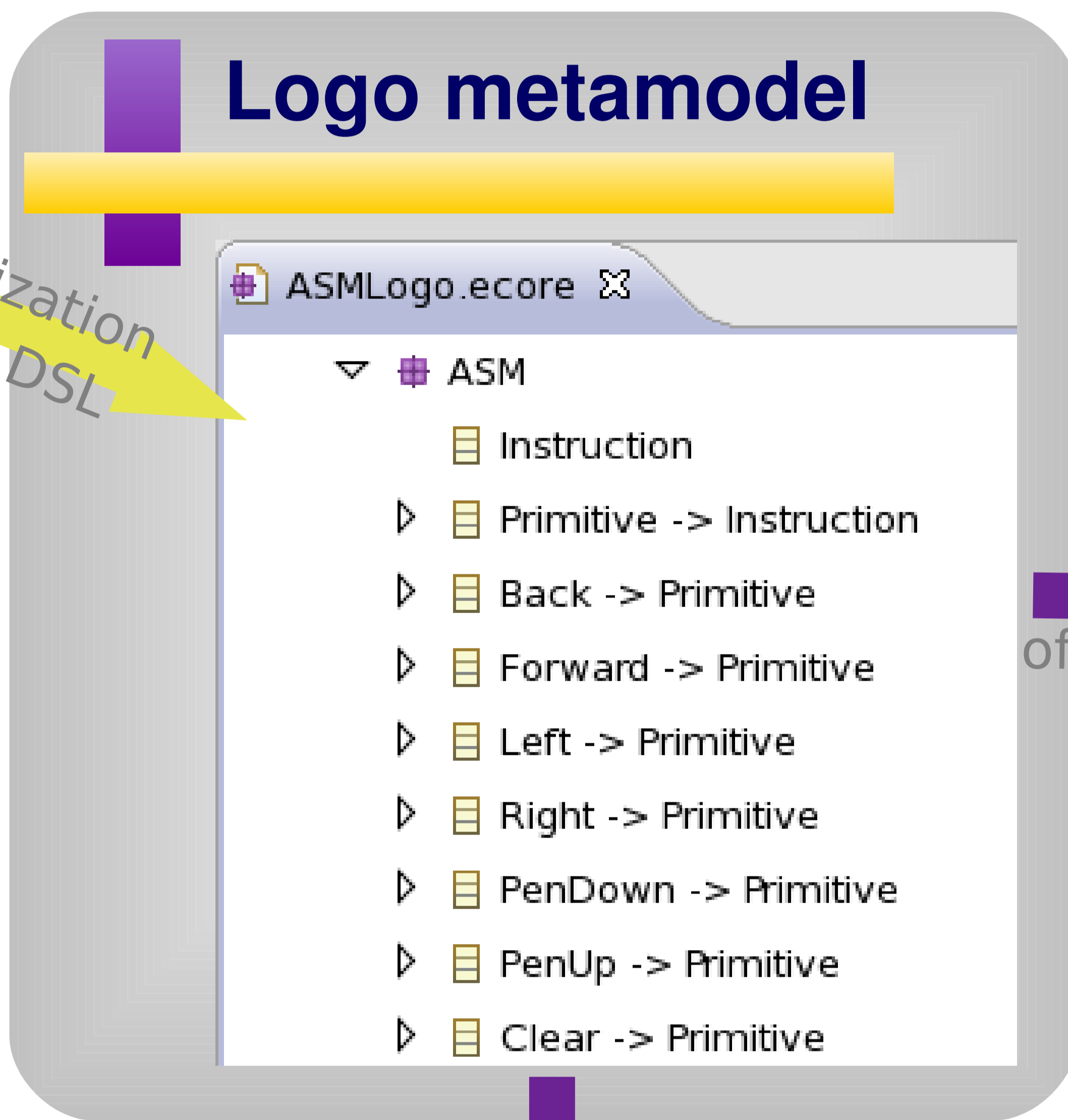
The LOGO language demo

Business world
A DSL: Logo

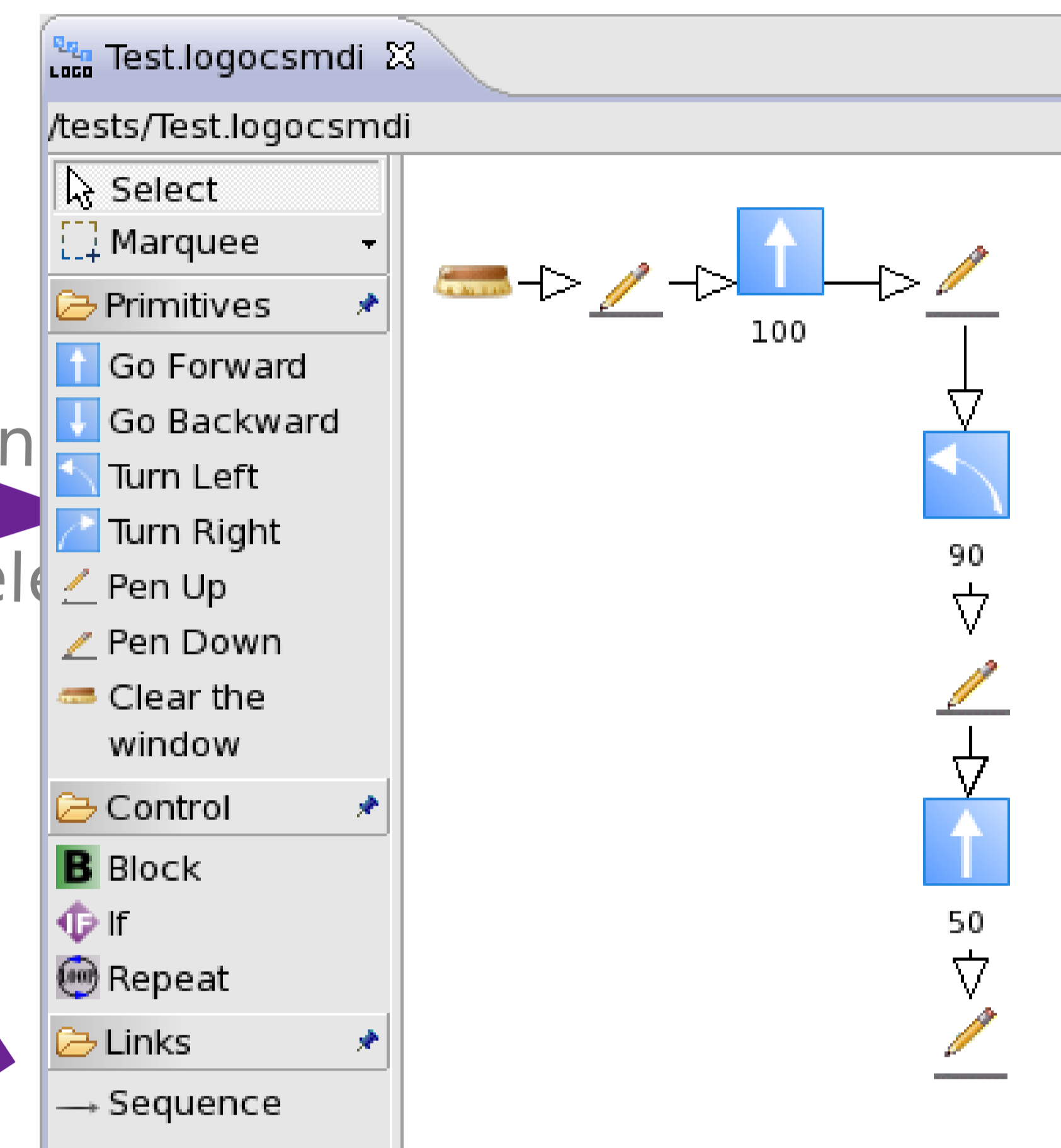
Based on your DSL, you realize the metamodel (an ASM).
 Then within the platform, you can generate the corresponding model editor (or even graphical modelers)

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

Meta-ization of the DSL ①



Graphical modeler



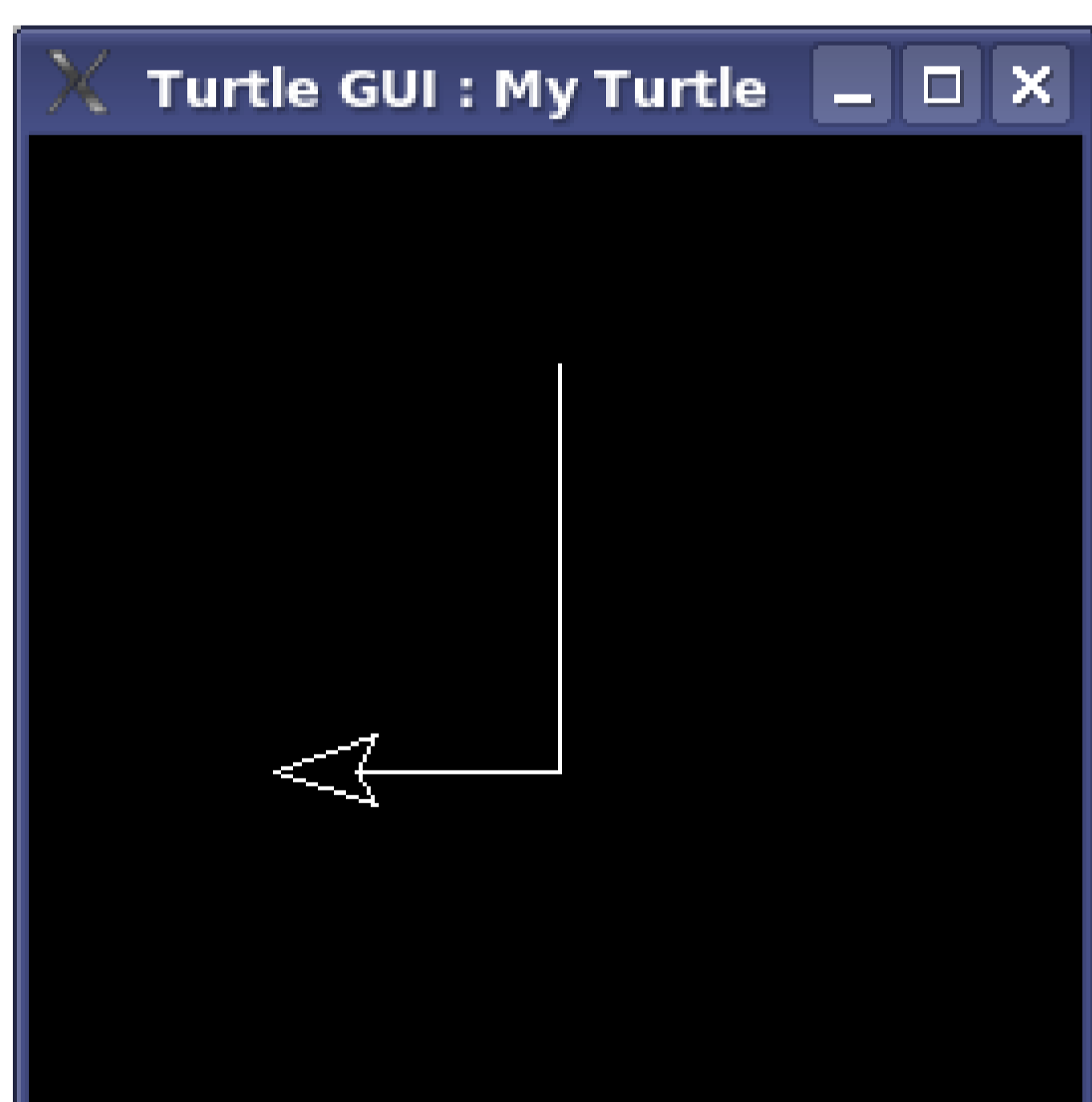
Generation of the modeler ③

② Generation of the editor
Models editor

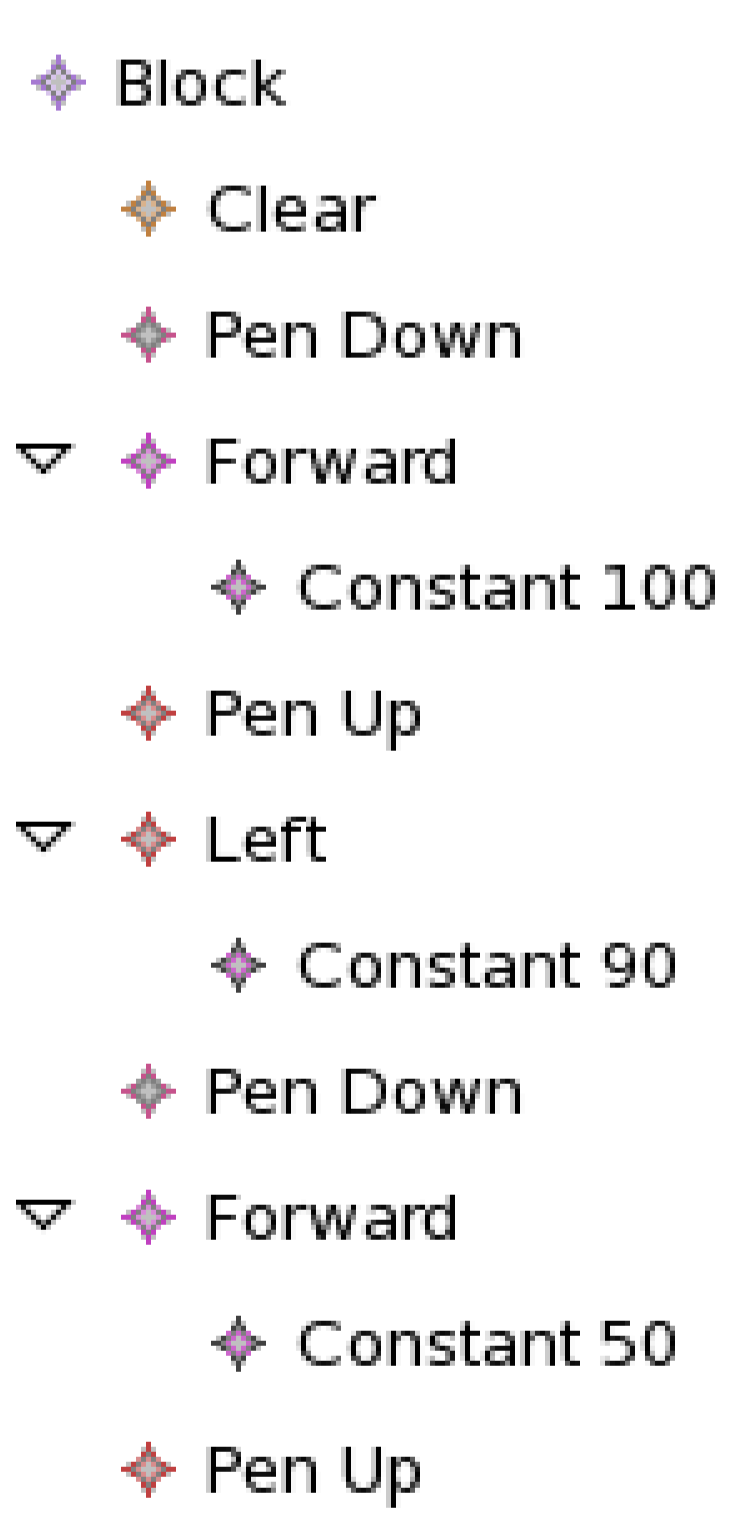
Graphical user entry

Validate your models in an adhoc simulator

Simulation



④ Test the model



⑤ Generate code

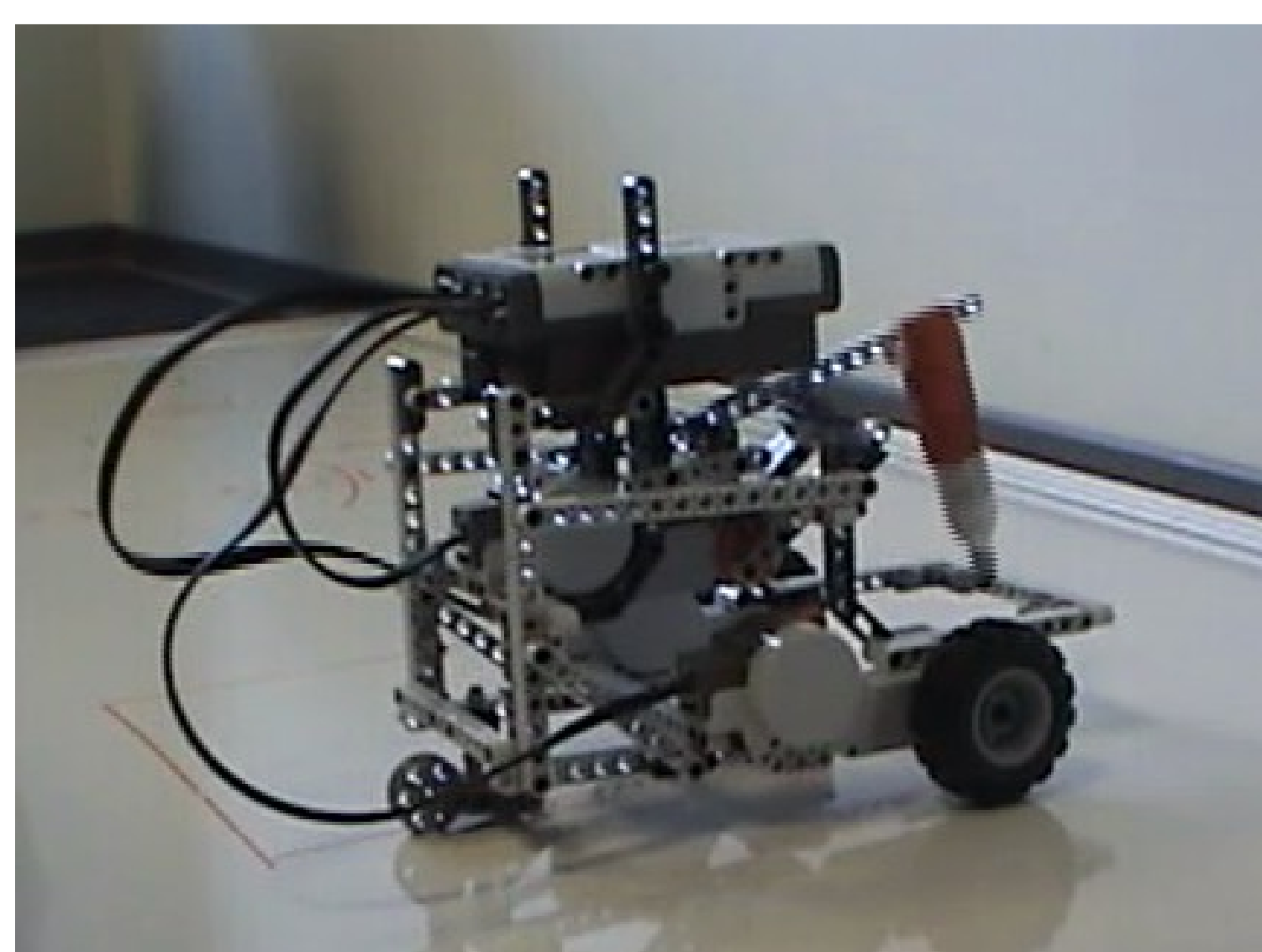
Lego Mindstorms
NXC code

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

⑥ Compiler + export

Business world
A robotic turtle

Compile source code and use corresponding embedded code



Once validated, transform your models in source code