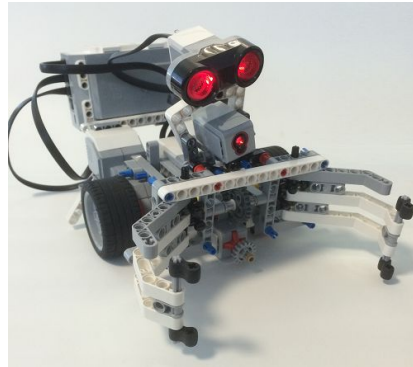




Tutorial Demo





LEGO mindstorms
EV3

He can perform basic actions



Going Forward



Grab an object



Rotate



Release an object

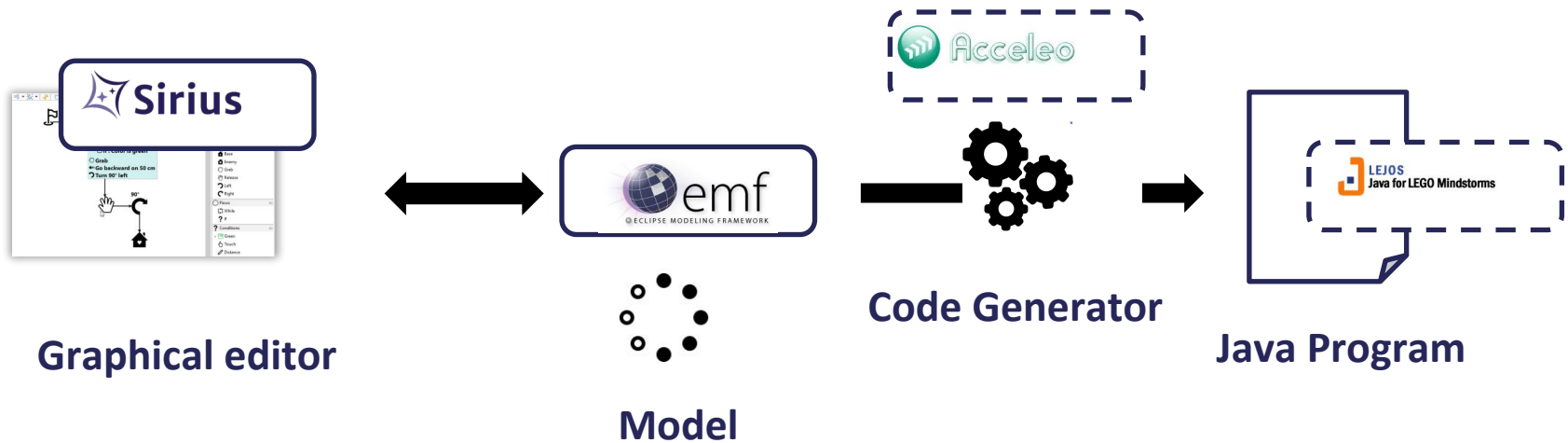
Java program

- Our robot is controlled by a program written in Java
- Based on a small framework on top of LeJOS EV3

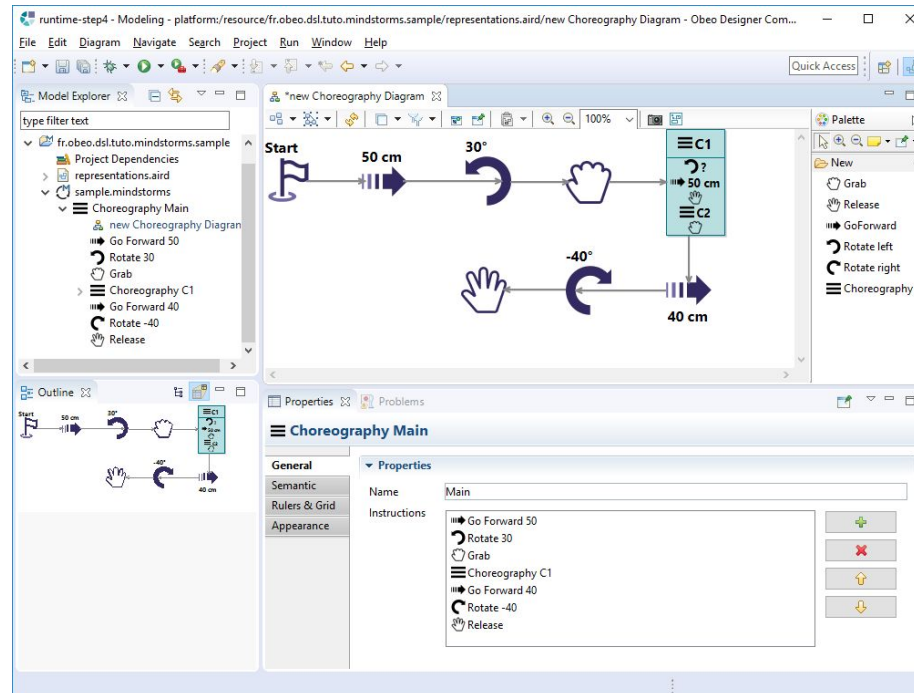


```
@Override
public void execute() {
    robot.goForward();
    if (robot.getColor() == Color.GREEN) {
        robot.grab();
        robot.goBackward(50);
        robot.rotate(90);
        while (robot.isMoving()) {
            Thread.yield();
        }
    }
    robot.release();
    robot.rotate(-90);
    while (robot.isMoving()) {
        Thread.yield();
    }
    robot.returnToBase();
    while (robot.isMoving()) {
        Thread.yield();
    }
}
```

Modeling + Generation

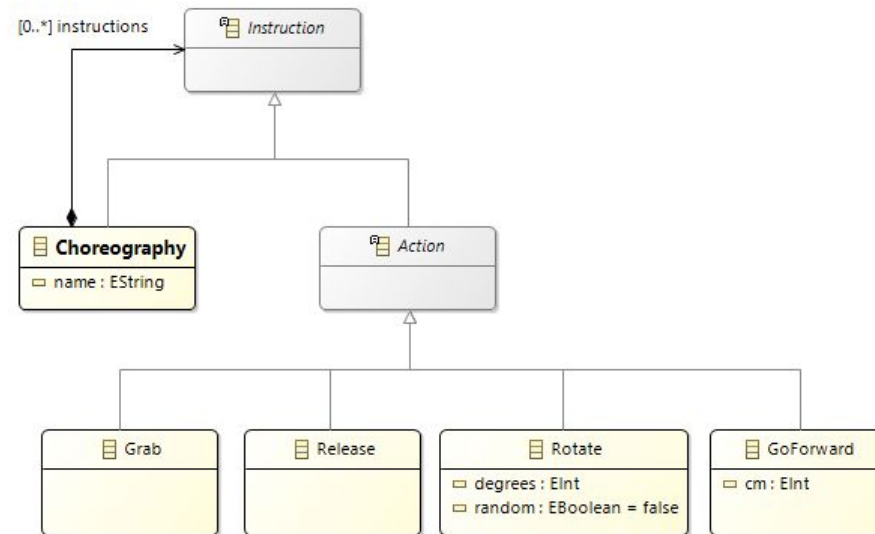


Graphical editor



Mindstorms Domain Model

A subset of what the robot can do: Grab, Release, Rotate, GoForward

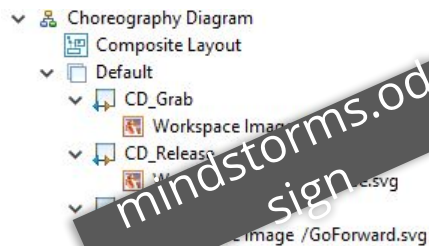


Principles

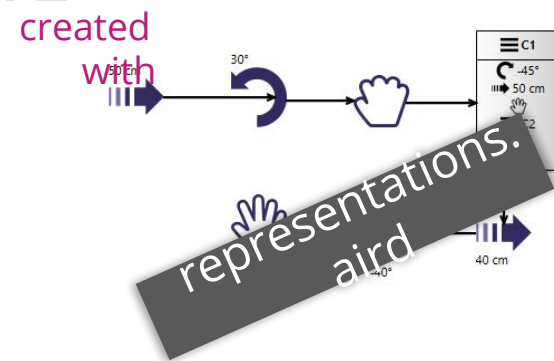
Tool
Developer

End
User

Modeling Tool

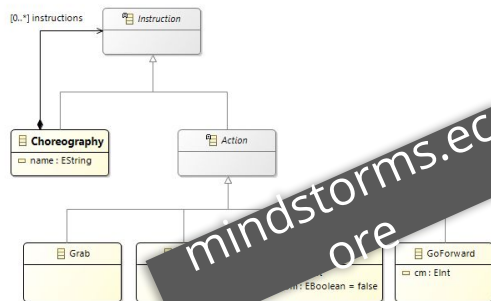


Representations

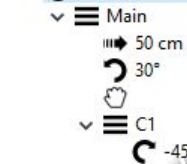


references

represent



sample.mindstorms



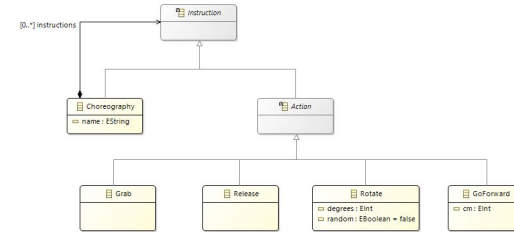
conforms to

Domain

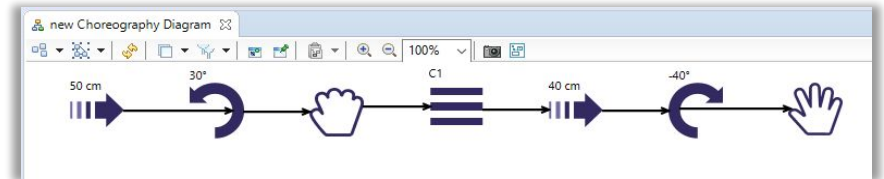
Data

Tutorial Steps

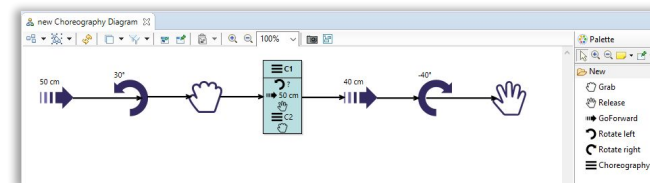
- 1) Metamodel



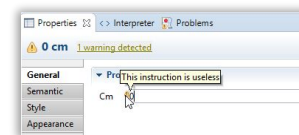
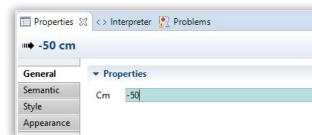
- 2) Visualisation Tool



- 3) Container and Edition Tools

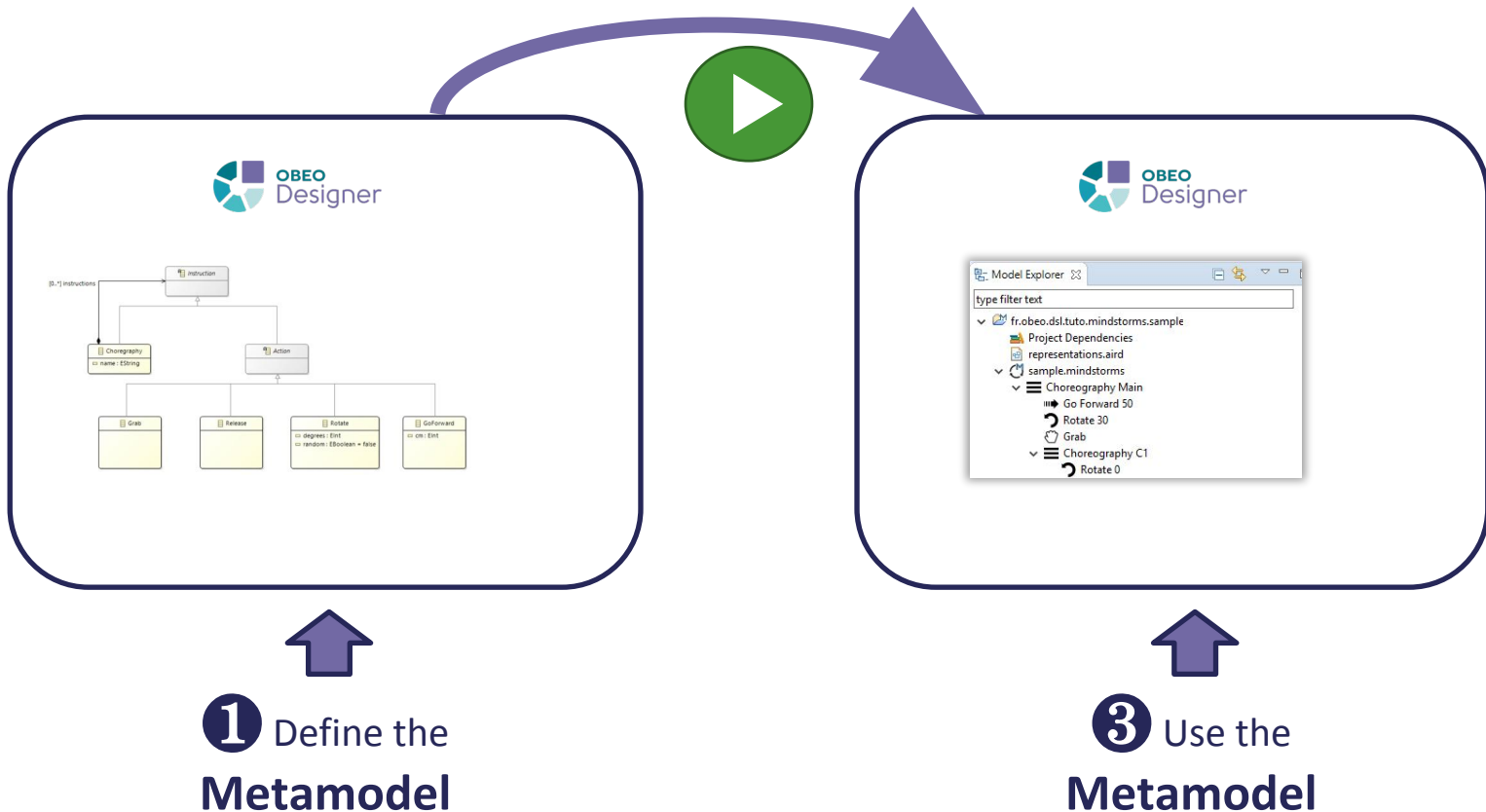


- 4) Custom Properties views



Work in a new runtime

2 Run a **Eclipse Launch Configuration**



Thank you!

Next at EclipseCon Europe :

- **TUESDAY 17:00** MAKE YOUR TRANSITION TO CLOUD-TOOLING NOW THANKS TO AN HYBRID RCP/WEB APPROACH! by Cédric Brun
- **WEDNESDAY 9:30** YOUR CLOUD-BASED MODELING WORKBENCH IN 15 MINUTES WITH ECLIPSE SIRIUS by Mélanie Bats
- **WEDNESDAY 11:15** STEPPING UP SIRIUS - TIPS AND TRICKS FOR YOUR VISUALIZATION JOURNEY! by Robert Bosch GmbH
- **WEDNESDAY 15:10** A PLAYFUL INTRODUCTION TO MBSE (INTERACTIVE TALK INSIDE) by Etienne Juliot

At anytime, come to our booth!