A detailed black and white illustration of a hand holding a pen, poised to draw on a blueprint. The hand is rendered with fine lines and shading, showing the texture of the skin and the grip of the pen. The blueprint is spread out on a surface, with several corner fasteners visible. The overall scene suggests a process of design or engineering. The text 'Why Model When You Can Just Program?' is overlaid in the center of the image.

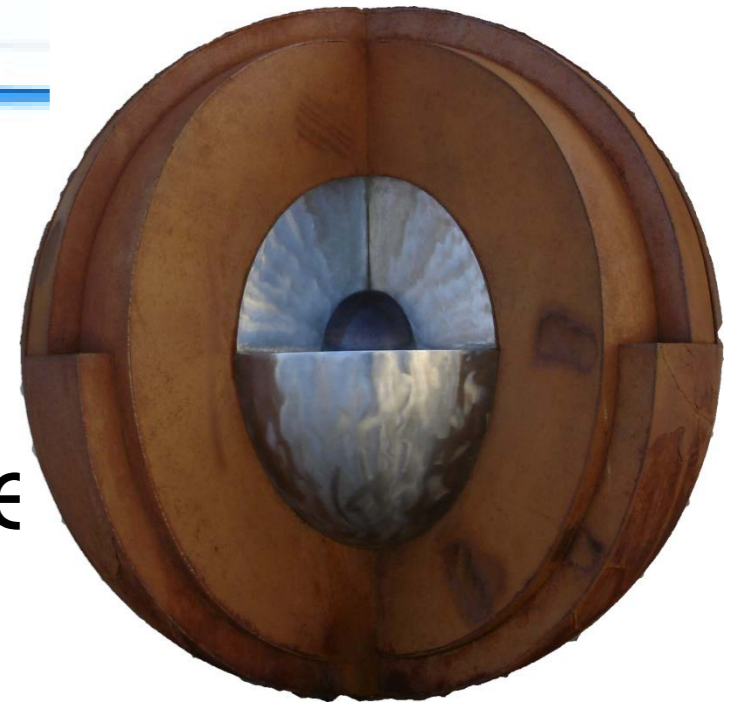
# Why Model When You Can Just Program?

Ed Merks  
itemis

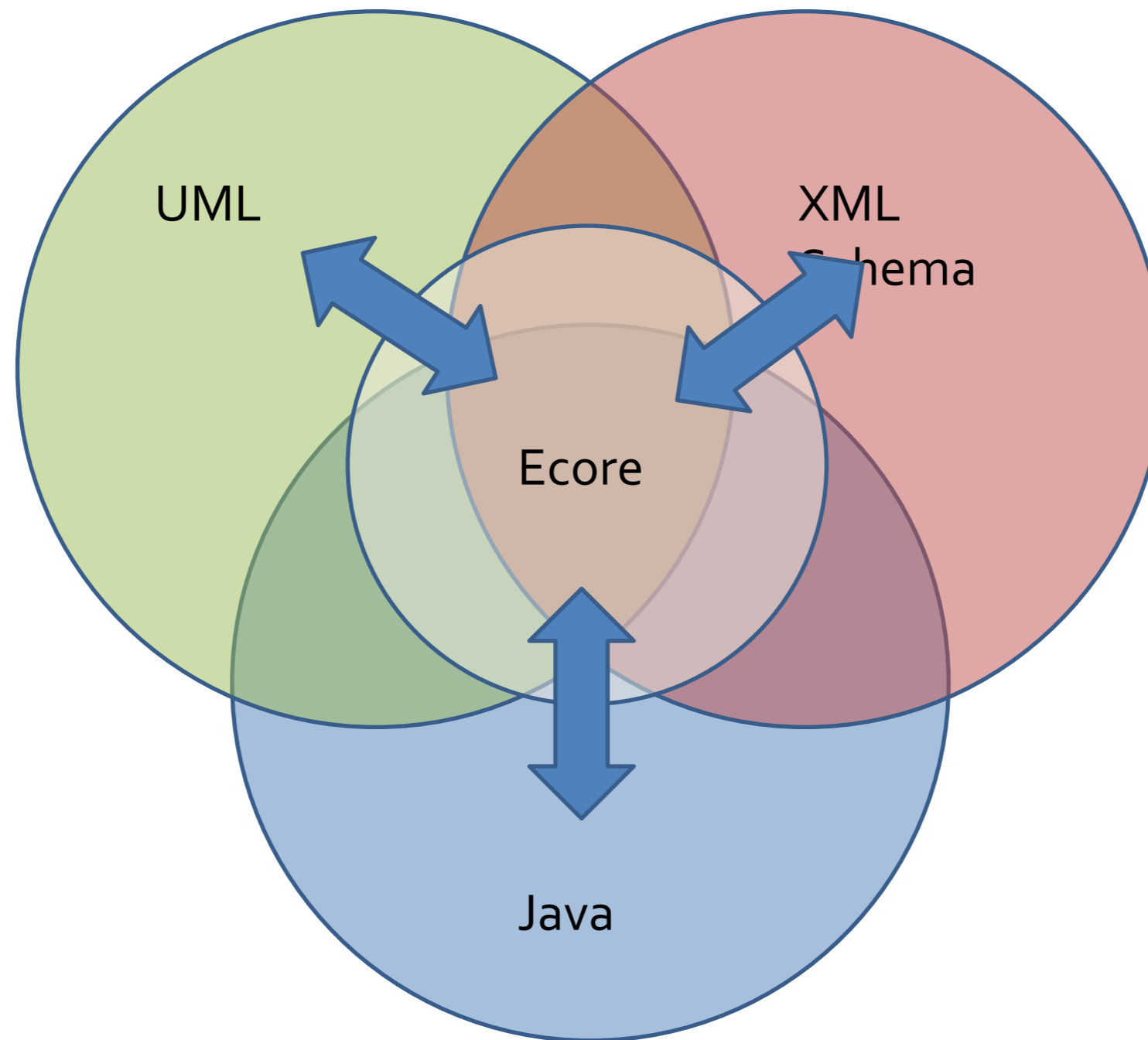


# Ecore: The Model of Models

- A simple model for describing models
  - Classification of objects
  - Attributes of those objects
  - Relationships/associations between those objects
  - Operations on those objects
  - Simple constraints on those objects, and their attributes and relationships
- Ecore is self describing, i.e., it is its own model

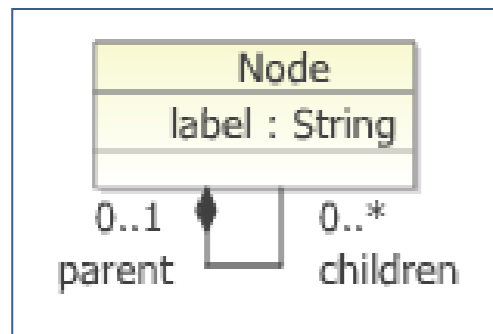


# Relationship of Ecore to Other Models

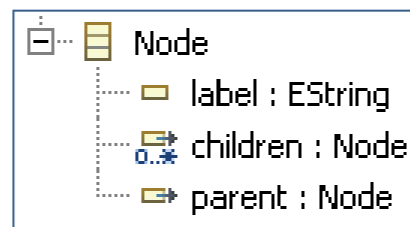


# A Model is a Model is a Model

## UML



## Ecore



## Java

```
public interface Node {  
    String getLabel();  
    void setLabel(String value);  
    List<Node> getChildren();  
    Node getParent();  
    void setParent(Node value);  
} // Node
```

## XML Schema

```
<xsd:complexType name="Node">  
    <xsd:sequence>  
        <xsd:element  
            name="children"  
            type="tree:Node"  
            minOccurs="0"  
            maxOccurs="unbounded"  
            ecore:opposite="parent"/>  
    </xsd:sequence>  
    <xsd:attribute  
        name="label"  
        type="xsd:string"/>  
</xsd:complexType>
```

# EMF is Great!

- JavaBeans on steroids
- Containment
- Notification
- RESTful resources
- And so on....



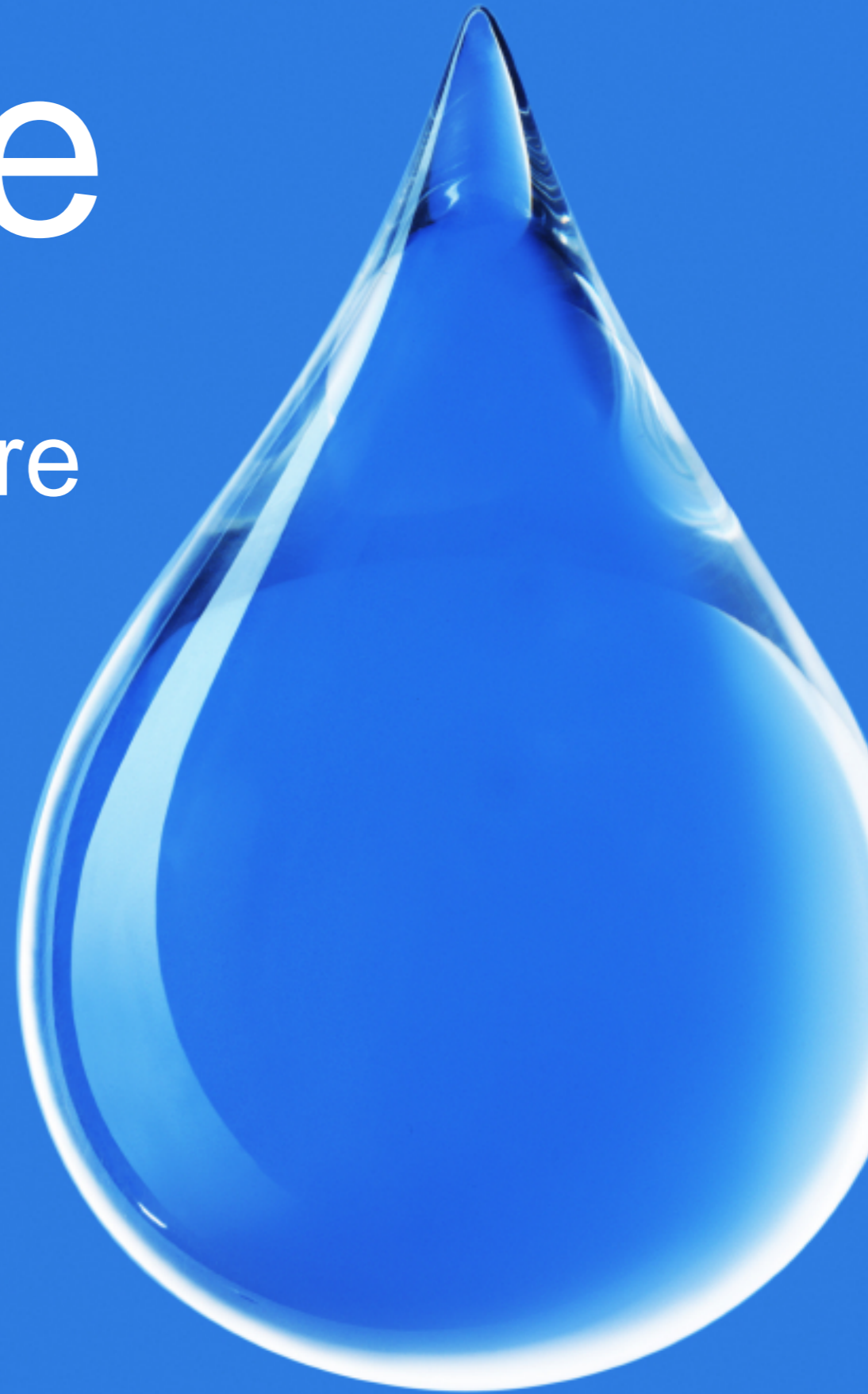
# However...

- Poor editors
- JMerge
- Turn around

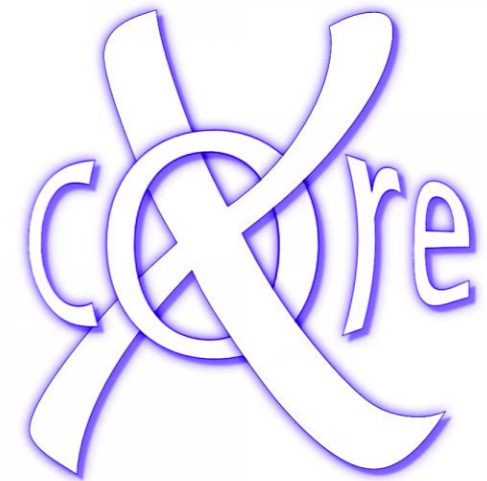


# Xcore

- Textual syntax for Ecore
- Cool editor
- Generates on save
- No generator model
- Specify behavior!



# Xcore's Tree Model



```
class Node
{
    String label
    contains Node[] children opposite parent
    container Node parent opposite children
}
```



Let's have a look!





<http://wiki.eclipse.org/Xcore>

