Why Model
When You Can Just Program?

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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

- UML
- XML Schema
- Ecore
- Java
A Model is a Model is a Model

UML

XML Schema

```xml
<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>
```

Java

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