

scetris

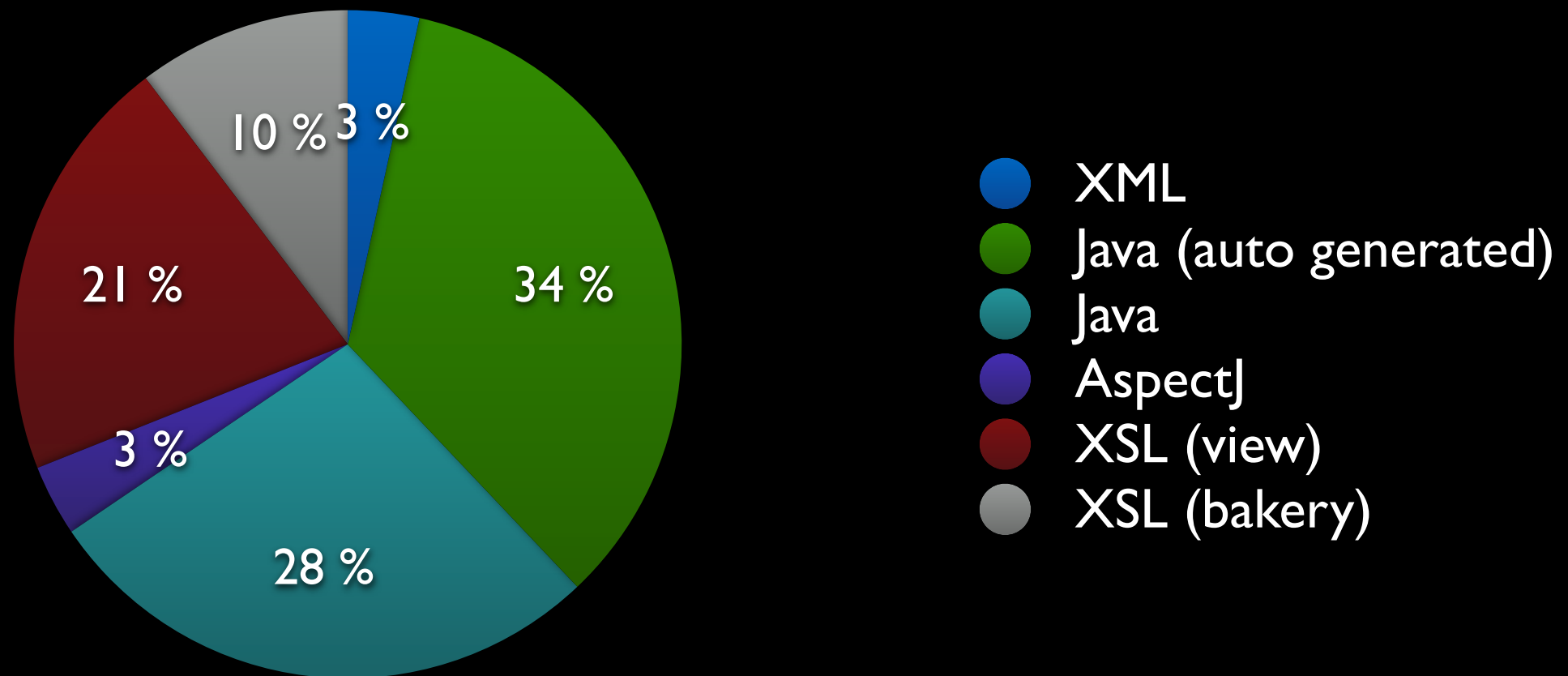
what is it?

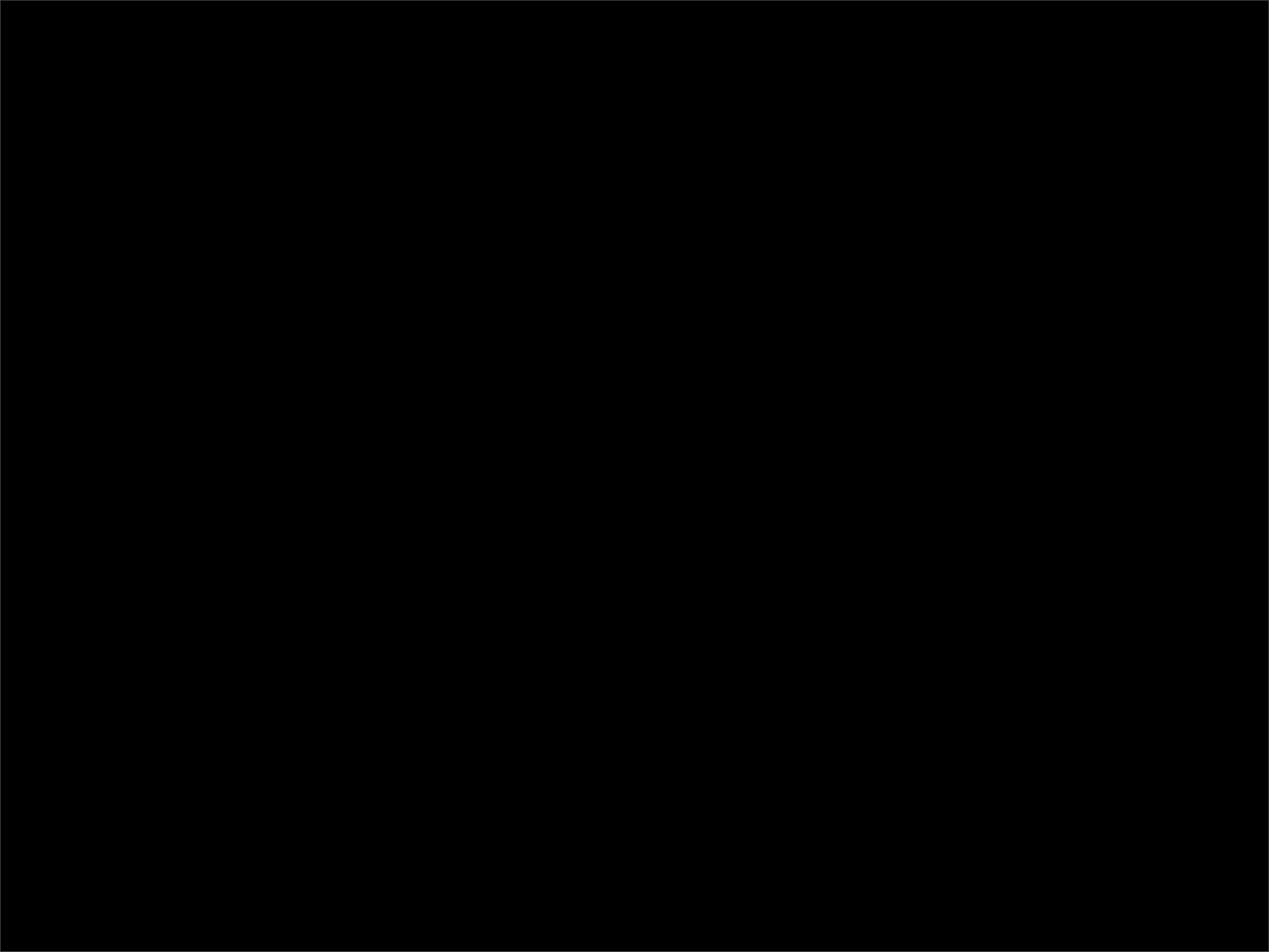
what is it?

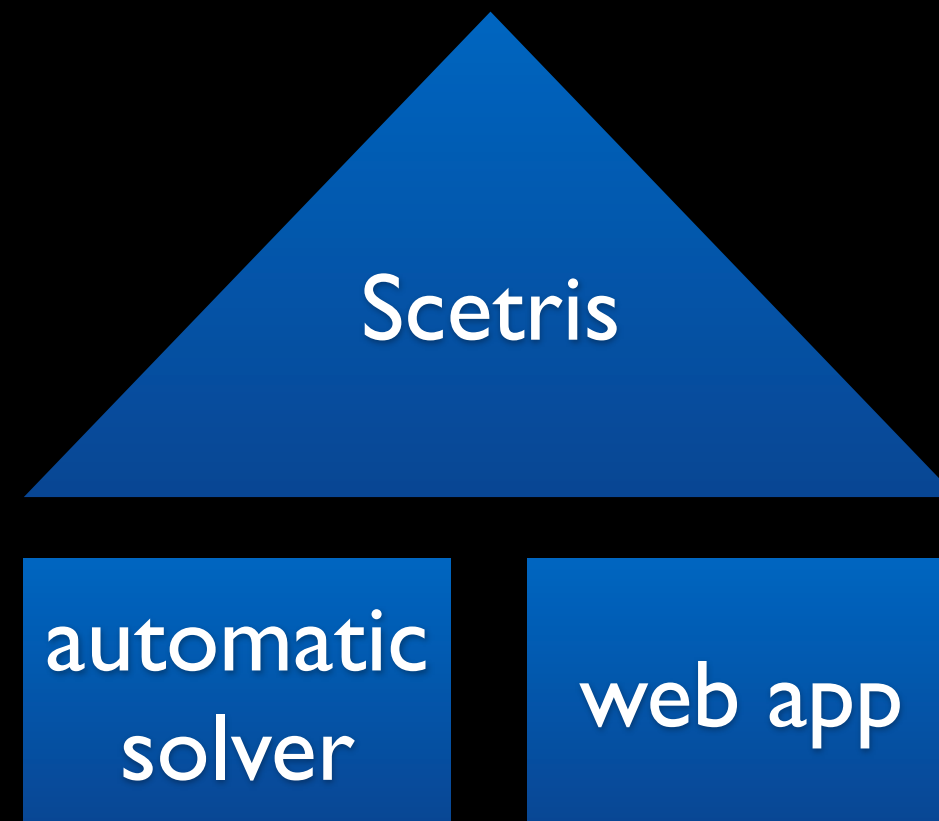
- A Team: André, David, Hagen, Julian, Konrad
- A Contest: S.C.O.R.E. myCourses
- A Software-Project: Scetris
- Some by products:
 - junction / bakery / weave / lego

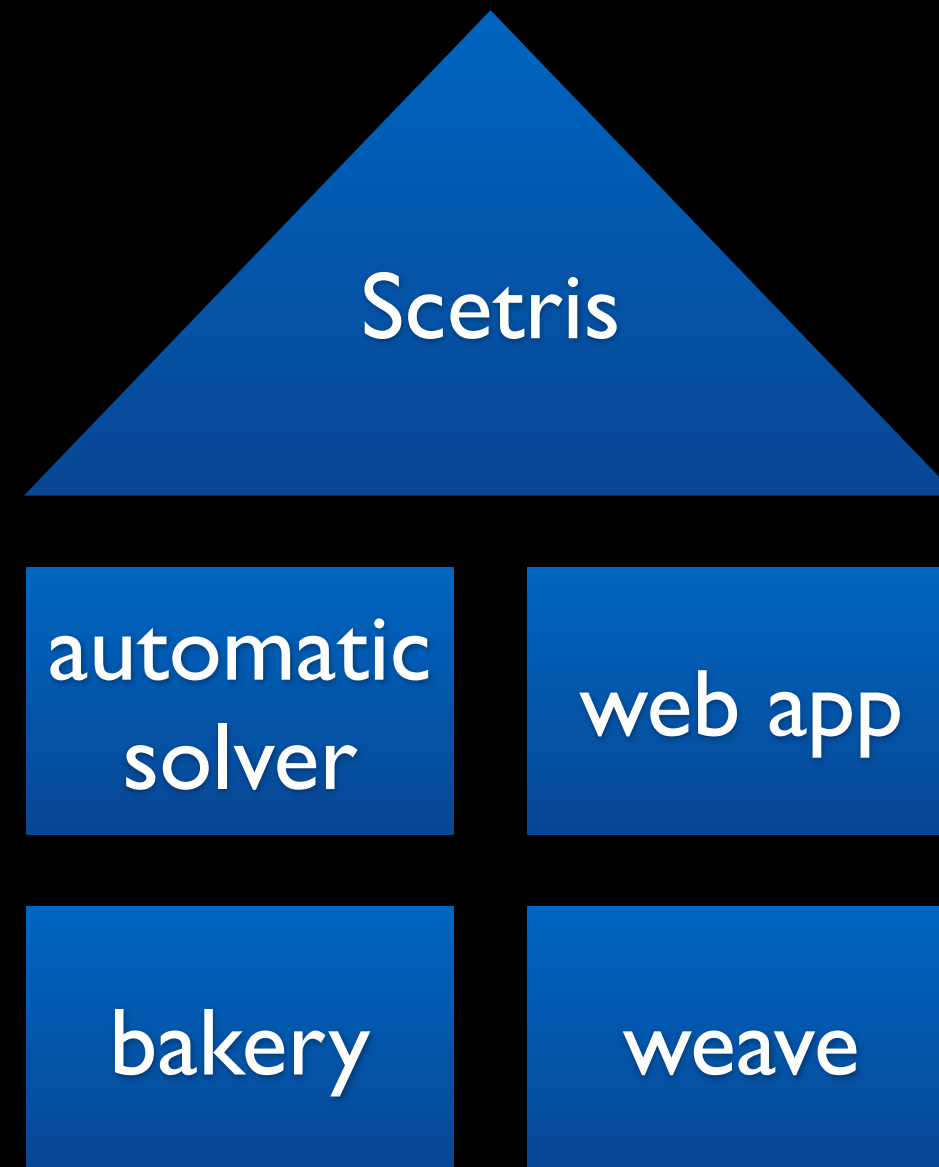
questionable facts

questionable facts











Scetris

The diagram shows the Scetris logo at the top, represented by a blue triangle. Below it is a 2x3 grid of blue rectangular boxes. The first row contains 'automatic solver' and 'web app'. The second row contains 'junction' and 'lego'. The third row contains 'bakery' and 'weave'.

automatic
solver

web app

junction

lego

bakery

weave

Scetris

Genetic Course
Scheduling

automatic
solver

web app

Utilities

junction

lego

Auto-generated
Active Record

bakery

weave



Scetris

The diagram illustrates the Scetris architecture. At the top is a blue triangle labeled 'Scetris'. Below it is a 3x2 grid of blue rectangles. The first row contains 'automatic solver' and 'web app', with 'Genetic Course Scheduling' to the left and 'Model' to the right. The second row contains 'junction' and 'lego', with 'Utilities' to the left and 'View' to the right. The third row contains 'bakery' and 'weave', with 'Auto-generated Active Record' to the left and 'Controller' to the right.

Genetic Course
Scheduling

automatic
solver

web app

Model

Utilities

junction

lego

View

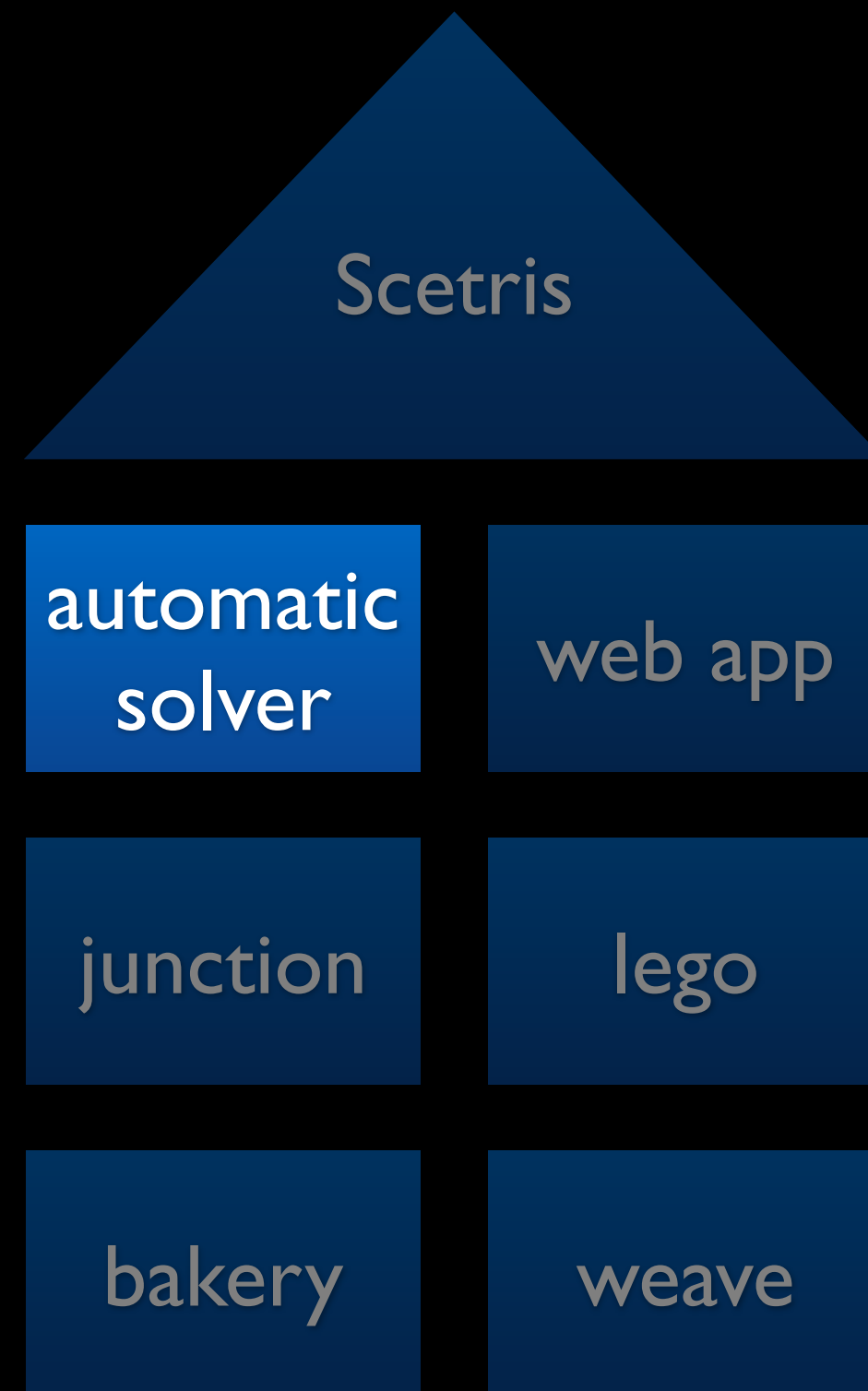
Auto-generated
Active Record

bakery

weave

Controller

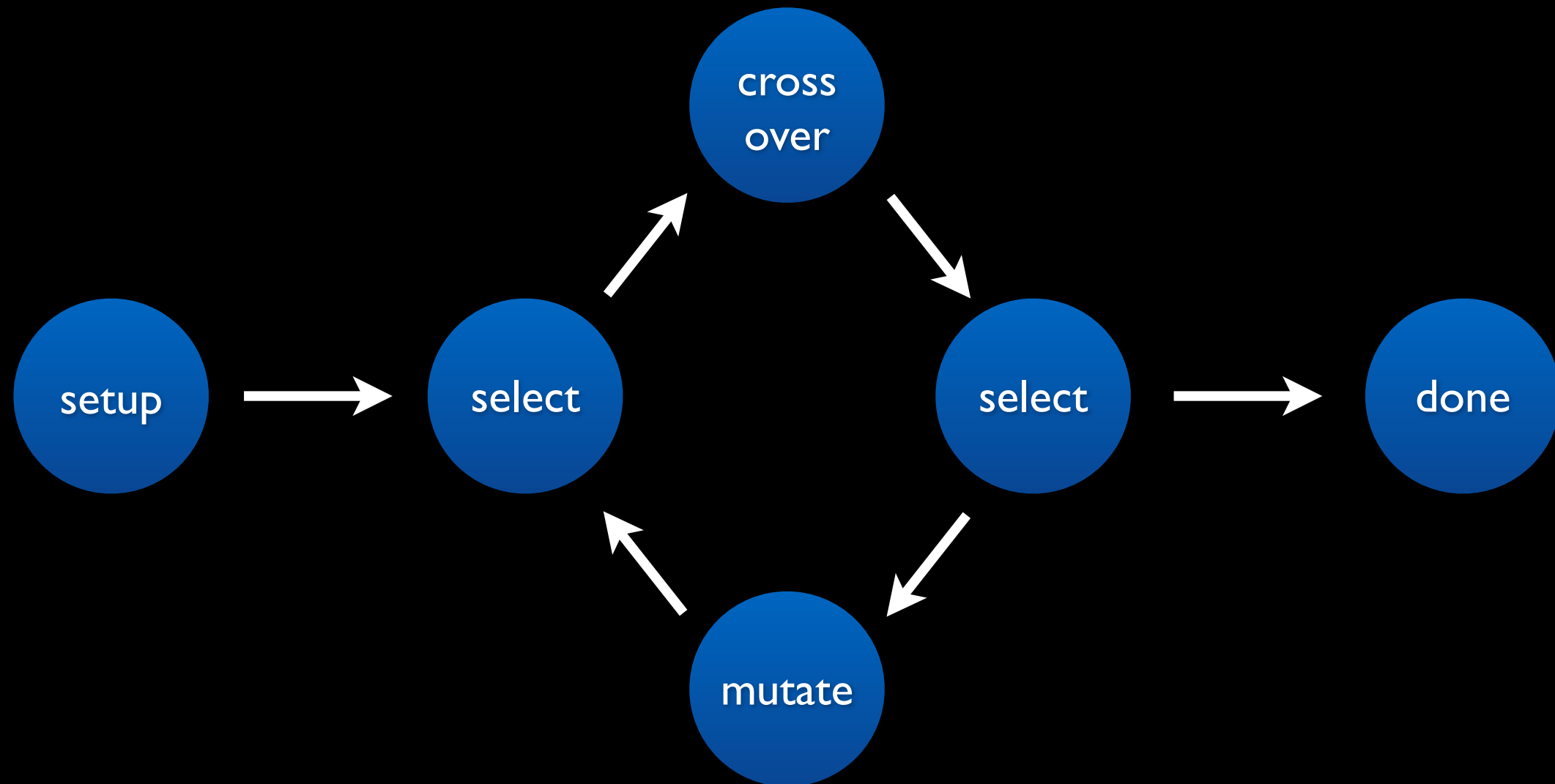
Genetic Course Scheduling



auto-solver

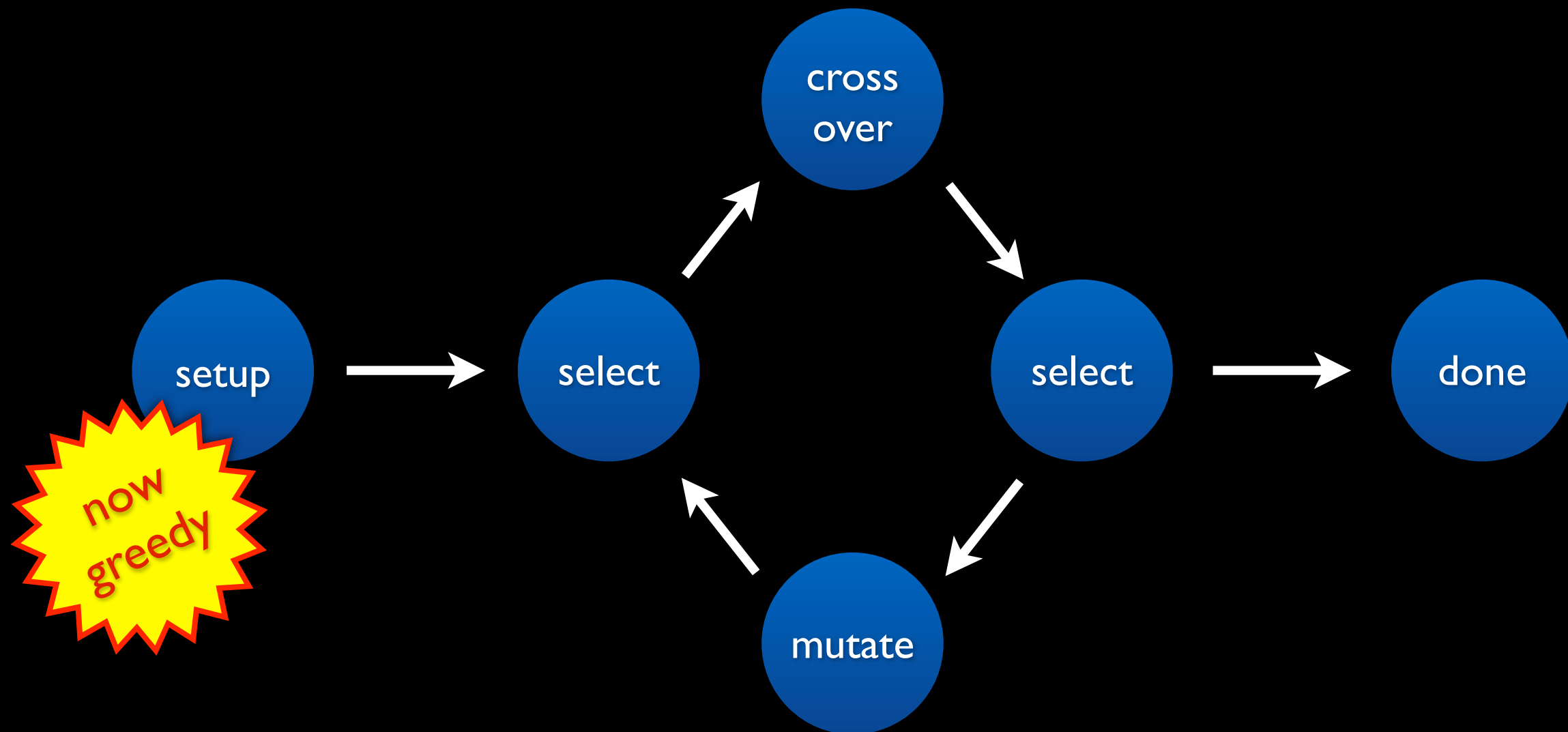
auto-solver

*Course Scheduling using
a genetic algorithm*



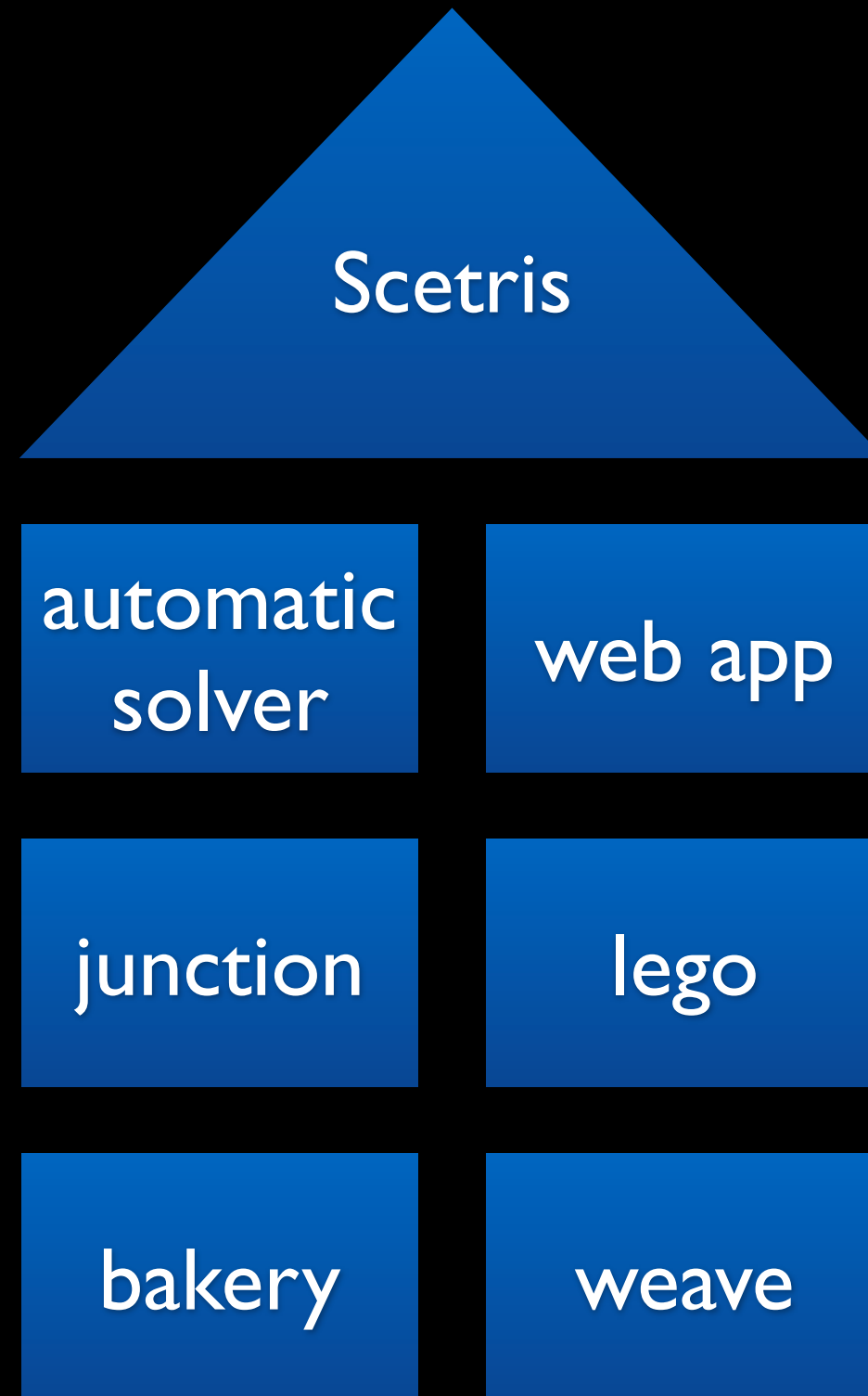
auto-solver

*Course Scheduling using
a genetic algorithm*

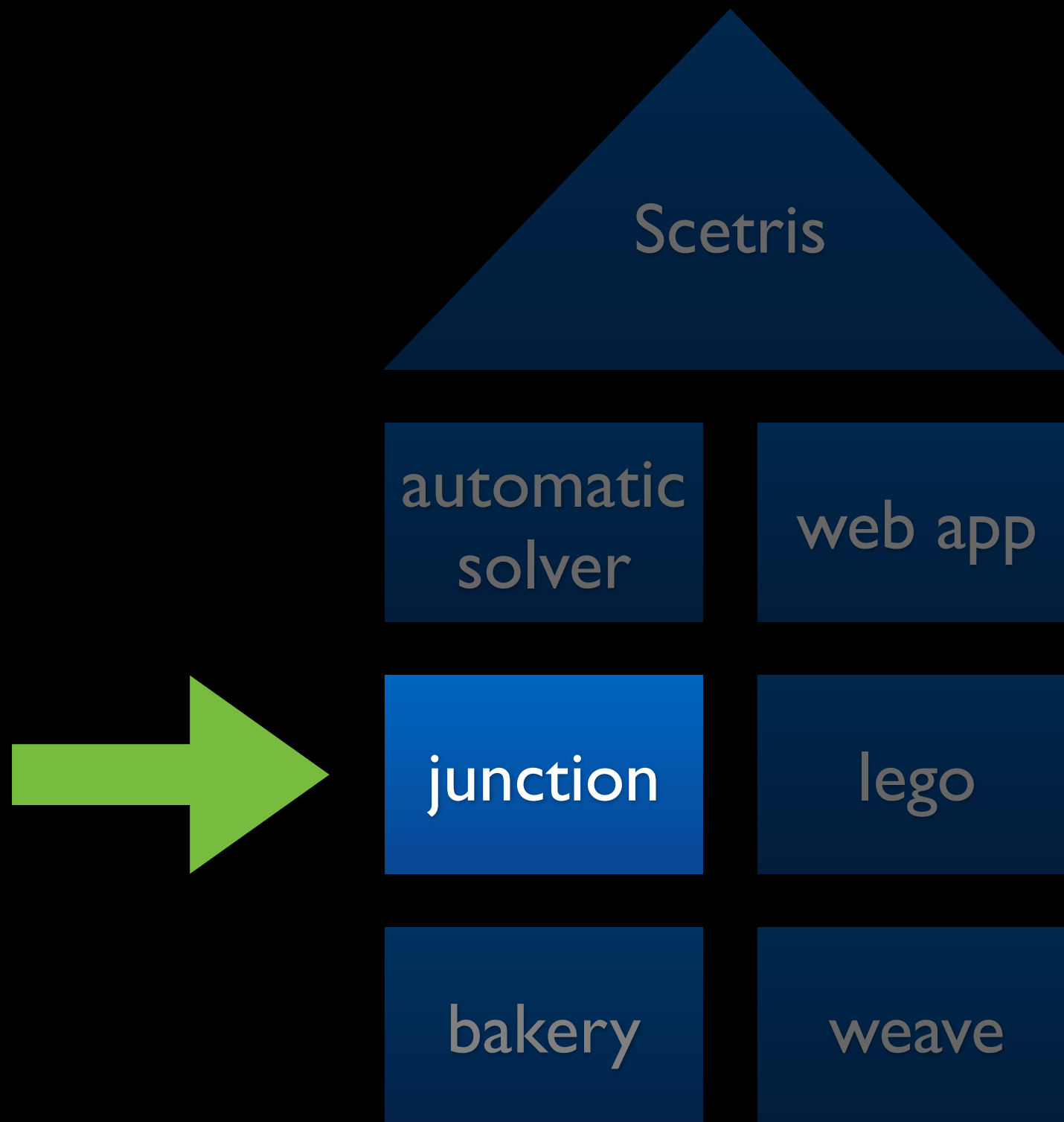


junction

junction

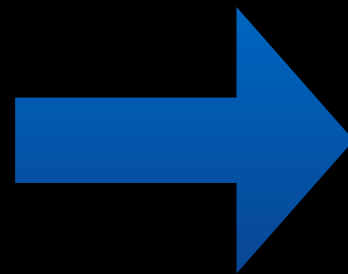
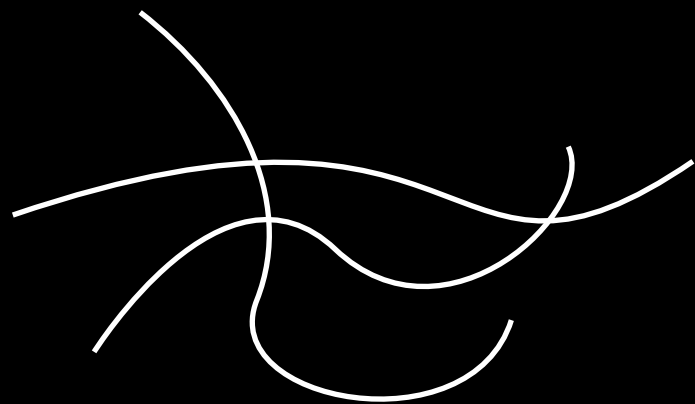


junction



junction

“Java functions you missed”



“string”

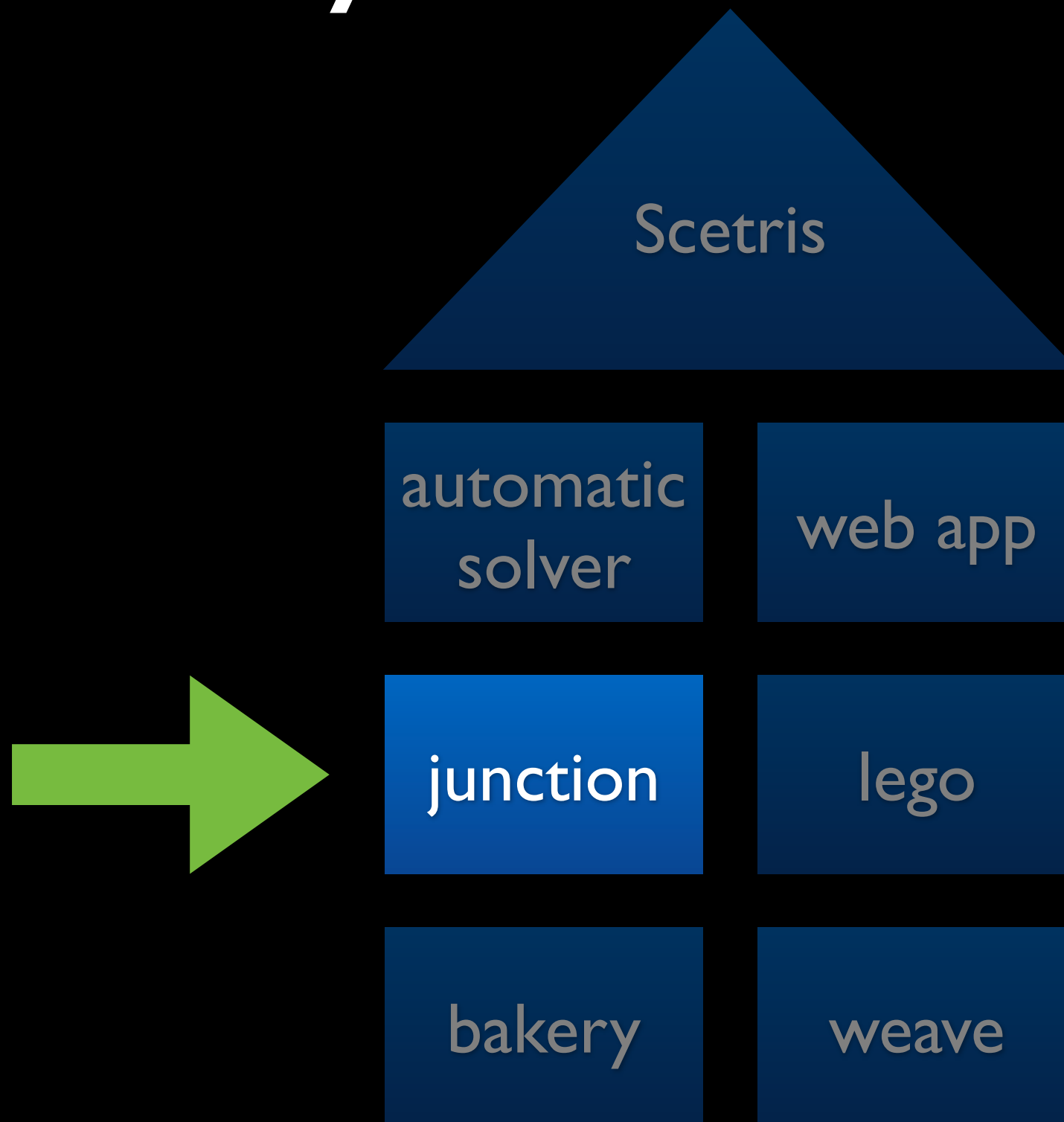
Methods to ease
your life in Java:

implode(...)

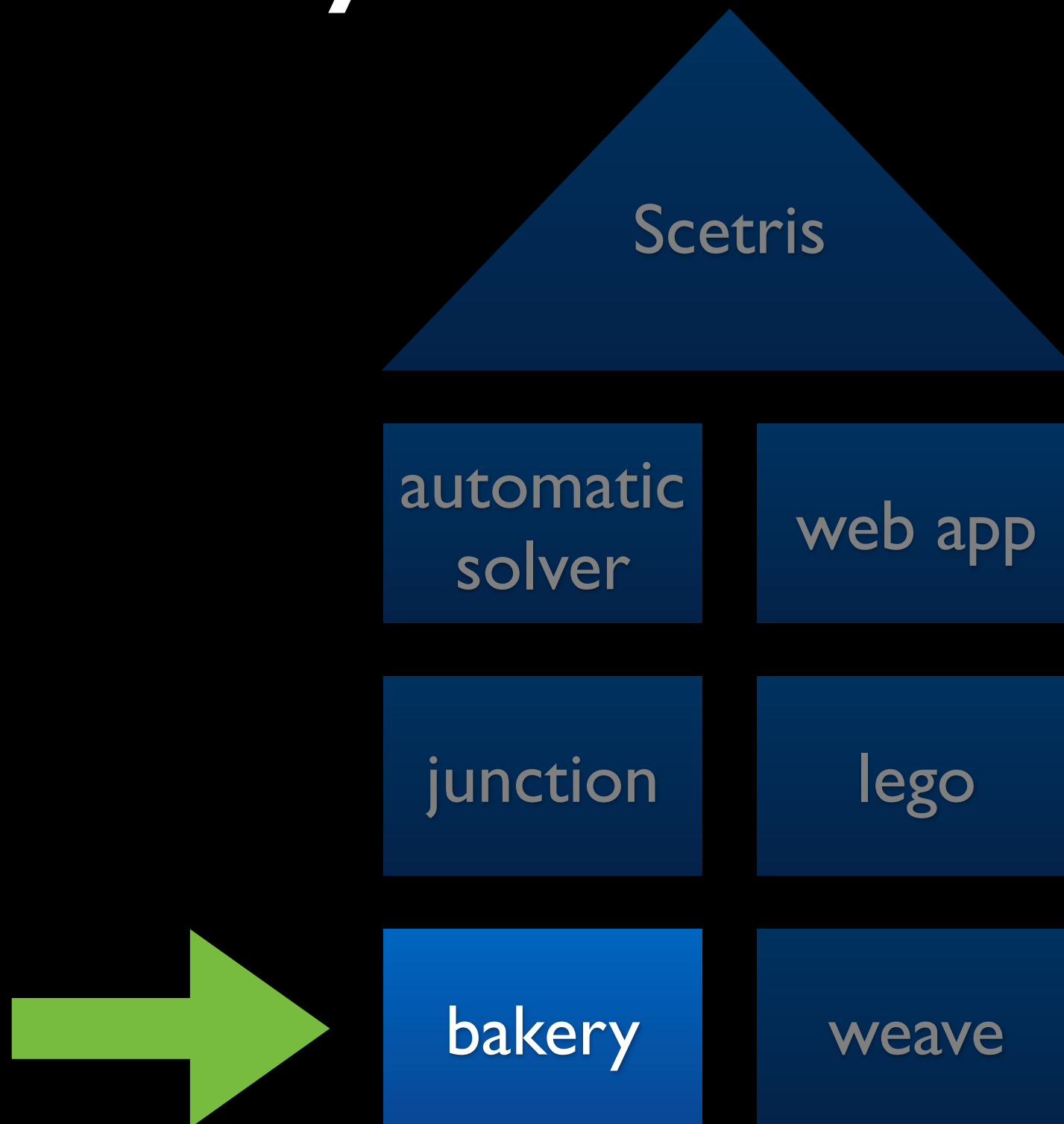
map(...)

filter(...)

bakery

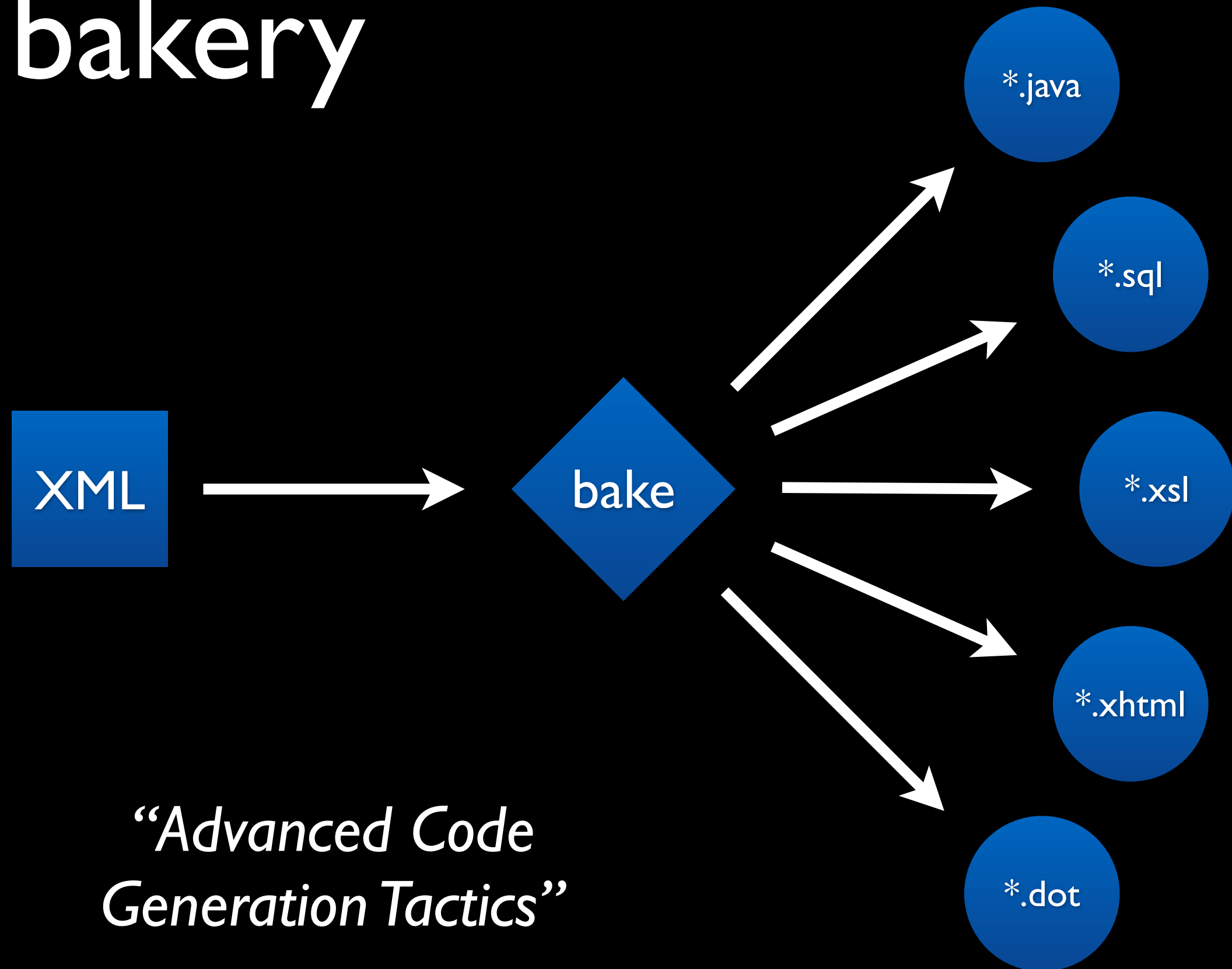


bakery



bakery

bakery



bakery

*.java

Active Records

*.sql

Database Schema

*.xsl

Templates

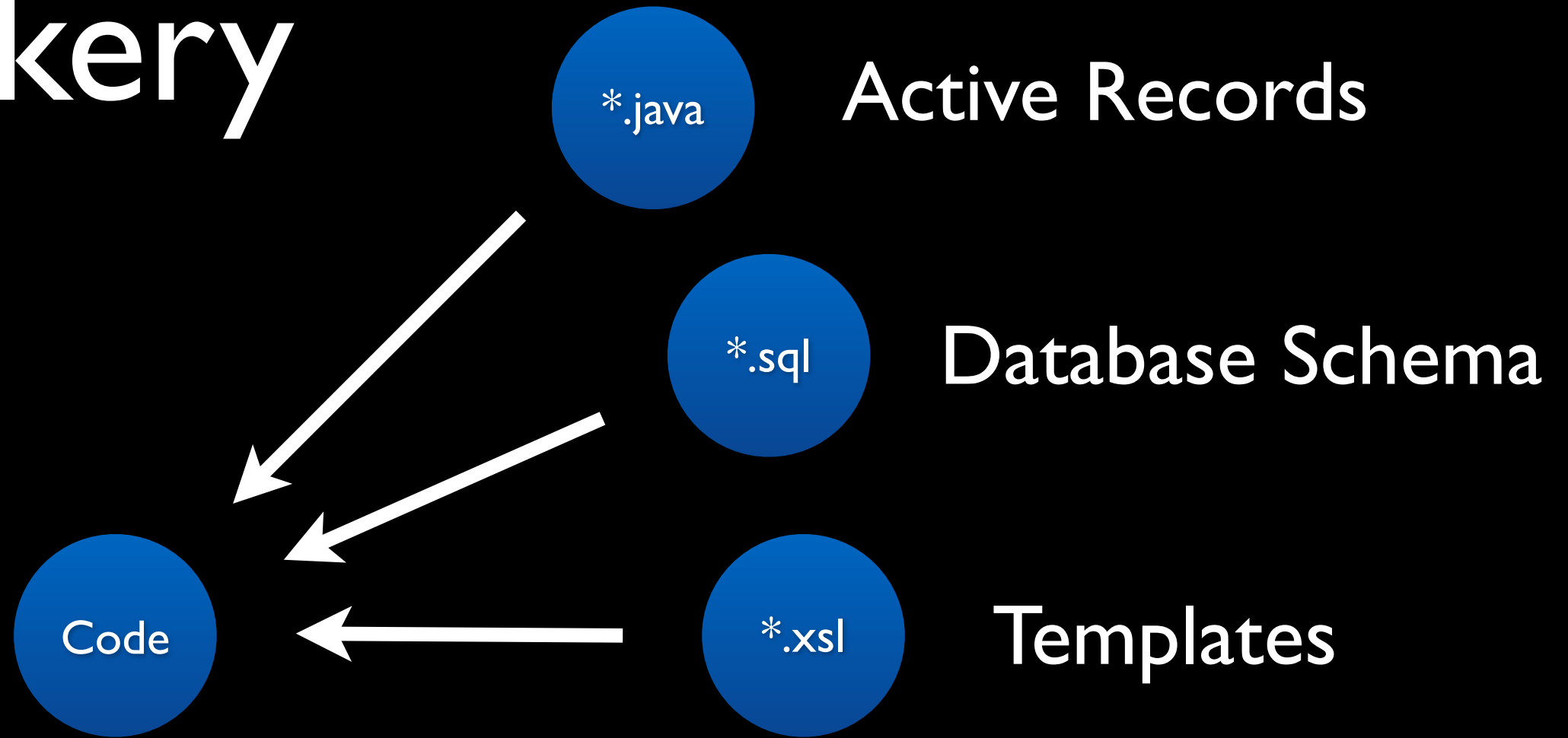
*.xhtml

Documentation

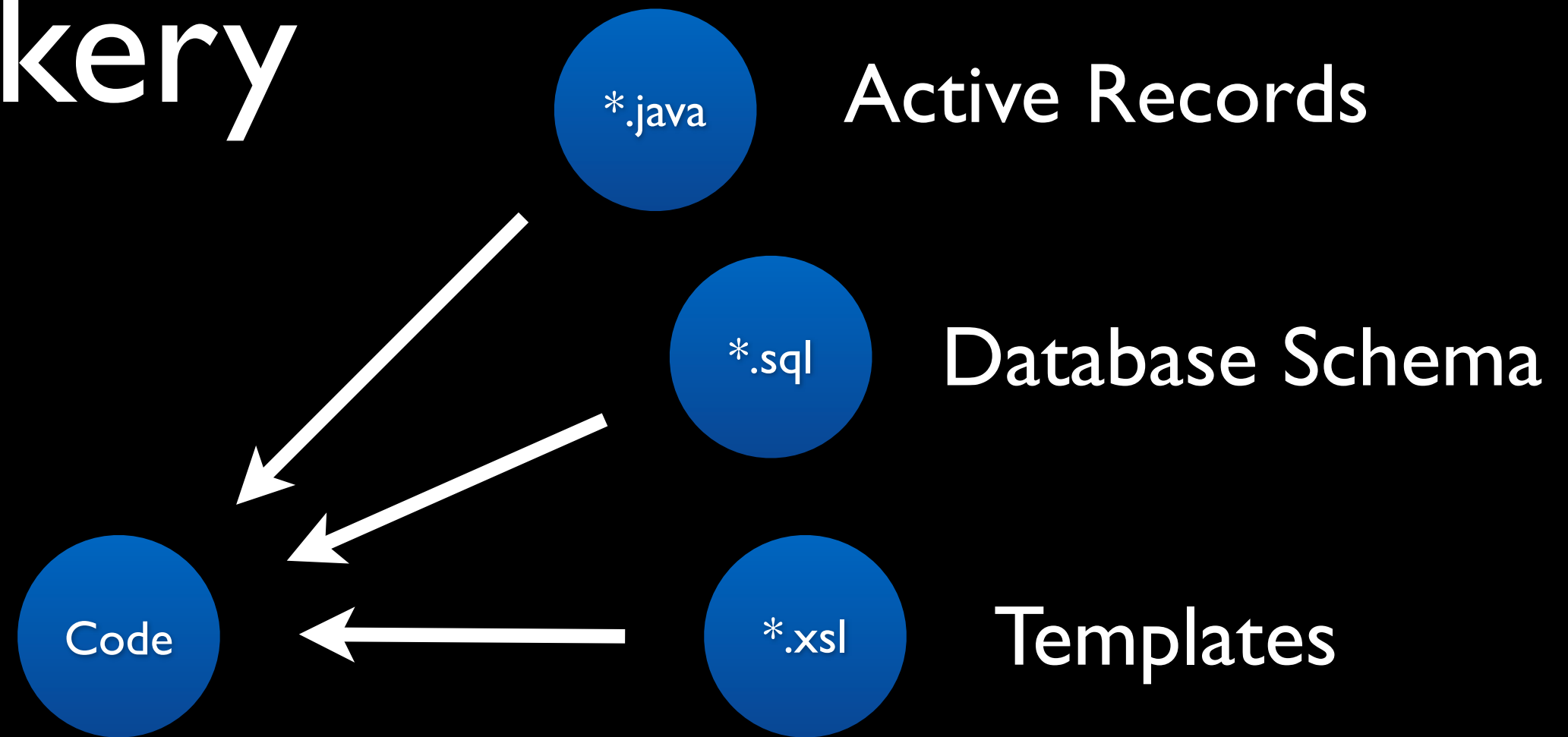
*.dot

ERM, UML, ...

bakery



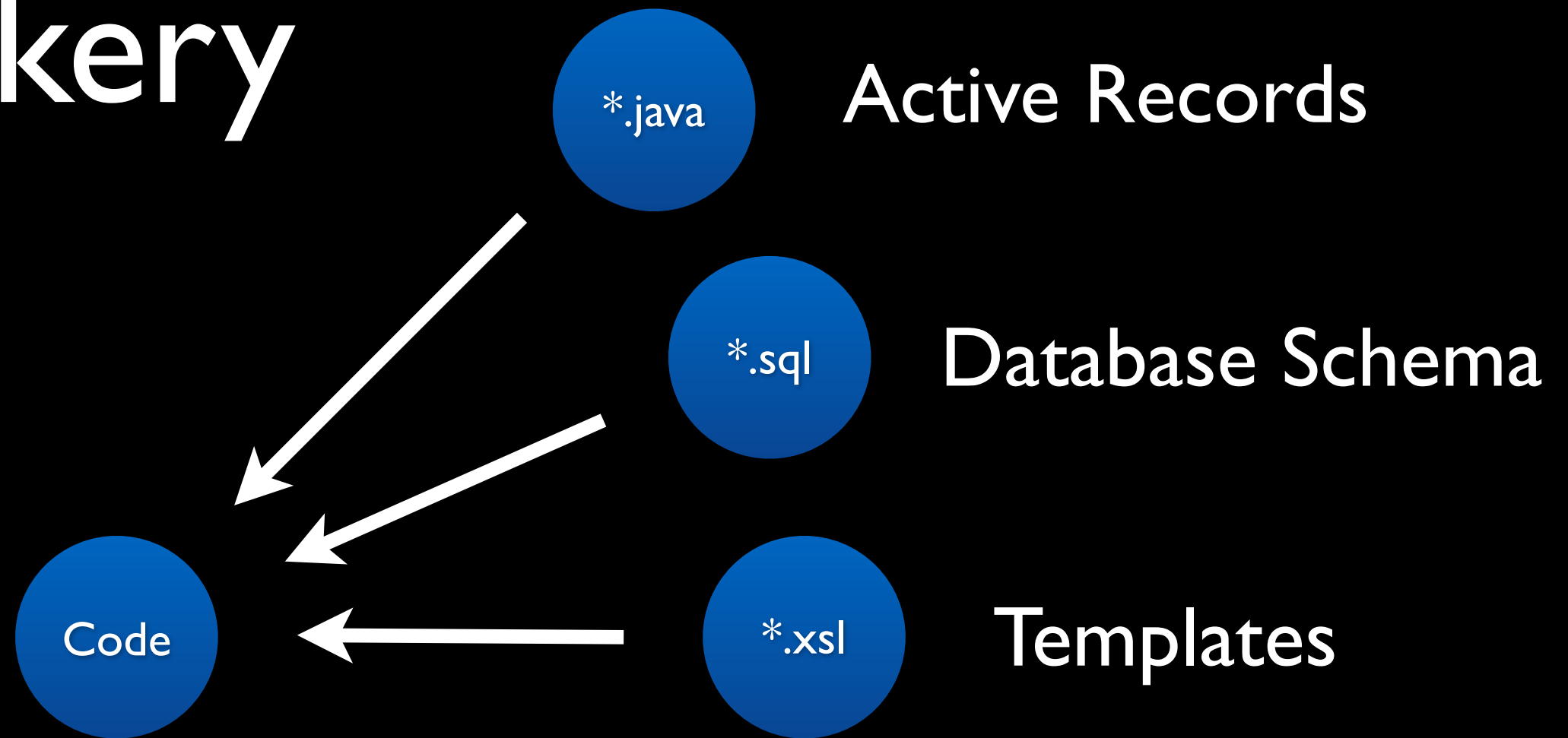
bakery



AspectJ

pg/SQL

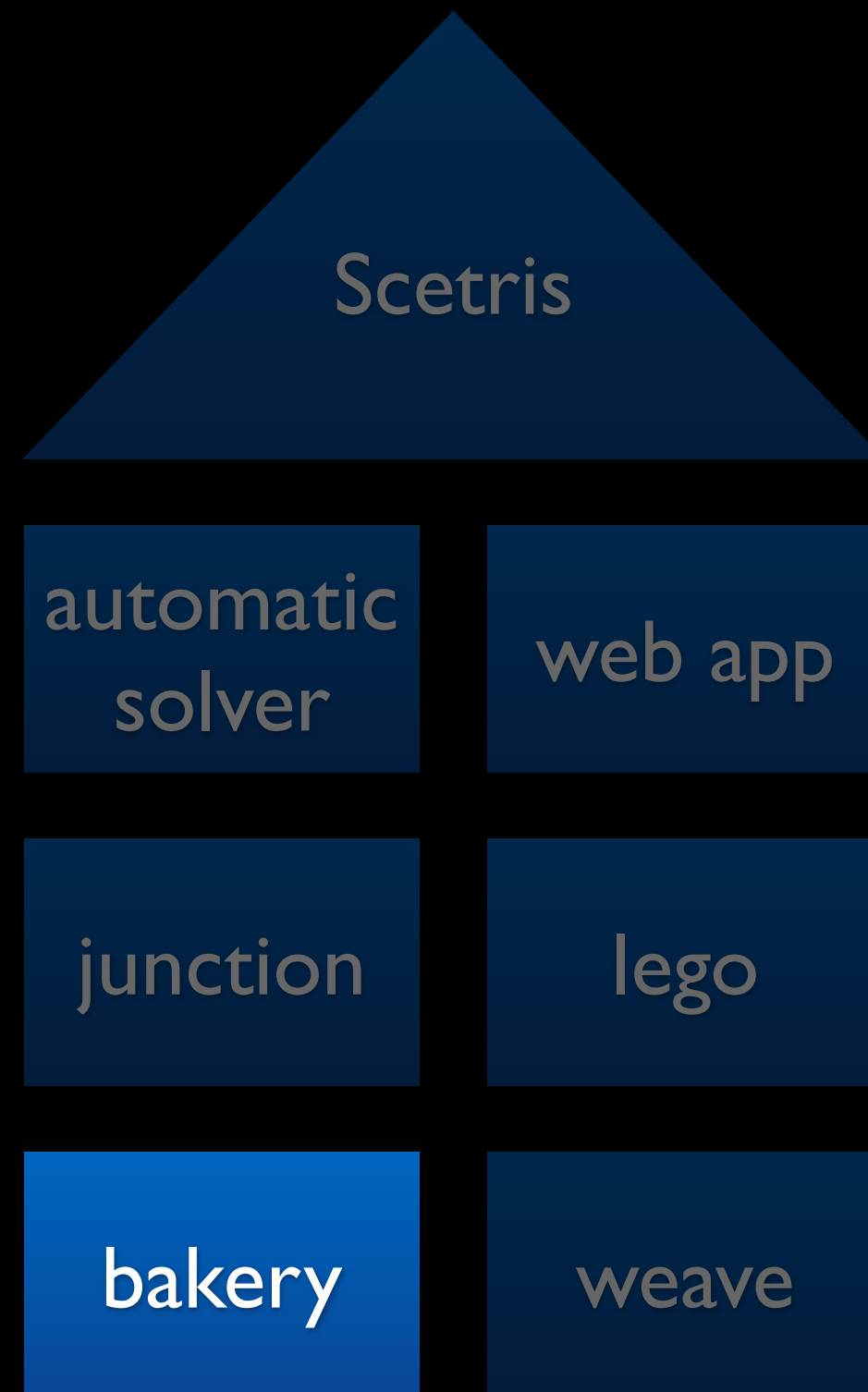
bakery

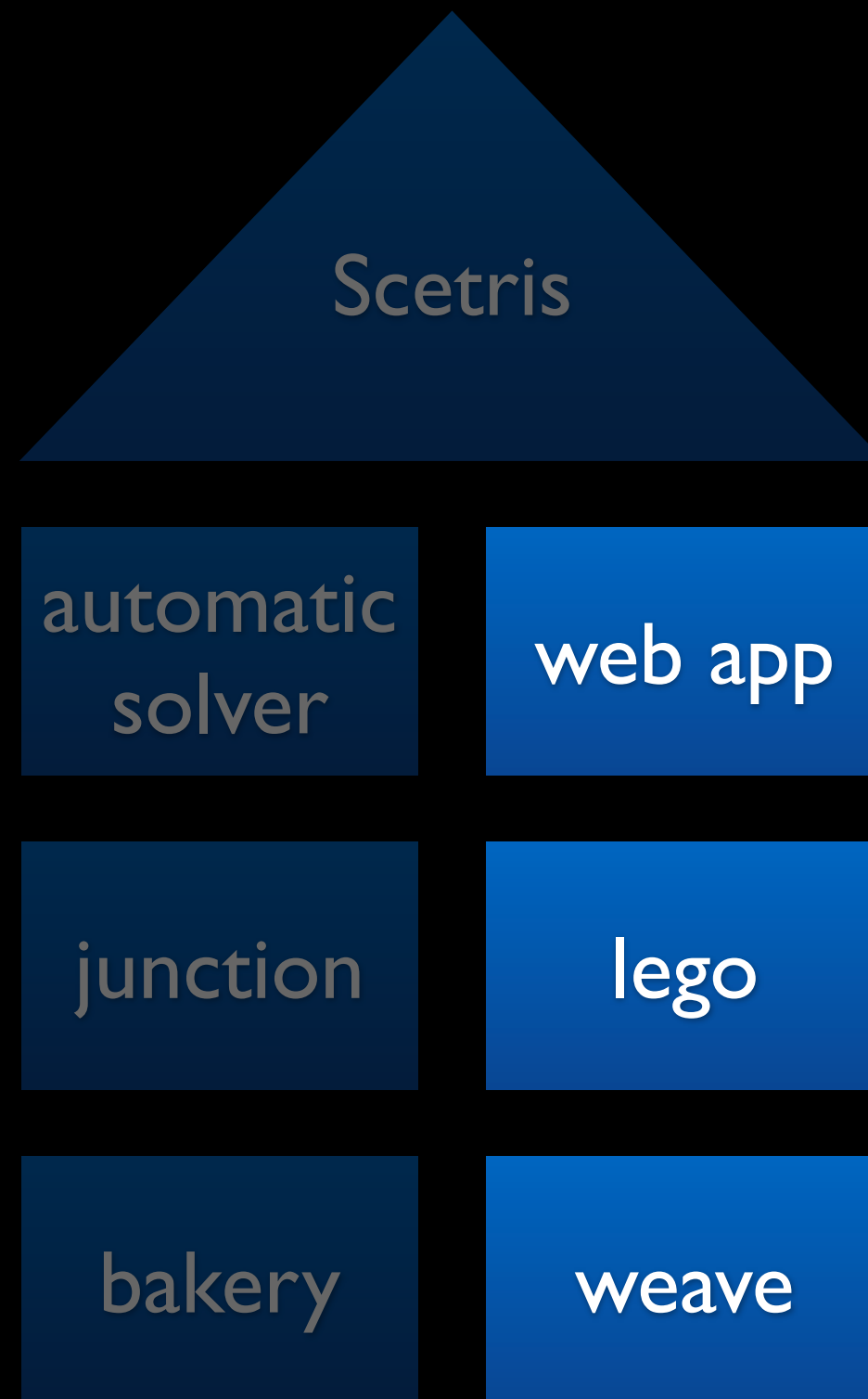


AspectJ

pg/SQL

► domain model





weave

weave

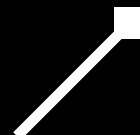
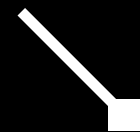
*@nnotation based
web-framework*

@Module

@Action
@Action

@Module

@Action
@Action
@Action

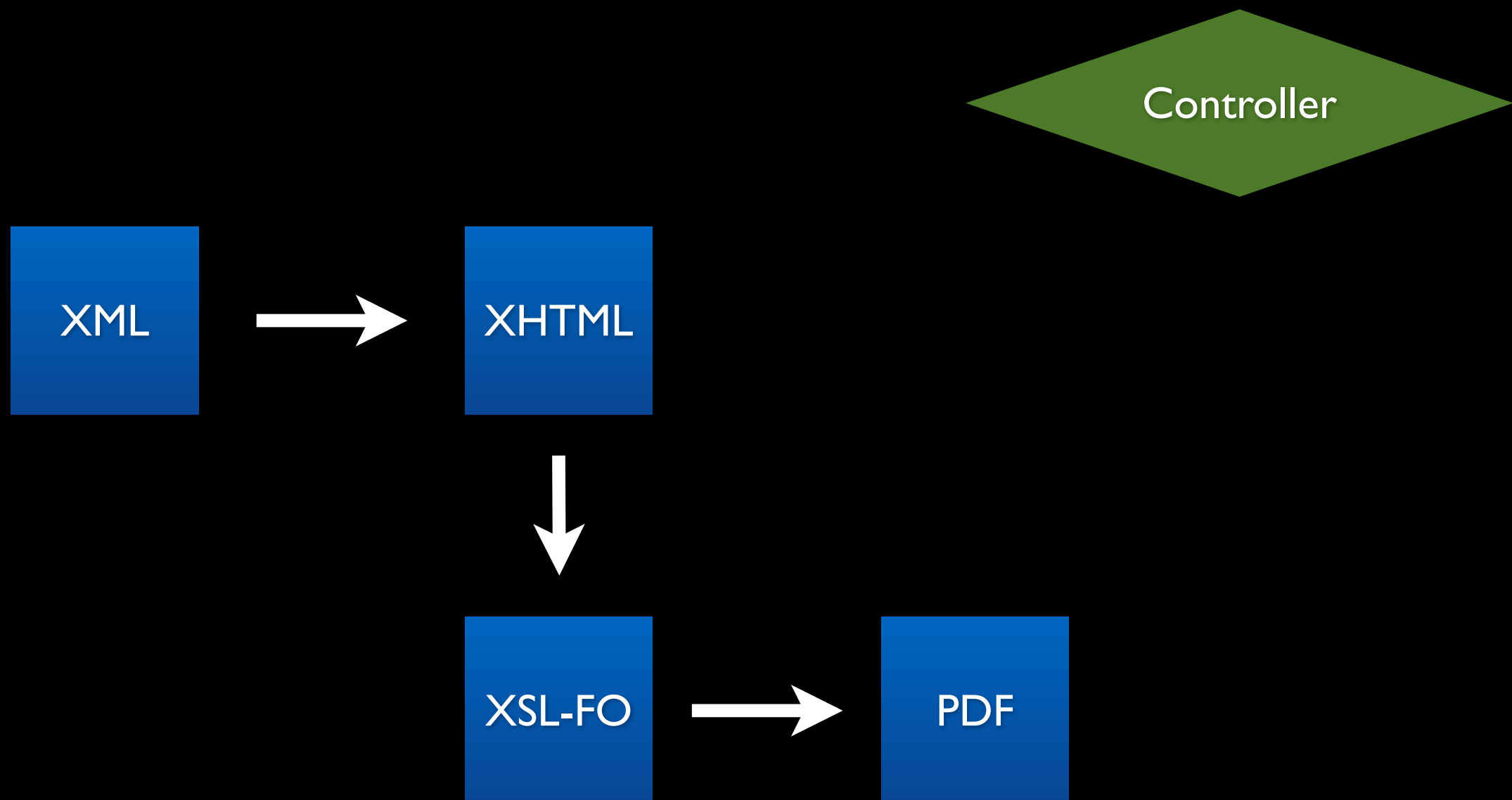


Controller

- Permission checking
- Output handling
- Control flow

weave

XML-Pipelines



lego

lego

Template “bricks”

+

jQuery UI

► presentation logic

scetris

scetris

- More modules
- PDF-Output
- XML-Export via web

demo

goals

goals

- Better user-interface
- faster scheduling

= polish!

This week

- Release of *junction.jar*
- Public testing site
<http://score.imp.fu-berlin.de/bleeding-edge>
- Public bug-tracker
<https://dev.spline.de/trac/project-scetris>

slides @ risk

junction

“Java functions you missed”

```
Callable pow = callback(Math.class, “pow”);
```

```
Number[] xs = new Number[] { 1, 2.3, 7, -3};
```

```
List<Double> sq = new ArrayList<Double>(xs.length);
```

```
map( pow, filter( gt(0), xs ), sq, 0.5 );
```

```
System.out.println( implode(“,”, sq) );
```

Aspect J

Java EE 6

Apache
Ant

XSL-T

Cobertura

JUnit

Apache
FOP

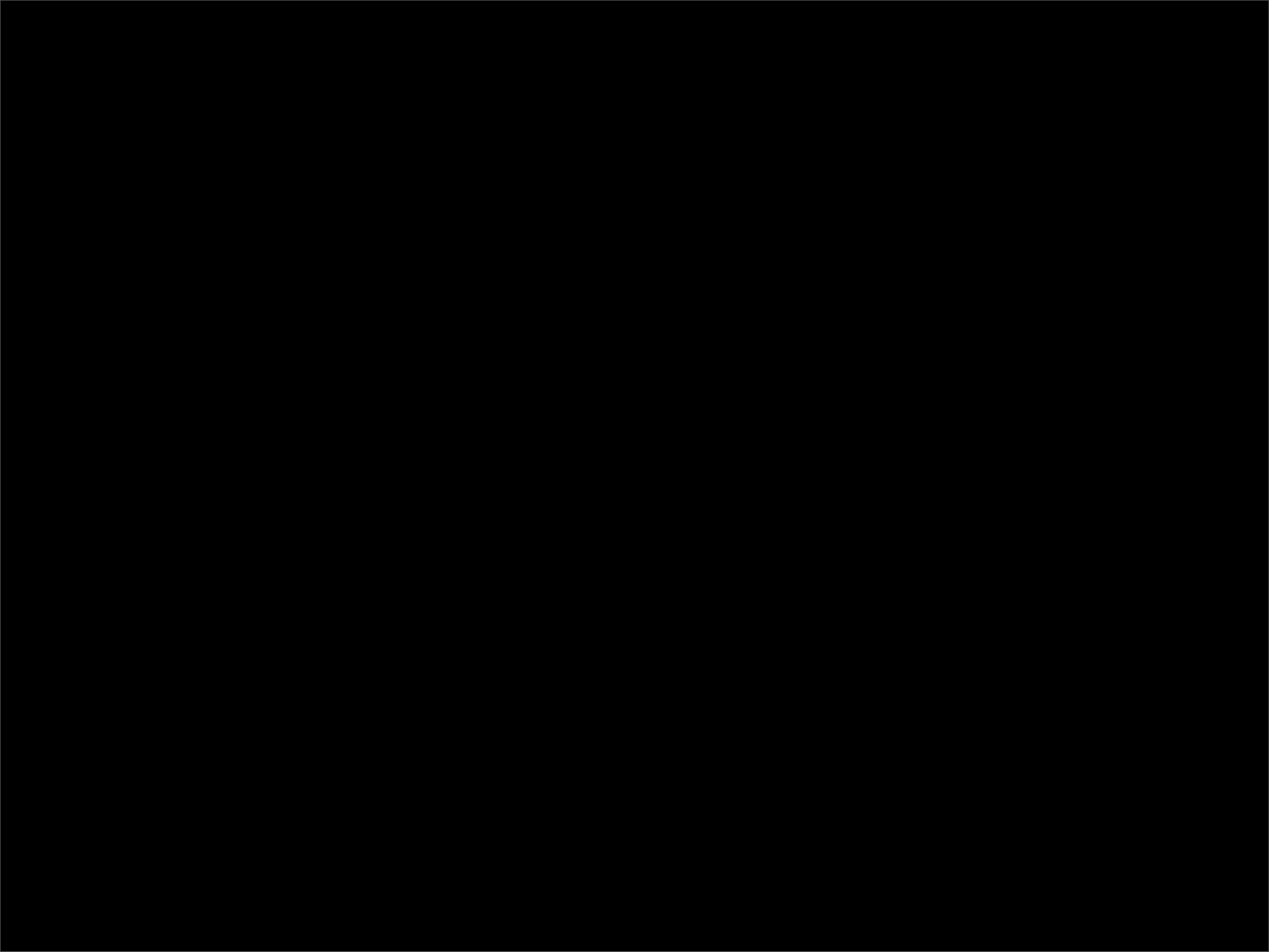
XSL-FO

jQuery

Jetty

Apache
Tomcat

XML



weave + bakery

```
public void listUsers(String[] path,  
    @Arg(name = "page", intDefault = 0)  
    final int pageNumber,  
    @Arg(name = "limit", intDefault = 50)  
    final int itemsPerPage) {  
  
    put("entries", relationManager.getUser(  
        pageNumber * itemsPerPage, itemsPerPage  
    ));  
}
```