End-User Reconfiguration of Applications using Adaptive Object-Models

February 2010 FEUP

The problem

- Most software projects exist in an everchanging environment
- Requirements change to reflect changes in the environment, the industry, the client and endusers
- Modifying a system is costly
- A stagnant project dies, so a big effort must be made to ensure its continuity

(A possible) solution

- A generic system that is flexible enough to introduce changes without too much effort
- These systems take longer to develop
 - Developers must foresee many use-cases that may never be used
 - Higher costs for preparing a system for unlikely scenarios

(A better) solution

 An architural design pattern prepared for these scenarios

AOM

AOM

- Meta-architecture design pattern
- A system can be configured by a domain expert using a DSL
- Allows for changes to a system's architecture in runtime

AOM Architecture

M2
System infrastructure
M1
System definition
M0
System Data

Oghma

- AOM framework
- Developed to answer the problems posed by the aforementioned systems
- Allows for the easy creation of highlycustomizable information systems
- ?Provides an architecture that allows endusers to model the system they're using? (é capaz de fazer mais sentido no próximo slide, 2º ponto)

Case-study: escolinhas.pt

- How to give better tools to teachers?
 - Let them build the tools they need!
- A specific architecture is required to allow end-users to model their own systems
- AOM and Oghma provide this missing functionality
- Will allow teachers to create their own tests, quizzes and other learning tools

Schedule

