Applying Design Patterns

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Design patterns capture recurring patterns of object-oriented design. This tutorial will provide a perspective on what it’s like to design and implement applications against a backdrop of design patterns. Furthermore, by carrying the designs through to implementation, we will demonstrate the way in which design patterns may or may not be reflected directly in the implementation. We will discuss issues of re-usability and suggest benefits in adopting implementation schemes that faithfully reflect the original design patterns.

The points the tutorial will address include:

- Design patterns: the idea
- Review of some key patterns
- Design case study
- Implementation schemes (examples from Smalltalk, Java or Eiffel)
- Focus on re-usability of implementation schemes

Level: Intermediate. Some experience with O-O design and programming will be presumed.

Presenters:

John Potter is an associate professor at Macquarie University, Sydney, where he heads the OT Group of the Microsoft Research Institute. His research interests include O-O design, programming languages and concurrency. He was a keynote speaker at TOOLS USA this year, speaking on his experience with the design of an Eiffel-Java translator.

James Noble is a research project leader at MRI. His current interests include design patterns, O-O prototyping languages, and user interface design. He founded the Sydney Design Patterns Group, which meets fortnightly to discuss patterns related topics.