

Modeling Systems with ADORA



REQUIREMENTS ENGINEERING II

JETON MEMETI
RITA PUIO
ROBERT RICHTER
MICHAEL STUDER
ARTHUR TOENZ

Index



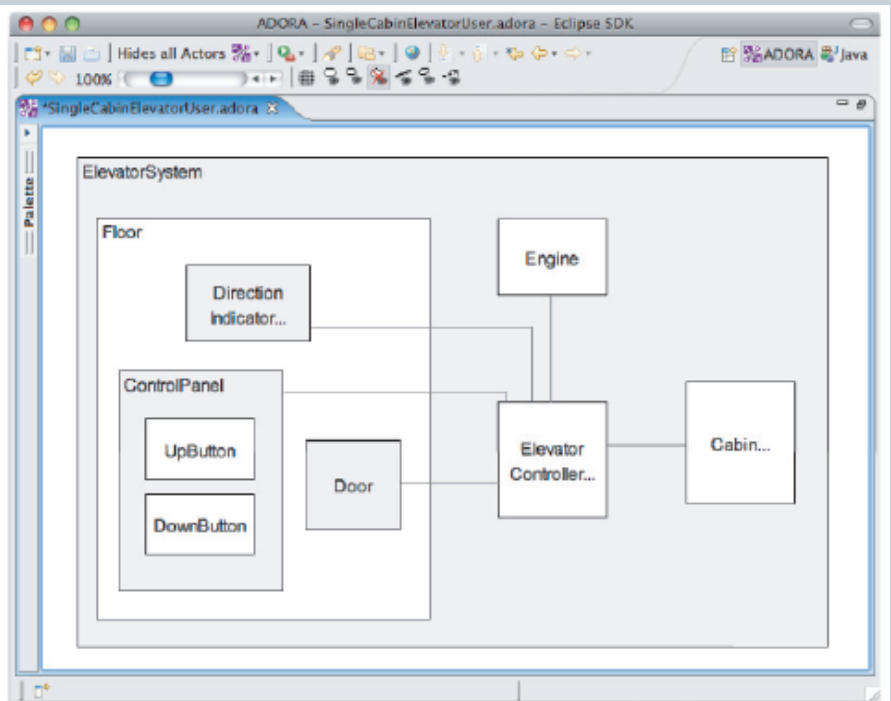
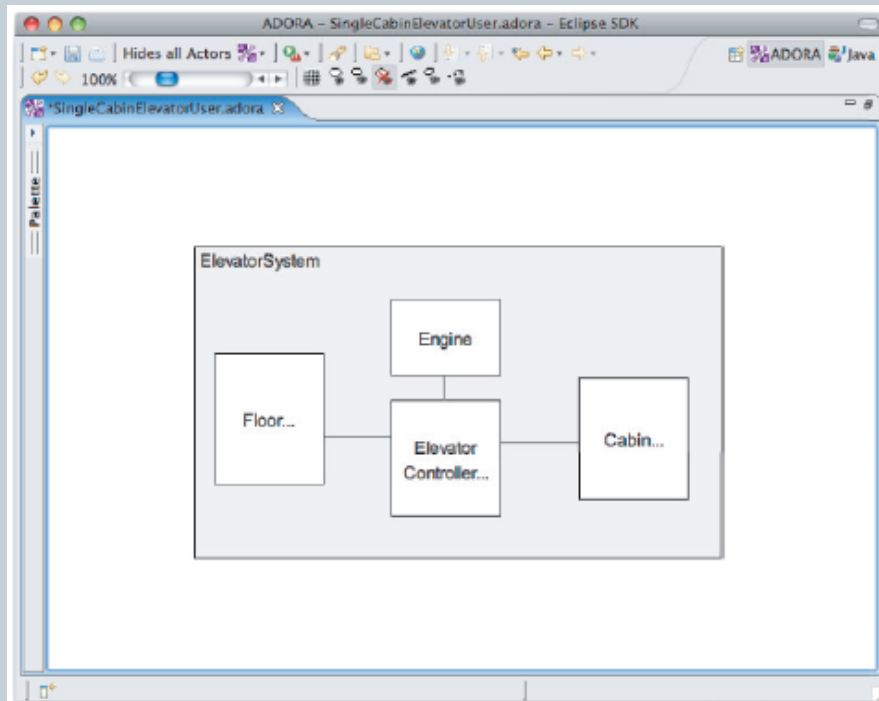
- ADORA modeling language
- Fisheye views
- Implementation challenges
- Simulating scenarios
- Level of supported formality
- Summary

ADORA modeling language



- Abstract objects instead of classes
 - Objects and object sets
- Hierarchical decomposition
 - Nested boxes, scenario hierarchy
- Integrated model
 - Hierarchy, aspect views
- Adaptable degree of formality
 - Formal, textual, semi-formal
- Contextual visualization
 - Fisheye views

Fisheye views

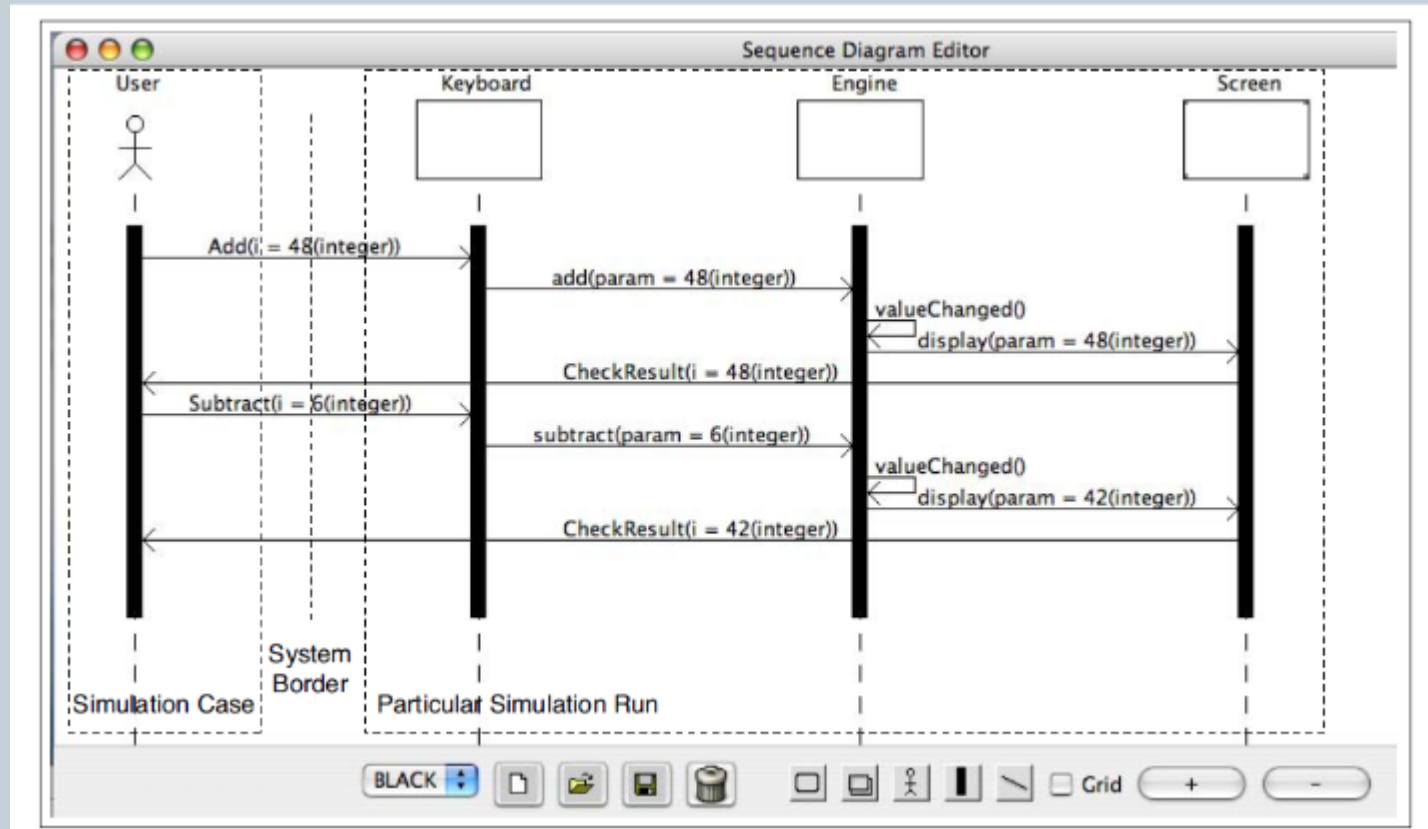


Implementation challenges

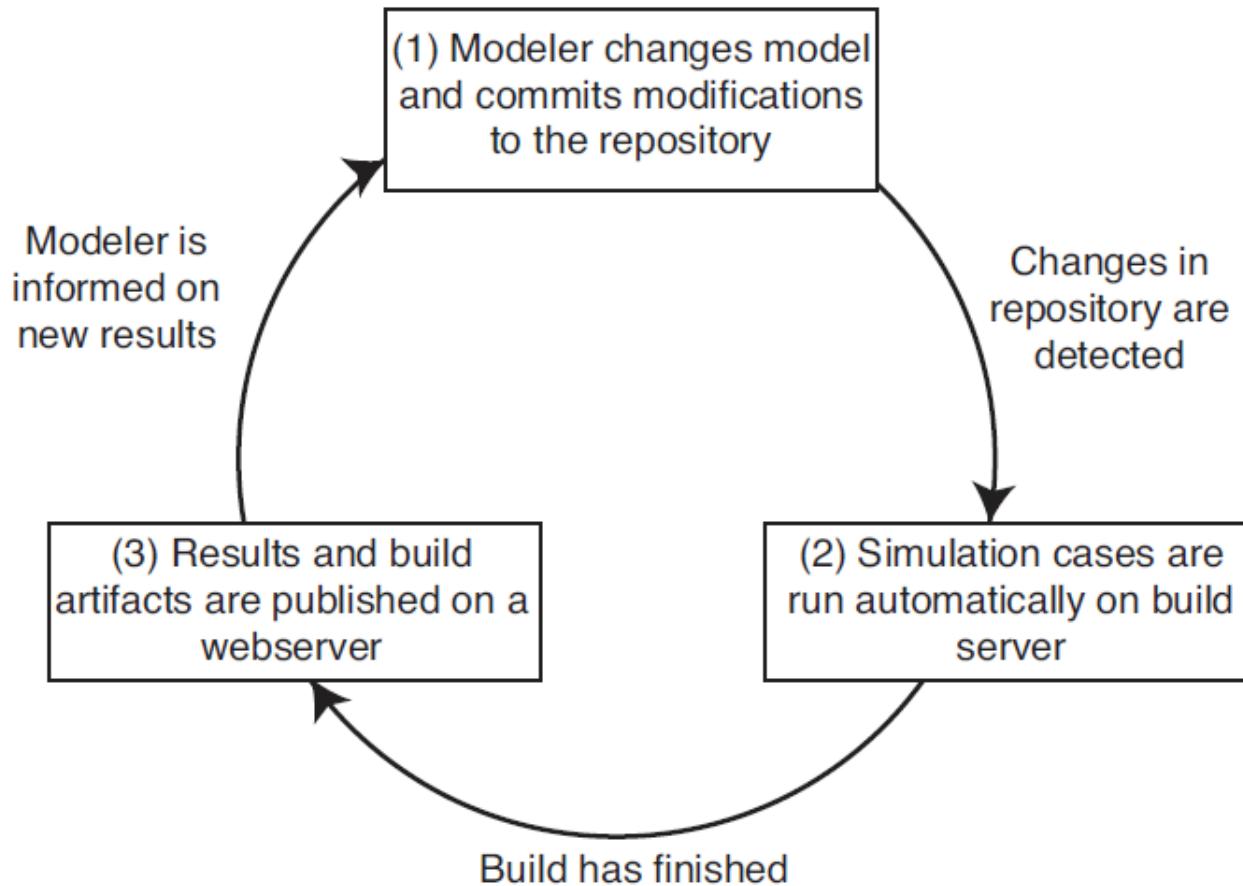


- Usability
- Performance
- Portability
- Sharing data
- Synchronisation

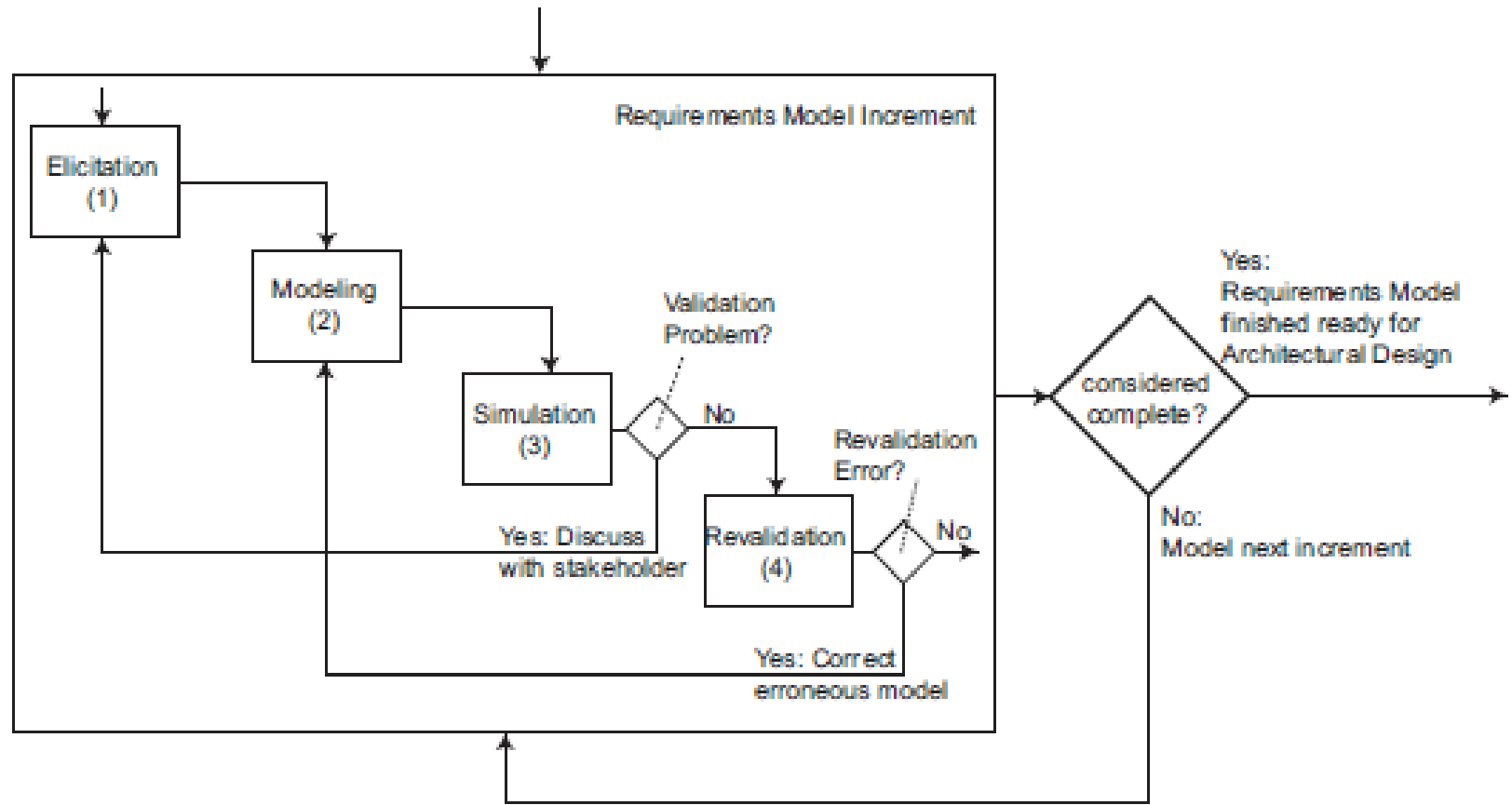
Simulating scenarios (I)



Simulating scenarios (II)



Simulating scenarios (III)



Level of supported formality



- Ideally
 - Formal, fully executable models
- Reality
 - Semi-formal, incomplete models
- ADORA supports for simulations both formal and semi-formal requirement specifications

Summary



- Models are often complex
- Tool support is necessary to reduce complexity and allow focus
- ADORA tool supports work with complex models
 - User can control detail level
 - Tool supports integration of all necessary information in one view
 - Tool supports validation of models by regression simulation

Questions



Backup: scenario hierachy

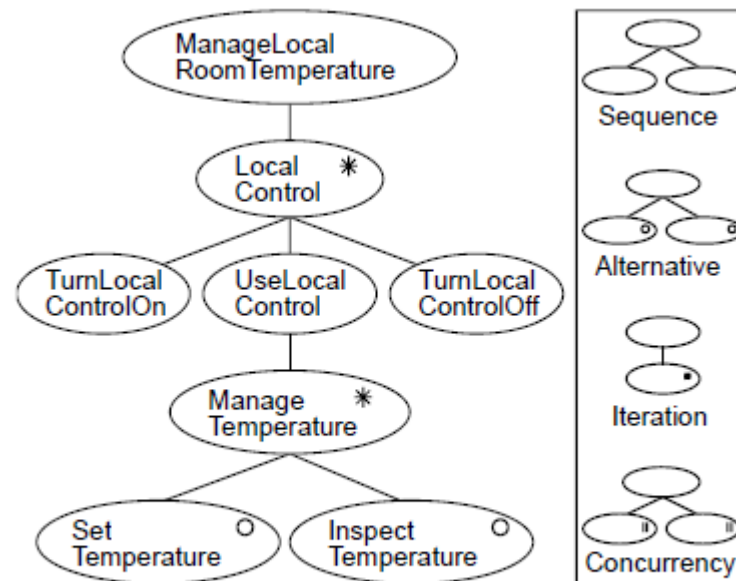


Fig. 8. A scenariochart modeling the structure of the Manage-LocalRoomTemperature scenario.