

Model Analyzer

Detecting and Fixing Design Errors Quickly



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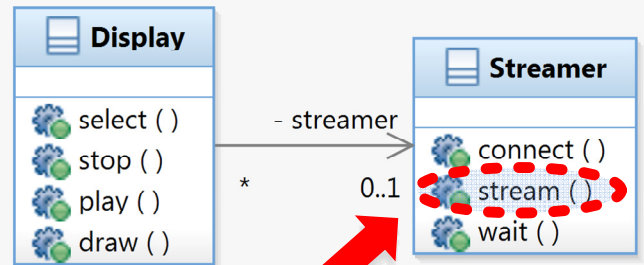
WWW: <http://www.sea.jku.at/>

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Model Analyzer

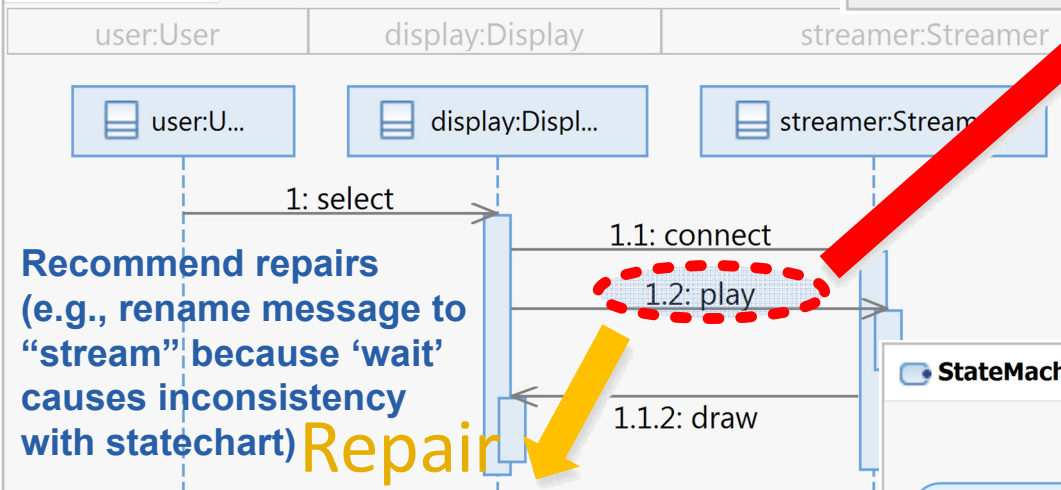
- automatically detects design errors
- automatically suggests fixes
- scales and is very fast
- is easy to use

Class Diagram



Interactions

Design models are strongly interrelated



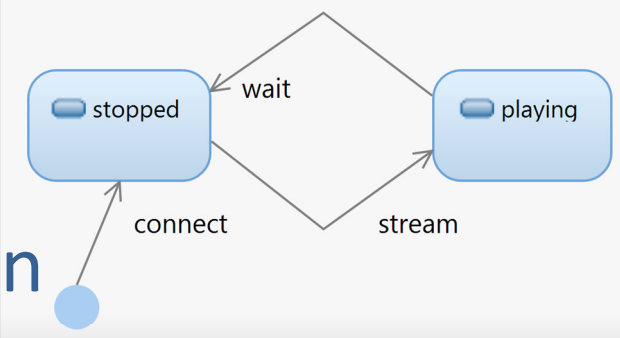
Recommend repairs (e.g., rename message to "stream" because 'wait' causes inconsistency with statechart)

Repair

Detect

Detect design errors instantly when introduced

State Machine of Streamer



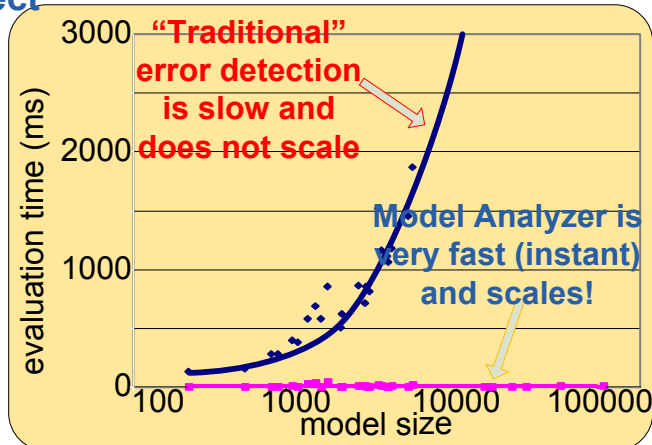
Restrain 'wait' cannot follow 'connect'

Model Analyzer is integrated with IBM Rational Software Architect™

- Pre-defined, modifiable rules
- Applicable to other languages

Download from <http://www.sea.jku.at/tools>

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[1] A. Egyed, "Instant consistency checking for the UML," in *28th International Conference on Software Engineering (ICSE)*, Shanghai, China, 2006, pp. 381–390.

[2] A. Reder and A. Egyed, "Model/analyzer: a tool for detecting, visualizing and fixing design errors in UML," in *25th IEEE/ACM International Conference on Automated Software Engineering (ASE)*, Antwerp, Belgium, September 2010, pp. 347–348.