

Project #2 **REVISED 11/29**
Software Engineering 521/621
Assigned: November 20, 2006
Preiminary Project Due: December 1, 2006
Due: December 19, 2006

1. General Project Information

Students in 521 will carry out a project using eValid tool (see <http://www.soft.com/eValid/>) or one or more of the Rational tools (tool suites) (see <http://www-306.ibm.com/software/rational/offerings/testing.html>).

Students in 621 will carry out a project using an experimental tool. In each case, **please email Professor Adrion by December 1** indicating your choice of tool and code to be tested.

521 Tools

eValid™ Web Testing & Analysis Suite
IBM® Rational® PurifyPlus™
IBM® Rational® Functional Tester Plus
IBM® Rational® Performance Tester

621 Tools

Daikon, Michael Ernst
Alloy, Daniel Jackson
SPIN, Gerard Holzmann
LTSA, Kramer and Magee
SMV or NuSMV, McMillan

Code to be tested should be of a reasonable size (~1KLOCS or perhaps smaller for 621) and include several objects/methods. You could use the FSA from Project#1, code from various open source repositories, e.g., sourceforge, or your own code. Website for eValid should be of reasonable size, small enough to analyze but big enough to provide enough features (should include links, pictures, applets, etc.)

2. You should design an experiment that addresses the following issues:
- a. Ease/difficulty of installation
 - b. Learning curve for the tool(s)
 - c. Ease/difficulty of application
 - d. How well the tool(s) works around the issues associated with that particular form of testing.
3. Format of report:
- Describe the tools(s) and sample code/website being evaluated
 - Describe the process of evaluation
 - Restate the evaluation criteria (you are welcome to add criteria)
 - Describe your methods and approach
 - Describe the results
 - Interpret your results, e.g., categorize faults into classes; interpret the metrics outputs; discuss displays, controls, reports; etc.
 - Suggested Improvements
 - Summary and conclusions
 - Appendix
 - Artifacts