A Survey on Software Architecture Analysis Methods
Liliana Bobrica and Eila Niemela
IEEE TOSE July 02

Group Presentations

- Progress?
  - Has every group found their articles?
  - Is every group working together?

- Example?
  - Does every group have an example?

Group Presentations

Schedule
- Thursday, 11/21
- Tuesday, 11/26

What is Software Testing?
And Why Is It So Hard?
James Whittaker,
IEEE Software Jan/Feb2000
Pp70-79

Why users find bugs
- The user executed untested code
- The order in which statements were executed in actual use differed from that during testing
- The user applied a combination of untested input values
- The user’s operating environment was never tested

Four phases
- Modeling the environment
  - Input sources, interfaces
- Selecting test scenarios
  - Test data adequacy criteria
- Running and evaluating test scenarios
- Measuring testing progress
Phase 4: Measuring Testing Progress

- Number of tests
- Percentage of code covered
- Number of failures
- Functional testing completeness
- Structural testing completeness
- Error Rates

Voas’ Testability

- From a point in the code, what is the probability that a change (fault) will be visible (cause a failure)?
- Fault detection probability

Reliability

- Probability that software will not fail in x time
- Operational profile