

Department of Computer Science
Purdue University, West Lafayette



Spring 2011: CS 49000 Software Testing
Quiz 1: Bugzilla/Cobertura

Tuesday February 8, 2011. 1:30-1:45pm SMITH 208
Maximum points: 20 (2 points for each correct answer). Use the reverse of this sheet for additional space.

Name: _____

Q 1 List two reasons why you might want to use Bugzilla in a project?

- (a) *You can keep track of milestones, predict product versions for integration, and follow the discussion trail that led to critical decisions.*
- (b) *Bugzilla provides a powerful, easy-to-use solution to configuration management and replication problems.*

Q 2 Is it possible to inherit the settings of an old bug while reporting a new bug in Bugzilla? If so, explain briefly how would you do this?

Yes. Bugzilla has a feature that allows you to clone an existing bug. To use this, go to the bug that you want to clone, then click the Clone This Bug link on the bug page. This will take you to the Enter Bug page that is filled with the values that the old bug has.

Q 3 List two database systems currently supported by Bugzilla.

MySQL, PostgreSQL, and Oracle.

Q 4 Should bug reports be deleted once the corresponding bug is fixed? Give reason(s) in support of your answer.

Probably no. You generally do not want to delete bug reports; they are supposed to be a permanent historical record.

Q 5 What information does the "Time Tracking" feature in Bugzilla. help you track?

Developers can see deadlines and estimated times to fix bugs, and can provide time spent on these bugs. Original Estimated Time, Current Estimated Time, Hours worked, Hours left, Deadline, Gain.

Q 6 Why do you want to use a coverage tool?

To asses the goodness of our tests measured in terms of the amount of code tested..

Q 7 What makes Cobertura different from other coverage tools? Provide at least two reasons.

- (a) *Can be executed from ant or from the command line.*
- (b) *Instruments Java bytecode after it has been compiled. (Bytecode level instrumentation)*
- (c) *Can generate reports in HTML or XML.*

Q 8 Briefly list the kind of information Cobertura reports after execution of a program against a test suite?

- (a) *Number of classes*
- (b) *Statement Coverage*
- (c) *Branch Coverage*
- (d) *Code complexity*

Q 9 Is it always possible to attain 100% decision coverage? Justify your answer.

Yes, if only feasible decisions are considered in the computation of coverage, no if all decisions are considered.

Q 10 List at least one other tool that provides information about the amount of code covered.

EMMA, JTest, Clover etc.