

# Testing

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## 1 Administrivia

### Announcements

Informal walk-through now.

### Assignment

Read Chapter 9; online essay.

### From Last Time

Implementation.

### Outline

1. Chapter questions.
2. Team Exercises.

Coming Up

## 2 Chapter Questions

1. How do failures of a software system help to identify faults in the software system?
2. Complete testing of a software system requires that every possible system state is tested at least once. Is such testing possible in a moderately large software system? Why or why not?
3. If complete testing is not possible for a software system on which you happened to be working, how would you know when you had tested enough situations?
4. If you developed test cases for every piece of code in a software system, would you be performing white box or black box testing? Explain the difference between the two.
5. What is regression testing? Why is one tempted to ignore regression testing in object-oriented systems more so than in traditional systems?

## 3 Team Exercises

1. Create a set of test cases for the Galaxy Sleuth system. For each test case, explain what is being tested. Don't forget to include stress and performance tests, in addition to structure and functional tests. Create a test oracle for the test cases.