

ICS 52: Introduction to Software Engineering

Fall 2001

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Assignment 4: Testing

Issued: Friday, 23rd November 2001

Due: Friday, 30th November 2001(beginning of Discussion)

SUMMARY

In this assignment you will do system testing of your Congo.com implementation. Your testing should follow the general approach to black box testing that was explained in **the November 20th lecture on "Testing"** (see course web page).

ASSIGNMENT DETAILS

1. Use a sub-domain based strategy to select black-box test cases for your implementation. Create a matrix similar to the ones shown on **slides 18-21 in the week 9 lecture slides on "Testing"** to record the test cases that you select.
2. Execute the test cases that you designed in the above step, recording the results in the matrix.
3. Turn in a document containing the following items:
 - a. A general description of your testing process, including a description of your approach to running test cases, to storing test results, and to determining whether a test case succeeded or failed.
 - b. A short description of the sub-domains that you used in selecting test cases.
 - c. The completed matrix that you developed during the process of testing.
 - d. A printed copy of the program that you used during the testing (this may be the same as you turned in at the end of the last assignment, or a modified version, as discussed in the Note below.)

Your documentation should be detailed enough so that the graders can reproduce any of your testing efforts.

Your document should also include

- A title page using a 20 point font with the following text centered vertically and horizontally

Congo.com Testing

First_name Last_name
{Last four digits of your student ID}

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- Page numbers on each page (at the bottom of the page)
- Stapled once in the upper left hand corner, no binders, no plastic covers.

GRADING

70% for your selection of sub-domains and test cases (“thoughtfulness and thoroughness” are the criteria)
30% for documentation of your testing process, including the test outputs (“care in the process, a running program, and recorded outputs”)

The assignment counts 10% towards your final grade for the course.

Notes:

- **Do not work in teams to complete this assignment**
- **No late assignments will be accepted**

Please note that you must have a running version of your implementation in order to get 100% on this assignment, since part of the grading depends on there being test output. (duh!) If the program that you turned in for the last assignment did not work, then you will need to work on it further and get it working. Note that this assignment does not demand that the program work perfectly, but given that the program as a whole is perhaps only 200 to 300 lines of Java, fixing it up should not be an onerous task.