In-Class Activity 4: White-box Testing

Overview

- Create white-box test cases for a web app
- Learn about a program analysis tool
- The tool: WAM
  - Available via Blackboard
  - Must customize shell scripts and config files
- Hint: read the paper on how to use WAM

Goals

1. All goals from ICA-1
2. Run and configure program analysis tool
3. Understand the WAM approach
4. Generate and run test cases based on WAM output

Blank

Implement the Following

1. Use WAM output to create a test suite that achieves 48% statement coverage (10min max runtime)

2. Fully automated

   1. Run WAM

   2. Generate test cases

   3. Run test cases (time bound)

3. Use new app for full credit

Grading

100 total points
- 15 points for the quiz
- 20 points for in-class checkoff (late credit until 10/14)
- 15 points for complete automation
- 35 points for coverage goal
- 15 points for using empldir

- 10 point bonus for highest in-class
- 10 point bonus for highest overall

Submit

1. Shell scripts
2. Test case files
3. Coverage report