Final Project Submission Details

- Final project submission due 2:30pm, May 12th (this Monday)
- Late policy: up to 24hrs late = 5% off project score up to 48hrs late = 10% off project score more than 48hrs late = no credit
- Submit code and final design document (PDF, PS, etc.) in file "project.tar.gz"
 - Details on filenames, etc. within file to be released shortly
 - At the same time, we will also release testing script to check contents of submission tarball
 - Also submit hard copy final design document in class

Final Project Testing Script

- Testing script can be run on tarball before final submission to check for minor errors
- Runs like "./testproject project.tar.gz"
- Will perform checks related to
 - Makefiles
 - Arguments accepted by fuzzer
 - Output of fuzzer
 - · Etc.
- Will allow you to find and correct simple mistakes

Project Grading: Overview

- Overall grading breakdown:
 - 5 points: milestone 1
 - 5 points: milestone 2
 - 50 points: number of bugs found in pstotext
 - 40 points: final design document and code
 - extra credit: bugs found in other programs
- 20 bugs in pstotext
 - Each distinct bug worth 2.5 points
 - Maximum of 50 points with 20 bugs



Project Grading: Design and Code

- 40 points for "final design document and code" category, broken down as follows:
- 14 points: "applicability and likely effectiveness of fuzzer design with wide range of programs"
 - Based on entirely on design document
 - For full credit on this part:
 - → Design should be easy to apply to many programs
 - → Should be effective in searching variety of spaces of possible testing inputs



Project Grading: Design and Code

- 40 points for "final design document and code" category, broken down as follows:
- 14 points: "correctness of implementation"
 - Based on entirely on code (as run on ilinux1)
 - For full credit on this part:
 - → Must correctly implement design described in design document
 - Must correctly implement interface we've specified (this will be mostly covered by testing script)



Project Grading: Design and Code

- 40 points for "final design document and code" category, broken down as follows:
- 12 points: "clarity and completeness of design document"
 - Based entirely on design document
 - For full credit on this part:
 - → Design document should be 2-4 pages long
 - → Need not include timetable, but should include per team member work breakdown
 - Should adequately answer following questions:

"In general, what form does the specification for a testing input take?" "How is that specification expanded into a test input with a PRNG seed?" "Within this framework, how are PostScript inputs specified?" "What space of PostScript documents should this search / sample from?" "What implementation-level issues arose, and how were they solved?"

Project Grading: Extra Credit

- Extra credit
 - Awarded when your fuzzer can "crash" some program
 - Input must be generated by your fuzzer and replayable
 - Program must segfault or terminate due to similarly severe signal (such as SIGILL)
 - Other forms of incorrect functioning not counted
- Each program crashed worth 15 points
 - Added to final project score
 - At most 15 points per program, even if more than one bug found
 - At most 3 programs, for maximum of 45 points extra credit
- Extra credit can raise project score above 100%!
 - Will improve overall course score accordingly



Project Resources

- icluster no longer available to this class
- Currently available machines
 - Linux x86: ilinux{1,2,3}.eecs.berkeley.edu
 - Solaris x86: {rhombus,sphere,pentagon,cube,torus}.cs.berkeley.edu
 - Solaris sparc: {quasar,pulsar,nova,star,solar,h50,h30}.cs.berkeley.edu {c199,cory}.eecs.berkeley.edu
- CPU usage policy
 - If other people using a machine, each team may run at most one instance of pstotext at a time on that machine
 - Please tell us if people do not follow this from now on