

SG420 Game Software Testing and Debugging

KGA #2: Applying Testing Techniques

This assignment supports the following course outcomes:

- Evaluate the quality of audio, visual, and user control aspects of games.
- Implement appropriate test parameters and values to generate an effective Combinatorial test.
- Discuss the debugging process.

Assignment Overview

In this assignment, you will assume the responsibility of designing and executing a test for a small portion of a video game. You will evaluate the quality of the software of a game of your choice and report out on it. Although there is no real development team in this class to follow up on your reports, your report should be precise, compact, and reproducible.

You will select a game for testing (Note: Be sure to pick a game that has noticeable defects, preferably a shareware or freeware game). After describing the game in a narrative format, you will use Ad Hoc Testing and then Combinatorial Testing to test a section of the game. Upon completion of testing, you will write a report summarizing your experiences with the testing process, discussing the debugging process and make recommendations for next steps in the debugging process.

Deliverables

Upon completion of this project, you are to submit to your instructor the following documents (see content grading rubric for specific details):

- Game description narrative (1 page)
- Ad Hoc testing results (1 page)
- Combinatorial testing results:
 - Allpairs input text file (parameters and values)
 - Allpairs output text file
 - Excel file of test table with expected results
 - Excel file of defect reports
 - Screen shots to document testing process
- Test summary report with debugging (1 page)

Grading

The following grading rubrics will be used to evaluate your assignment. Your instructor will provide you with these rubrics along with this assignment handout.

- Content Grading Rubric – 90% of assignment grade
- Written Report Grading Rubric – 10% of assignment grade

Resources

- Allpairs software and documentation (from course textbook)
- Microsoft Excel
- <http://www.gamehippo.com/>
- <http://www.shareware.com/>

- <http://www.noodan.com/>