

## SG420 Game Software Testing and Debugging

### KGA #1: Methodologies Research Paper

This assignment supports the following outcomes:

- Examine the different types of testing and the various tools associated with them.
- Explain the advantages and disadvantages of various testing methodologies and techniques.
- Review the differences between traditional software and game software testing methodologies.

### Assignment Overview

In this assignment you will research commonly used software testing methodologies and techniques, including the various tools associated with these methodologies. You should compare and discuss the advantages and disadvantages of the different methodologies and techniques, including some which are not discussed in the course text book.

### Deliverables

Write a five-page paper covering the use of various testing methodologies and techniques. Select five different techniques used in testing software and describe each of the five techniques in detail, with a separate section for each. (See content grading rubric for specific details.)

### 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.

- Research Paper Content Rubric: 80% of assignment grade
- Written Report grading Rubric: 20% of assignment grade

### Resources

Search library resources as well as the internet for research material regarding testing methodologies and techniques. Consult books, technical journals, symposium materials, and technical meetings material.

- The below web resources may be of assistance:
  - <http://www.businessanalysisbooks.com/TestingMethodologies.html>
- This website contains description of various books that could be used to research the subject.
- <http://www.bitpipe.com/data>
- This website contains white papers and case studies about the subject.
- <http://www.qaforums.com/> and <http://www.igda.org/qa> are websites that promote software testing and quality assurance discussions.
- The following subjects are suggested readings for this project:
  - UML Object-Oriented Testing Methodology and Techniques.
  - Object-Oriented Testing Methodologies & Techniques.
  - Agile Testing