**Test Manual**

**Genetic Engine Project**

CITS3200 Professional Computing

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University of Western Australia

Crawley, WA, 6009

**Instructions for filling out the template**

This test manual describes a collection of tests for the STARS system. This can be the test of a class, a subsystem, a collection of subsystems, or the full STARS system. The description is broken down into the specifications for each test, descriptions of the test, and analysis of the test results. If automated test tools (this includes rules in make files) or special techniques are to be used, they and the conditions for their use are described as well.

Each team needs to describe 4+-2 test cases. Each test case must contain or refer to the following components:

* Test Specification
* Test Description
* Test Analysis Report
* Testng Schedule
* Test Materials

This document template assumes the description of 4 tests "Test A, Test B, Test C and Test D.

**Table of Contents**

**Objectives**

<<In this section, describe the purpose of this document. Forecast the testing strategy, the unit tests, integation test and system tests listed in this document.>>

**Document References**

<<In this section, reference the major documents produced during project development. Explains the relationships among the requirements documents, design documents, implementation documents and the test procedures.>>

**Test Summary**

<<In this section, describe the functions of the system tested in this document (Refer to Requirements Analysis Document and Problem Statement)>>

**Testing Strategy**

In this section, define the subsystem or subsystems to be tested, the system integration strategy and how, where, when, and by whom the tests will be conducted. You may want to include drawings depicting relationships among the major classes of the subsystem or the subsystem decomposition, if you feel this is appropriate.>>

**Test A**

<<Introduction and overview for test A>>

**Test Specification**

<<The Test Specification lists the requirements whose satisfaction will be demonstrated by the test. It lists the methods tested, and describes the conditions of the test.>>

**Test Description**

<<The Test Description is used as a guide in performing the test. It lists the input data and input commands for each test, as well as expected out put and system messages. If you find that you are unable to describe expected output numerically, use a natural language description. A test description consists of

* Location of test (hyperlink to test)
* Means of Control: Describes how data are entered (manually or automatically with a test driver)
* Data
  + Input Data
  + Input Commands
  + Output Data
  + System Messages
* Procedures: The test procedure is often specificed in form of a test script.

**Test Analysis Report**

<<The Test Analysis Report lists the functions and performance characteristics that were to be demonstrated, and describes the actual test results. The description of the results must include the following:

* Function
* Performance
* Data measures, including whether target requirements have been met

If an error or deficiency has been discovered, the report discusses its impact.>>

**Test B**

<<Introduction and overview for test B>>

**Test Specification**

<<The Test Specification lists the requirements whose satisfaction will be demonstrated by the test. It lists the methods tested, and describes the conditions of the test.>>

**Test Description**

<<The Test Description is used as a guide in performing the test. It lists the input data and input commands for each test, as well as expected out put and system messages. If you find that you are unable to describe expected output numerically, use a natural language description. A test description consists of

* Location of test (hyperlink to test)
* Means of Control: Describes how data are entered (manually or automatically with a test driver)
* Data
  + Input Data
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**Test Analysis Report**

<<The Test Analysis Report lists the functions and performance characteristics that were to be demonstrated, and describes the actual test results. The description of the results must include the following:

* Function
* Performance
* Data measures, including whether target requirements have been met

If an error or deficiency has been discovered, the report discusses its impact.>>

**Test C**

<<Introduction and overview for test C>>

**Test Specification**

<<The Test Specification lists the requirements whose satisfaction will be demonstrated by the test. It lists the methods tested, and describes the conditions of the test. >>

**Test Description**

<<The Test Description is used as a guide in performing the test. It lists the input data and input commands for each test, as well as expected out put and system messages. If you find that you are unable to describe expected output numerically, use a natural language description. A test description consists of

* Location of test (hyperlink to test)
* Means of Control: Describes how data are entered (manually or automatically with a test driver)
* Data
  + Input Data
  + Input Commands
  + Output Data
  + System Messages
* Procedures: The test procedure is often specificed in form of a test script.

**Test Analysis Report**

<<The Test Analysis Report lists the functions and performance characteristics that were to be demonstrated, and describes the actual test results. The description of the results must include the following:

* Function
* Performance
* Data measures, including whether target requirements have been met

If an error or deficiency has been discovered, the report discusses its impact.>>

**Test D**

<<Introduction and overview for test D>>

**Test Specification**

<<The Test Specification lists the requirements whose satisfaction will be demonstrated by the test. It lists the methods tested, and describes the conditions of the test.>>

**Test Description**

<<The Test Description is used as a guide in performing the test. It lists the input data and input commands for each test, as well as expected out put and system messages. If you find that you are unable to describe expected output numerically, use a natural language description. A test description consists of

* Location of test (hyperlink to test)
* Means of Control: Describes how data are entered (manually or automatically with a test driver)
* Data
  + Input Data
  + Input Commands
  + Output Data
  + System Messages
* Procedures: The test procedure is often specificed in form of a test script.

**Test Analysis Report**

<<The Test Analysis Report lists the functions and performance characteristics that were to be demonstrated, and describes the actual test results. The description of the results must include the following:

* Function
* Performance
* Data measures, including whether target requirements have been met

If an error or deficiency has been discovered, the report discusses its impact.>>

**Test Materials**

<<Describes materials required for executing the tests described in this document.>>