

Test Plan

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November 27, 2015

1 Revisions

Table 1: Revisions

Name	Date	Description
Keyur Patel	27/11/2015	Created Test Report latex file
Alex Guerrero	27/11/2015	Edited Structural Testing

2 Structural (White Box) Testing

2.1 Unit Tests for Food

Table 2: Revisions

Test Case	Initial State	Expected Output	Output
testRandomPos.1	foodA and foodB randomly placed	positions compared and not equal	pass
testRandomPos.2	foodC randomly placed	——	pass
testRandomPos.3	foodD randomly placed	——	pass

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3 Features that were Tested

- 1:The functional requirements of the product
- 2:The classes and methods of the product (Model)
- 3:The GUI of the product

4 Testing Types

Testing can be broken up into different types, which each have their own role in the testing the product. These test types should be utilized to comprehensively evaluate the quality of the product.

4.1 Structural Testing

Structural testing is also known as white box testing. Structural tests are derived from the program's internal structure. It focuses on the nonfunctional requirements of the product. This type of testing shows errors that occur during the implementation by focusing on abnormal and extreme cases the product could encounter.

4.2 Functional Testing

Functional testing is also known as black box testing. Functional tests are derived from the functional requirements of the program. It focuses less on how the program works and more on the output of the system. These tests are focused on test cases where the product receives expected information.

4.3 Static vs. Dynamic Testing

Static testing simulate the dynamic environment and does not focus on code execution. This testing involves code walkthroughs and requirements walkthroughs. Static testing is used prevalently in the design stage. In contrast, dynamic testing needs code to be executed.

Dynamic testing involves test cases to be run and checked against expected outcomes. A technique to save time during dynamic testing is to choose representative test cases.

4.4 Manual vs. Automatic Testing

Manual testing is done by people. It involves code walkthroughs and inspection.

Automatic testing can usually be conducted by computers. The tools used to assist with automatic are unit testing tools for the respective programming language. Automatic testing relies on people for testing more qualitative aspects like GUI.

- 5 Automated Unit Testing
- 6 Testing functional requirements