Testing Report

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This document outlines my test plan, the design of my tests and the results of my testing.

TEST PLAN

Testing will begin in the beta stage of development of my Columns game, just before final release to allow for final bug fixes for bugs found in testing. Tests will be done on all the major functions in the game (e.g. loading scores, saving scores, block matching algorithm). To test these functions, I will manually step through the code as the program runs and see where the code breaks or where inefficiencies are.

TEST DESIGN

An individual test will be the testing of one function. I will step through all lines of code for that function, watching its unique variables and variables associated to it, to see what breaks, and where it breaks. The function will be put through all possible scenarios to make sure that it can cope in any situation (within reasonable parameters).

TEST RESULTS

The following are the results of tests which I conducted:

| Test date | Test Description | Results Summary | Status (Pass/Fail) |
|------------|--|---|--------------------|
| 26/11/2014 | Testing 'getWeather' function. | Function acts as intended | PASS |
| 26/11/2014 | Testing 'removeBlocks' function. | Function acts as intended | PASS |
| 26/11/2014 | Testing 'checkMatches' and 'checkSurrounds' functions. | Some cases exist where matches are not made where they should be. 'checkSurrounds' function needs to be reworked to account for these situations. | FAIL |
| 26/11/2014 | Testing 'updateBlocks' function. | Function works, however in some cases, audio effect 'thud' is being called too many times in 1 tick. Consider an | PASS |

| | | Audio Manager to handle this. | |
|------------|--------------------------------|--|------|
| 26/11/2014 | Testing 'updateGrid' function. | Function acts as intended, but could be improved by sorting blocks from lowest to highest 'y' value. | PASS |
| 27/11/2014 | Testing 'loadScores' function. | Function acts as intended. | PASS |
| 27/11/2014 | Testing 'saveScores' function. | Function acts as intended. | PASS |
| 27/11/2014 | Testing 'sortScores' function. | Function acts as intended. | PASS |