

Project 1: Black Box Test Plan

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Introduction

To run the tests:

1. Right click on EcoGUI class in the Package Explorer.
2. Select Run As > Java Application

The FileChooser for the course catalog will load automatically.

All tests files are located in the test-files/ folder.

Test ID	Description	Expected Results	Actual Results
Test1: Invalid file	<p>Preconditions: None</p> <p>Run EcoGUI</p> <p>DO NOT specify a file name and load the simulator.</p> <p>Check results.</p> <p>Click OK.</p> <p>Close GUI.</p>	<p>A dialog box should be displayed reading "File required to initialize the ecosystem."</p>	
Test2: Valid grid file	<p>Preconditions: None</p> <p>Run EcoGUI</p> <p>Specify the file test-files/valid_initial_grid</p> <p>Load the simulator with ZERO steps</p> <p>Check results.</p> <p>Close the GUI.</p>	<p>The grid displays the following cells (with the "O"s displayed in red, the "M"s displayed in orange, the "F"s displayed in orange, and the "I"s displayed in green, and the "."s displayed as plain black cells):</p> <pre>..O.M.M.III...OM.MMM ..MMI...MMMM...OIO.. .M.O.....O..O..O.. .OMMM.IIIIIIIII.MM.F....F..... .OOMMMIIIIIMMMOIM.OII.....IIII..... ..OO...III.MMMM.III.IOO.III.</pre>	

		<pre> .IIII.....MMI..... ...F....FFF..... OMIOMIOMIOMIOMIOMIOMOMIMIMIMIM.MIMI.O.. IIMIOIIO....OO..II.MIIII.MMM.OOOO.MM....MM....M.O..F.I. OO.MMMM...IIIIIMMM MMIMIMIMIMIMIMIMIMIM </pre>	
Test3: behavior	<p>Preconditions: Test 2 passes</p> <p>Run EcoGUI</p> <p>Specify the file test-files/valid_initial_grid</p> <p>Load the simulator with ONE steps</p> <p>Check results.</p> <p>Close the GUI.</p>	<p>A different grid than the previous default in test 2 should be displayed. You should see movement of certain animals, some animals should likely be eaten, some should be born, though not necessarily.</p> <p>For this test, ensure that no green animals ate any animals, no orange ate any red animals, no animals of different types bred, no animals moved more than one cell in any direction, and no animals were added to or left the system without either an animal higher on the food chain that was previously next to them taking their place (for leaving system), or two GREEN animals of the same type being directly adjacent to one another previously (for entering system). {no animals should starve after one step, and only low level animals can breed after one step}</p>	

Document Revision History

Date	Author	Change Description
09/20/2016	Scott Spencer	<ul style="list-style-type: none"> Added 3 Black Box Test cases