

EE422C Project 4 Test Plan

(Replace <...> with your actual data.)

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Spring 2022

Test plan summary

Our goal was to ensure that the sections we were working on worked correctly and would be able to mech properly with the rest of the application. After completing each stage, we tested them individually and then tested the program as a whole with relevant tests as we added each portion. JUNIT was our main method of testing, using the sample tests as a guide for the evaluation of our progress. We covered cases that we considered typical for the functionality of the application to ensure it was usable. We did not thoroughly cover all of the possible invalid commands that could be input into the program.

1.
 - a) KillCrittters
 - b) Test for make critter and stats, and step.
 - c) Parameters are set. Creates large number of make critters and compare stats after 500 steps.
 - d) Expects all critters to be dead.
 - e) All critters are created, steps were correct, expected stats are shown.
2.
 - a) ParseErrors
 - b) Errors within valid inputs
 - c) Parameters are set. Several inputs that cause exceptions are input to the program.
 - d) "Error processing: " <line> for each line in the input.
 - e) All errors were interpreted correctly.
3.
 - a) ShowEmptyWorld
 - b) Tests for empty world to be shown
 - c) Parameters are set.
 - d) World shown is empty.
 - e) No critters are present in the world shown.
4.
 - a) ParseCreateLargeCriticter
 - b) Test for Create and show command.
 - c) Parameters are set. Large critter size is chosen
 - d) Large critter is created and world is shown.
 - e) Critter is correctly created and world is correctly shown.
5.
 - a) MakeCriticter
 - b) Use MakeCriticter to create a Critter, and makes sure walk works for 1 step.

- c) Input to create a critter and move one step
- d) A critter is created and moves one step.
- e) Critter is correctly created, shown, and is shown to have moved one step.

6.

- a) Walk and Energy
- b) Walks 1 step each turn. Check energy drop at each turn.
- c) Parameters are set. A critter is created and is made to walk.
- d) The correct amount of energy is deducted each time the critter attempts to move.
- e) Critter correctly attempts to move and the correct amount of energy is deducted from it at each attempt.

7.

- a) Conflict
- b) Test if a critter made for running survives a conflict.
- c) Parameters are set and 2 critters are created at the same location, one being a runner.
- d) Runner moves, loses energy, and lives.
- e) Runner moved correct amount of spaces in correct direction, the correct amount of energy is deducted, and runner survives the encounter.