

GridWorld

Assignment #1

ASSIGNMENT: INTRODUCTION TO GRIDWORLD

Summary:

1. You will complete exercises 1-4 on pages 13-15 of the GridWorld: Case Study Student Manual. Download: http://mchs-cs.com/apcsa/ap07_gridworld_studmanual_appendix_v3.pdf
2. You will create your assigned letter bug with the following constraints:
 - a. If your letter is A, then your Letterbug object is ABug, Z would be ZBug.
 - b. Your bug should draw a letter that is approximately 6 squares wide and 8 squares high.
 - c. You must have two constructors:
 - i. `XBug(int size)`
 1. The size is a multiplier, so a size of 2 results in a letter 12 squares wide and 16 squares high.
 - ii. `XBug(Location origin)`
 1. The origin specifies the lower-left hand corner where the letter should begin drawing from.
 - iii. `XBug(Location origin, int size)`
 1. This version of the constructor allows for a location and size to be set.
 - d. Your `Act()` method should cause your bug to take one step in drawing the letter. If the size is 1, then it should only move one square. A larger size may allow for multiple steps to be taken in the process of drawing the letter.
 - e. When the letter has been completely drawn, the bug should start drawing it again when the `Act()` method is called again.

Due Dates:

Exercises 1-4 (2 points each) must be completed by the start of class on Friday and the `XBug.java` file must be emailed to mchs.cs.java@gmail.com by the end of class on Friday (22 points).