

GridWorld Part 1 Lab 3 Extensions

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10:17 AM

Once you have completed GW: Part 1 Lab 3, try some of these extensions

Extension 1: Comments: There are three types of comments:

// creates a single line of comments

/* will create a comment that spans many lines

* you will often see these at the start of the program or parts of the program.

*/

/**

*This type of comment is used to generate "javadoc" comments. They

* generate web pages. We will look more at these later in the semester.

*/

Modify your code by removing unnecessary comments and adding more appropriate comments.

- Add a comment for your name, and the date
- The top comments describe what the first BugRunner project is about. Alter these to reflect what this project does.
- Add one line comments throughout the main to make your code more organized by separating the code that creates each bug or rock.

Extension 2: Add code to BugRunner3 that will allow the user to enter 3 more integers between 0 - 255 for the amounts of red, green and blue in a color. Create that color by using the following model:

```
Color myColor = new Color (red, green, blue);
```

- Use an appropriate and descriptive name for the Color identifier.
- Add the following to the import line:
import java.awt.Color;
- To change the Color of a Bug, use the Bug constructor that takes in a parameter
new Bug (myColor)

Extension 3: Modify your prompt for input to include the parameters of the grid, so that we avoid going out of bounds.

For example: Rather than stating "Enter the row value" you would say,
"Enter a value for the row between 0 and number of rows - 1.

Look at the Quick Reference, can you find a method that we could use to get the number of rows and the number of columns in the Grid?

In order to use this method, you need to have an object of the Grid class.

- Add the following two imports to the top.
 import info.gridworld.grid.Grid;
 import info.gridworld.actor.Actor;
- The ActorWorld class has a getGrid method that will return the Grid.
 Grid<Actor> gr = world.getGrid();

- Add a variable to hold the number of rows and number of columns.
- Use the method to assign these variables to the number of rows and columns in the Grid.
- Use this variable in your prompt.