

```
1 // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)
2 import greenfoot.*;
3
4 /**
5  * This class will be used to display messages to the
6  * game player such as instructions on how to play the game
7  * and messages when the level end or the game ends
8  *
9  * @author Derek Peacock
10 * @version 1.0 29/Jan/2015
11 */
12 public class MessageBox extends Actor
13 {
14     GreenfootImage image; // current Actor image
15
16     private static final int LEFT_MARGIN = 60;
17
18     private static final int LINE_HEIGHT = 20;
19
20     private int yPos = 80; // The current y position for drawing text
21
22     /**
23      * Create a new MessageBox and scale the image to width
24      * by height (make sure the aspect ratio is preserved)
25      */
26     public MessageBox(int width, int height)
27     {
28         image = getImage();
29         image.scale(width, height);
30     }
31
32     /**
33      *
34      */
35     private void explainGame()
36     {
37         drawLine("In this game the crab moves around ");
38         drawLine("in order to eat worm. An otter will however ");
39         drawLine("chase the crab if it can see the crab.");
40     }
41
42     /**
43      * Draw one line of text (message) ontop of the current
44      * image starting at the left margin and current yPos
45      * Increase yPos ready for the next line of text.
46      */
47     private void drawLine(String message)
48     {
49         image.drawString(message, LEFT_MARGIN, yPos);
50         yPos = yPos + LINE_HEIGHT;
51     }
52
53     private void explainScoring()
```

```
54     {
55     }
56
57
58     private void showKeys ()
59     {
60     }
61
62
63     /**
64     * This method will show the user a summary of how
65     * the game works, it will display what keys to use
66     * and it will explain how the scoring system works
67     */
68     public void showInstructions ()
69     {
70         explainGame ();
71         showKeys ();
72         explainScoring ();
73     }
74 }
75
```